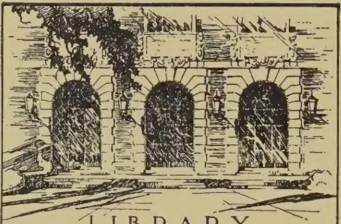

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Biology

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IN TWO VOLUMES ANNUALLY.

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JAMES G. WAKLEY, M.D.

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Lettsomian Lectures
ON THE
SURGERY OF THE ARTERIES.

(ILLUSTRATED BY TWENTY-SEVEN OPERATIONS OF
LIGATURE BY THE AUTHOR, AND OTHER
CASES OF DISEASE AND INJURY.)

Delivered before the Medical Society of London, Jan. 1875,

By C. F. MAUNDER, F.R.C.S.,
SURGEON TO THE LONDON HOSPITAL.

LECTURE III.—Part I.

ON LIGATURE OF A MAIN ARTERY TO ARREST ACUTE TRAUMATIC INFLAMMATION.

Mr. President and Gentlemen,—The special subject of my discourse this evening—ligature of a main artery to arrest acute traumatic inflammation—was, when suggested to the profession by me, a novelty in Europe; but inasmuch as it was not so (as I afterwards learned to my chagrin) in America, I must, for both reasons, be allowed to give you a brief history of the matter, and to relate the illustrative cases somewhat in detail. A little time previous to this operation I had heard of *compression* of arteries being employed as a means to arrest inflammatory action. This information led up to the idea that *ligature* of the main artery would be a more effectual method. It will doubtless be accepted that cases of acute inflammation (of joints, for example) require speedy and active interference in order to bring about resolution—an admission in favour of the ligature. On the other hand, supposing compression to be resorted to, and, for some reason or other, to be relinquished too soon, blood would then not only pass to the inflamed spot through the enlarged smaller vessels, but also through the main channel, and thus an additional and injurious supply would be added.

On May 13th, 1866, I recommended the ligature of the femoral artery in a case of wound of the knee-joint followed by traumatic fever and acute inflammation below, about, within, and above the knee. The man who had sustained the accident was under the care of my then much-esteemed colleague, Mr. L. S. Little; and that gentleman tied the superficial femoral artery, with immediate and striking relief to symptoms. The patient, who was in imminent danger of losing, possibly, both limb and life, was from that moment in comparative safety, and made a good recovery.

Lacerated wound of the knee-joint; acute inflammation; ligature of superficial femoral artery; immediate relief; recovery.—Joseph C—— was admitted into the London Hospital, under the care of Mr. L. S. Little, on May 3rd, 1867, having sustained a lacerated wound, opening the knee-joint. When seen by Mr. Disney Thorpe, the house-surgeon, an hour after the accident, synovia was escaping. The wound was closed with three silver sutures, a back splint was applied, and the joint surrounded with bags of ice. He passed a good night without pain. The next day there was some effusion into the joint; but there was no heat nor constitutional disturbance.

May 5th.—Effusion less; patient very well. Ice to be continued, as he complains of pain if fresh ice is not frequently applied.

6th.—So well that he was placed upon full diet.

11th.—There is some redness along the inner side of the knee, and some pain.

12th.—Knee-joint much increased in size, red, and tense with fluid. Great and incessant pain, which is much aggravated if the joint be touched.

13th.—Joint still more swollen. It feels hot notwithstanding the continued application of three large bags of ice. The redness has extended some distance up the thigh, particularly on the inner side, where the tissues are brawny, also down the leg. The patient is suffering much from pain and sleeplessness, with a pulse of 120, anxious countenance, and general constitutional disturbance. At 10 A.M. he had a rigor. I now saw the patient in consultation with Mr. Little, and proposed the ligature of the superficial femoral artery as a means of arresting the inflammation. Mr. Little, courteously acting on my suggestion, boldly and dexterously tied the artery at once (4 P.M.) at the apex of Scarpa's triangle, the patient being under the influence of chloroform. The redness paled somewhat at once; and the patient, on recovering from chloroform, remarked, with surprise and delight, "my pain is gone." Half an hour after the operation the pulse was 100, having previously been 120.—10 P.M.: No pain since operation. Thinks he'll sleep. Pulse 96; less redness; toes cold, but sensible to touch.

14th.—4 P.M.: Toes warm; knee cooler and less red, but with a sense of numbness about it; pulse 90, feeble. To have six ounces of wine.

15th.—3.30 P.M.: Says he is "first-rate"; better appetite; heat about the heel prevented sleep (pressure from splint); knee and thigh smaller and paler; the ends of the accident wound began to discharge very thick pus about two hours ago; pulse 100, firmer; tongue cleaner.

16th.—4.30 P.M.: The patient had some starting pains during the night, so that he slept badly. As the discharge from the knee was now considerable, the quantity of wine was increased to ten ounces. Pulse 98.

17th.—During the night he had a profuse sudden bleeding from the nose.

June 1st.—Ligature removed to-day. Has gone on uninterruptedly well, with the exception that the wounds have been very slow in healing, and showed little power, particularly that on the thigh, which discharged very freely.

June 26th.—Sat up to-day.

P.S.—The patient gradually regained the use of his limb, and acquired free motion to the extent of 20°. Three months later the man was quite well, but the range of motion appeared to be limited by thickening outside the joint. He refused further interference, as he can do his work satisfactorily. He is here to-night.

I need scarcely say that when this idea of mine had been put in practice (1866) with pre-eminent success, it created considerable discussion in the profession, and many surgeons came to see the case. Since that time certain articles on inflammation published in this country have advocated this as one of the methods of treatment. Mr. Bryant says* "To arrest acute inflammation in a limb, the deligation of the main artery of the limb, or the arrest of the circulation through it by pressure upon the artery, has been adopted. Dr. Campbell, of New Orleans, speaks highly of the practice, and even affirms that no portion of an extremity should be amputated for destructive inflammation without the surgeon attempting the practice. Upon the suggestion of Mr. Maunder, of the London Hospital, in 1867, Mr. Little applied a ligature to the femoral artery for acute suppuration of the knee, with a success sufficient to prove its value; and the late Mr. Moore, of Middlesex Hospital, acupressed the brachial artery with a good result." Dr. Robert Druitt in his article "Inflammation,"† naturally jealous for originality emanating from his own countrymen, says: "Mr. Maunder, of the London Hospital, has tied the femoral artery in several instances of severe inflammation of the lower limb, and has spoken favourably of the results. Mr. Maunder's first case was so treated by him without any knowledge of the American experiences we have referred to, and his results were as satisfactory as those of Dr. Campbell. The late Mr. C. H. Moore also compressed the brachial artery for severe traumatic inflammation of the hand, acting on Mr. Maunder's suggestions, and in that case also the remedy had a very striking effect."

The advantages I claim for the ligature are best shown by a review of the above case. Immediately on the application of the ligature, pain, previously severe, ceased; and with this cessation sleep and appetite returned. On the following day the countenance was changed from one expressive of physical suffering to that of repose, and in forty-eight hours the man pronounced himself to be "first-rate." Symptoms of inflammatory action, both general and local, quickly subsided—redness paled, swelling disappeared, and the integuments, previously rendered red and œdematous above, about, and below the knee, soon assumed their normal character. On the day of operation

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* Practice of Surgery, 1872, p. 454.

† Cooper's Surgical Dictionary, 1872, vol. ii., p. 65.

Mr. Little and I were not sure whether or not pus was already formed (the man had experienced a slight rigor in the morning), but inclined to the opinion that a small quantity did exist immediately under the skin and middle of the line of the wound, which was healed. We also thought it quite probable that the synovial membrane of the joint had already begun to secrete pus. About forty-eight hours subsequent to operation, both ends of the original wound opened spontaneously and discharged pus, the matter flowing in small quantity, and as though it welled up from the interior of the joint. During this suppurative stage the patient experienced no discomfort, with the exception of slight starting pains for one or two nights, and after the lapse of a few days the discharge of pus, except from the surface of the accident wound, ceased. Another and all-important advantage is, that no blood is taken from the patient; and the subject of these remarks was in no condition to lose an ounce of the vital fluid.

Since then I have tied a main artery twice, with a view to arrest inflammation in a limb, and my colleague, Mr. Reeves, has ligatured the superficial femoral with a similar object. Also, in several instances in which the ligature has been used to stop bleeding, existing inflammation has ceased, and repair commenced. The first of the former was that of a child whose knee-joint had been opened by a burn.

Open knee-joint; suppuration within and without; ligature of the femoral artery; recovery.—A. P——, aged three years and a half (Case 12 in Table of Arteries*), was admitted into the London Hospital, under the care of Mr. John Adams, Feb. 5th, 1869. She had sustained a severe scald by boiling water over the lower part of the abdomen and thighs, and especially of the right knee. She progressed favourably for several weeks, when, on April 8th, the house-surgeon, Mr. Vialls, observed an abscess on the outside of the knee, which broke on the following day.

April 10th.—The patient had recently come under my care (by reason of Mr. Adams's retirement from the office of surgeon). At the site of the abscess a depression in the granulations admitted the little finger into the joint. The cavity contained pus, and an incision made on the inside favoured its flow.

19th.—Suppuration has spread round about the joint, and up and down the limb, and incisions have been made here and there. A drainage-tube was introduced to-day through the joint.

28th.—Limb is more swollen, and two more incisions are made. The discharge is very profuse, and the limb is dressed twice daily in consequence. Drainage-tube removed. Eats and sleeps pretty well.

29th.—The whole limb is now œdematous from groin to toes, and pus can be squeezed out in large quantity at the various openings made from time to time. The child is very exsanguine and emaciated, but takes its food fairly, sleeps pretty well, and has a clean tongue.—3 P.M.: I placed a fishing-gut ligature on the superficial femoral artery at the apex of Scarpa's triangle on the antiseptic plan, everything coming in contact with the wound having been treated with a solution of carbolic acid. The ligature was cut short, and the wound closed by three metallic sutures, and then covered in with layers of lint soaked in carbolic glycerine. The whole limb was carefully wrapped in cotton-wool, and a flannel bandage and splint applied to secure immobility at the knee. A large piece of lint saturated with carbolic glycerine was laid upon the thigh. There is nothing special to record concerning the operation. The vessel was deep by reason of the swollen state of the integuments, and a nerve larger than usual crossed the sheath towards its inner side; the femoral vein was not seen, and not a teaspoonful of blood was lost. The toes looked white and tallowy after the ligature of the vessel.—9 P.M.: Child is asleep; cries when the toes are touched, but moves them freely, they having very much the same appearance as the toes of the opposite member, and are equally warm to the hand.

30th.—3 P.M.: Sitting up; clean tongue; no appetite; strong odour of carbolic acid; much less discharge; toes colder than those of opposite foot. To have six instead of three ounces of wine. To use as little carbolic acid as possible, lest it affect the child's general health injuriously, which it already probably has done.

May 1st.—Clean tongue; has eaten a little meat to-day. Removed the flannel bandage and cotton-wool, and pressed out matter which had accumulated since the operation. Incised a fluctuating swelling, giving exit to pus which existed at the time of operation, on the inside of the knee. The whole limb, excepting the operation wound, dressed from the foot upwards with strips of lint. Wool and bandage reapplied and a back splint adapted.

2nd (only seventy-two hours after operation).—Nurse says the discharge is only a quarter as much as it was formerly. All swelling has subsided. Relishes food.

3rd.—Feeds pretty well. There is a vesication on the heel (from pressure). The little pus discharged from the various wounds is very *thick* in character.

7th.—On exposing the operation wound to-day, it was found gaping and granulating, the sutures being detached by ulceration, but there was no discharge. The child takes milk, wine, eggs, and bread-and-butter freely, but very little meat. There is *not a tablespoonful* of discharge from the whole limb, now only the ninth day subsequent to operation.

It will thus be seen that the operation was markedly successful, the quantity of discharge being reduced to one-fourth. Subsequent to the ligature a small slough from continuous pressure formed on the heel, and I was very anxious about it. To my surprise the slough separated, and the wound healed as readily as though the normal circulation of the limb had not been interfered with. The child made a good recovery, although naturally weakly and the subject of ophthalmia, for which it was treated by my colleague, Mr. James Adams.

Question of operative interference.—With reference to the history of the case up to the time of operation, it is evident that the progress of the condition of the limb was from bad to worse. In the first instance, when the joint was found to have been opened, swelling and suppuration seemed to be restricted to its interior, but soon these limits were overstepped, and pus was found round about the joint on all sides. To give free exit to this, incisions were made, and a drainage-tube was passed through laterally, one end of the tube appearing on the inside of the articulation and the other in the popliteal space, to give exit to matter existing in that locality and to favour gravitation. The original wound on the outside of the joint allowed the matter to escape in that region. In the course of a few days further incisions were necessary above the knee, and on the day before operation matter had burrowed half-way up the thigh and half-way down the leg, and an incision in both situations gave exit to a large quantity of offensive discharge. On the day of operation the whole limb was œdematous, probably as a prelude to, or coëxistent with, further diffuse suppuration.

Now, although the child's general health was fair, still the local symptoms threatened to become worse rather than to improve; and if the former state resulted, not many days would elapse before either hectic or typhoid symptoms would arise, when in the former case proximate safety would be in amputation, but in the latter there would be no hope of recovery. By ligature of the femoral artery I hoped to save both life and limb.

By resorting to the ligature, I of course believed that suppuration would in great measure be arrested, and that amputation or death, necessitated by exhaustion, would be prevented. Also, I am of opinion, of two evils—profuse suppuration or ligature—I had selected the lesser; because I have not that dread of the consequences of ligature of the superficial femoral artery, under certain conditions, which some surgeons profess. I was greatly induced to operate in this case in consequence of an observation made in Mr. Little's case just related. A few hours before Mr. Little operated his patient had had a rigor, and we were led, from certain symptoms, to suspect that suppuration had already taken place in the joint, the original wound being at this time closed. In this suspicion we were probably correct, because, although both local and general inflammatory symptoms declined immediately after the application of the ligature in the most decided manner, still, some forty-eight hours subsequently, the original wound reopened, and the *thickest* possible pus flowed, or rather oozed up, evidently from within the joint. This thick pus was made up of just enough liquor puris to make it a soft solid—a condition due, I thought, to the withholding of fluid from the limb by the ligature on the artery.

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* The Lancet, Jan. 9th, p. 39.

The two preceding cases will contrast well with the following, in which ligature of the brachial was performed apparently to little purpose only.

Case 18, in Table of Arteries,* was one of acute inflammation of the hand, in a middle-aged female, consequent on a poisoned wound. The whole hand was enormously swollen, with the fingers bent upon the palm. Her temperature was 103°, and the patient was greatly exhausted and had a dry brown tongue. Just above the wrist was a patch of redness, as though suppuration either had already or was about to set in. I tied the brachial artery in the *middle* of the arm, but it is most essential to notice that the effect upon both local and general symptoms was very slight when compared to the alteration for good with ligature on the main artery in the *lower* limb. Pus formed above the wrist, but the palm escaped and the fingers were no longer flexed. The patient died two months later of pyæmia. In the future, should the necessity arise, I would ligature the brachial artery close to the axilla, in order to get above the origin of the *profunda* branches, with the view of still further diminishing the supply of blood to the hand. The arterial anastomoses about the elbow are so numerous that, although the brachial be tied about its middle, its effect upon the blood-supply to the hand will sometimes be too transitory for my purpose, as regards inflammation, but highly conservative with respect to the vitality of the part, as the subjoined show. I tied the brachial for false aneurism, in a young man (Case 16). A good radial pulse existed next day. Also in a man aged sixty-six (Case 13). There was a pulse at the wrist on the third day.

The fourth case known to me is that of a male adult who had sustained an incised wound opening the knee-joint, associated with severe venous hæmorrhage. The bleeding was arrested with difficulty, and violent inflammation of the joint followed. I saw the case in consultation with Mr. Reeves on August 3rd, 1870, and advised ligature of the superficial femoral. The man was extremely exhausted and wasted, and for days no hope of saving him by amputation had been nor could now be entertained. The discharge was most profuse both from the joint and thigh; perspirations copious; temperature 103°; pulse 135; and a large patch of redness had lately arisen over the front and inner side of the articulation. The benefit derived from the ligature in this case was almost ephemeral. The man ultimately died.

I shall now give you some American experience. I have received, through the courtesy of Dr. G. C. Blackman, of Cincinnati, U.S., a *résumé*, published by him in the Cincinnati *Lancet and Observer* of February, 1868, of the cases of traumatic inflammation treated in that country by ligature of the main artery, and which are well worthy of careful study. I will condense the information that I have gleaned. Up to this moment no one had hinted in any way that the operation had previously been performed. It was utterly unknown in this country. It appears probable that the femoral artery was ligatured for wound of the knee-joint, first, by Henry U. Ouderdonk, M.D., in June, 1813; and that the patient was cured. A similar case was so treated by Dr. David L. Rogers, of New York; and in this instance "the man got well by the twenty-fifth day." Dr. Rogers also refers to a case of compound dislocation of the ankle, in which Dr. Mott tied the femoral artery; but the patient died of tetanus. Dr. Rogers is of opinion that "the danger of mortification from defect of circulation is less than might be supposed" (and that has long been my opinion). A lad, sixteen years old, was the subject of a most severe and extensive gunshot wound of the arm. The brachial artery was ligatured high up, and although little hope was entertained of saving the arm, to the astonishment of all who saw the case there was merely sufficient inflammation in the wound to produce healthy suppuration and granulation. He recovered rapidly." Dr. H. F. Campbell, of Georgia, speaking from personal experience of six cases, is also a strong supporter of the principle. Dr. Daniel F. Wright, formerly of Winder Hospital, Richmond, records a case of gunshot wound of the thigh, followed by hæmorrhage, and treated by ligature of the femoral at the apex of Scarpa's triangle. "The injured limb was for some days slightly colder than the other, notwithstanding which the condition of the wound commenced improving from that day." A second case was one of gunshot wound of the middle finger, requiring amputation. Gangrene set in, and spread rapidly; hæmorrhage occurred twice, and then the brachial artery was ligatured in the lower third of the arm. Improvement in the wound commenced at once. A third case is one of gunshot wound of the thigh, followed by spreading gangrene and repeated hæmorrhage. The femoral artery was tied at the apex of Scarpa's triangle, and "the wound healed more rapidly than any lesion of such extent that I have ever witnessed." Two other cases are recorded by Dr. Wright, but were not immediately under his care. The brachial artery was tied in both instances "with a result exactly similar to that in the cases already detailed." Dr. Wright remarks: "In the five cases witnessed by myself, and in the six cases reported by Dr. Campbell, we have this uniform result—that, immediately from the date of ligation, large tumefaction has been superseded by recovery of the original contour, fetid ichorous discharge by laudable suppuration, and phagedænic gangrene by vigorous granulations, resulting in rapid separation of the eroded tissues. ......In all the instances I have given, though the ligature resulted in curing the gangrene, it was not resorted to for that purpose, but for that of arresting hæmorrhage. In the present state of professional opinion it would be bold surgery, savouring perhaps of rashness, to tie the brachial artery for gangrene of the hand, or the femoral artery for phagedænic erosion in the calf of the leg; though my friend Dr. Campbell does not stop short of advocating this very procedure." Also Dr. D. L. Duvall remarks that, in a paper published at Richmond by Dr. S. P. Moore, Surgeon-General of the Insurgent States, the author stated "that he had performed operations on patients whose limbs, after being wounded, presented all the indications of rapidly approaching gangrene from inflammation, when, fortunately for the patient, extensive hæmorrhage ensued, which necessitated the ligature of one or more of the large arteries of the limb, and, to his great surprise, rapid improvement began and the patient recovered." Velpeau too appears to have given this method of combating inflammation his consideration, and in the American edition of his great work on Operative Surgery (vol. i., p. 649) says:—"As compression of the arteries moderates, and even arrests, the circulation in the organs situated underneath (beyond?), it seems at first sight to constitute an excellent remedy in congestions, engorgements, and acute inflammations of all kinds. It is therefore somewhat surprising that physicians should, for so many years, have omitted to make use of it under this point of view. At the present time (1839) the mind appears to take another direction; and compression of the arteries, if we are to believe its partisans, should become the sovereign remedy in convulsions, epilepsy, inflammations of the limbs, &c."

AN

INQUIRY INTO THE CONDITION OF FIFTY-ONE CASES OF LITHOTRITY IN ELDERLY ADULTS, MADE AT PERIODS OF ONE OR TWO YEARS AFTER OPERATION.

By Sir HENRY THOMPSON,
SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS;
EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE;
LATE SURGEON TO THE HOSPITAL.

In The Lancet of April 3rd I reported the results of my last 100 stone operations (lithotomy and lithotrity) on adult patients averaging 63½ years of age, amongst whom there were 6 deaths, and consequently 94 recoveries. Mr. Thomas Smith made an inquiry in the following number of the journal relative to the condition of the patients on whom *lithotrity* had been performed, at any period not less than twelve months after the procedure, with the view of ascertaining whether the results of that operation were permanent. Such an investigation I thought desirable, and promised to make it; for although the general results must be well known to myself, I had never applied an exact or numerical test in order to determine them.

I have therefore sought, by writing and personal interviews, to obtain information of the present state in all those cases of this series in which the operation of lithotrity was performed more than twelve months ago—that is, between December, 1872, when it commenced, and May, 1874. Consequently the time after operation is much longer than that which Mr. Smith suggested, for while the last case was treated fully twelve months ago, more than two years and a quarter have passed since the first of the series was operated on.

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* The Lancet, Jan. 9th, p. 39.

I find that between the dates named—a period of about seventeen months—I performed lithotrity on 53 patients, of whom two died, leaving 51 cases of recovery. The mean interval between the date of operation and the present report of condition, for these 51 cases which are the subject of inquiry, is, therefore, about twenty months instead of "one year." An examination of these cases, given in a tabular form below, shows that respecting six patients I have been unable to obtain the information required; but the weight of such evidence as exists relative to these is greatly in favour of their being better and not worse than the average, since their mean age is only fifty-four years, nearly ten less than the mean of the whole series. As I am compelled to omit these from my reckoning, I believe that my report is less favourable to lithotrity than it ought to be.

The number of individuals, then, of whom I have precise information is 45, averaging about sixty-four years of age. Of these, 11 have since died. The causes, certified by their medical attendants, were—2 of organic heart disease; 1 of malignant disease; 1, at eighty, of natural decay; the other 6 of urinary disorders and advanced age together (the mean age being sixty-six years). All but one of these latter were individuals who for several years had passed no urine except by catheter, who owed their lives solely to surgical art, and who without it must have died miserably some years before. The prolongation of life had been entirely due to the improved modern means of mechanically removing retained urine and accumulated phosphatic deposits. Of the 45, 34 are living still; 28 of them enjoying good health and active existence, at a mean of sixty-three and a half years of age. The other 6 have some signs of recurring calculus, 2 having had a newly formed calculus removed; all are well but one of these, who is in bad health and suffers much.

I think I may leave these figures to speak for themselves. I shall make one observation, however, which, although a very natural one, does appear not to receive the consideration which I think it deserves. Supposing that these 53 cases of lithotrity (including 2 deaths with 51 recoveries) had been cut instead of crushed, how many fatal cases would have followed the operation? Their average age being sixty-three, 14 deaths would not have been a bad result, somewhat better than published tables offer us.* But after these operations, mainly done in 1873, only 11 deaths have since occurred *up to the present date*. And even if we were to reckon all these as deaths resulting from the operation, although, as may be seen below, they were quite unconnected with it, we still should have a total of recoveries larger than after lithotomy. There is, however, much reason to believe that the few examples of chronic cystitis with recurring phosphatic deposits, subsequent to lithotrity, occur generally in those feeble and diseased persons to whom lithotomy is most commonly fatal. The fact is, that almost all those patients whose subsequent troubles remain, and who, to superficial observers, appear to discredit lithotrity, do in reality owe their existence to the operation, and are trophies of life absolutely saved by it.

Thus it is that lithotrity, as I have observed, has created a new set of cases—men who, until the process was brought pretty nearly to its present perfection, never lived. Respecting them I should like to write the results of my experience, and hope ere long to do so. They are men whom lithotrity keeps alive—who, thanks to the ease and safety with which a small and newly formed phosphatic calculus can be crushed, go on for years to live and even to be active. These cases have to be kept apart from other cases of stone, because it would invalidate any inference from numerical statements were a surgeon to reckon as a "case of lithotrity" each time, perhaps twice a year or more, he removed a calculus from such a patient, although it might not always necessarily be very small. But it is not to be forgotten that before the time of lithotrity there was no adequate help for such a patient except by the cutting operation, and many such died miserably with bladders filled with phosphatic material.

I am very glad to have made this inquiry, although it has entailed no little pains and labour; since I venture to hope that it may prove to be, not merely a new, but also a useful contribution to our knowledge respecting lithotrity.

1. A gentleman aged thirty-six; operation, Nov. 1872; uric-acid calculus. I have no knowledge of the address. He made an excellent recovery; and I should, at his age, have probably heard more of him if his health had not continued good.

2. A gentleman aged seventy-five; operation, Dec. 1872; phosphatic calculus. In May, 1875, Mr. Gardner, of Gloucester-terrace, reports to me this patient in his usual health.

3. A gentleman aged sixty-nine; operation, Jan. 1873; uric-acid calculi. This patient, who was under the care of Mr. Newton of Upper Wimpole-street, writes me (June, 1875): "I am in perfectly good health, and have no uneasiness or feelings that lead me to suppose I have any stone in my bladder now."

4. A gentleman aged sixty-five; operation, Jan. 1873; phosphatic calculus. Mr. J. H. Bartlett, of Notting-hill, writes me that this patient had no further symptoms of calculus, and that he died of heart disease three months after.

5. A gentleman aged sixty-eight; operation, Jan. 1873. This gentleman had for many years passed all his water by catheter. His life had been prolonged, with very advanced prostatic disease, by great care and frequent removals of phosphates as they formed. He died, his urinary organs being quite worn out, with extensive sacculation of kidneys and ureters, in December of the same year.

6. A gentleman aged fifty-one; operation, Feb. 1873; uric-acid calculus. Mr. Allen, of Milner-square, Islington, writes me (May, 1875) that this patient is perfectly well.

7. A gentleman aged thirty-six; operation, Feb. 1873; uric-acid calculus. No return, and is perfectly free from symptoms at present.

8. A gentleman aged sixty-four; operation, Feb. 1873; phosphatic calculus. This patient had always passed all his urine by catheter. He had no return of his stone. He became insane, and used the instrument very carelessly. In January, 1875, I was called to see him with severe extravasation of urine, resulting from injury, of which he shortly after died. I saw him with my friend Dr. Murchison.

9. A gentleman aged sixty; operation, Feb.–March, 1873; phosphatic calculus. I heard from this gentleman a few days ago (May, 1875). He is in excellent health, and is leading a very active life.

10. A gentleman aged sixty; operation, March, 1873; uric-acid calculus. Dr. Manson, of Chesterfield, writes me (June, 1875) that this patient "remained quite free from any symptoms of recurrent calculus to the day of his death, which resulted from typhoid fever in December, 1873. He was perfectly satisfied with the result of the operation."

11. W. C——, aged sixty-seven; operation, March, 1873; uric acid; treated at University College Hospital. For many years he has passed small uric-acid calculi; and, having recently had one in his bladder which he was unable to expel, it has been successfully crushed for him in the country.

12. A gentleman aged seventy-one; operation, April, 1873. Writes me (May, 1875) that he continues quite well.

13. A gentleman aged sixty-seven; operation, April, 1873; uric acid. Recently seen by myself, he is performing his duty as a member of Parliament, and enjoys excellent health and strength.

14. A gentleman aged sixty-one; operation, April, 1873. I have just seen him. He is in perfect condition as regards his bladder. His stone was a large uric-acid formation. His medical attendant, Mr. Leppington, of Great Grimsby, writes me that "he has had no symptoms of any return of vesical mischief."

15. A gentleman aged fifty-nine; operation, April, 1873; oxalate-of-lime calculus. He was quite well six months ago, but I have not his address, and have failed to find him.

16. A gentleman aged seventy-nine; operation, April, 1873; uric acid. Had no return of his calculus, and died about a year afterwards of some other malady, apparently from natural decay.

17. W. B. H——, aged sixty-three; operation, May, 1873;

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* I may refer to my own table of 1827 cases, collected with great care, among others, as supporting this view. "Lithotomy and Lithotrity," 2nd edit., p. 142.

uric acid. Treated in University College Hospital successfully, and his present address and condition are unknown.

18. A gentleman aged sixty-seven; operation, May–June, 1873; large phosphatic stone. Writes me (May, 1875) that he is perfectly well, and better in health than for many years.

19. A gentleman aged sixty; operation, May–June, 1873; large uric-acid calculus. Dr. Evan Jones, of Aberdare, writes to inform me that the patient had rigors in September, and signs of blood-poisoning; no abscesses; and died comatose Oct. 23rd. He had left me in fair condition at the end of June, with some suspicion that the kidneys were not sound.

20. J. W—— (University College Hospital), aged fifty-four; operation, June, 1873; phosphatic calculus. Has long passed all his urine by catheter. Having just written to ask how he goes on, he replies that he was quite well for a long time after operation, but he begins to have signs of some phosphatic formation and wishes soon to be examined.

21. J. W——, aged thirty-six; operation, June, 1873; uric-acid calculus. Treated successfully in University College Hospital, and his present address and condition are unknown.

22. A gentleman from the Brazils, aged fifty-six; operation, June and July, 1873; very large phosphatic calculus. One of the most formidable cases I ever had. He made a most excellent recovery, always, as before the operation, passing all his urine by catheter. He came to me last summer (two years after operation), and I removed a small phosphatic formation which had been developed, and he left me as well as ever.

23. A gentleman aged forty-one; operation, July, 1873. I have just seen this patient; he has enjoyed fair health, and has had no return of his malady. The stone was originally oxalate of lime, and he is subject to irritation in the urinary passages and occasionally to orchitis. He leads an active life.

24. A gentleman aged seventy-seven; operation, July, 1873; uric-acid calculus. In excellent health for his age. No return of his malady. Uses a catheter twice a day, and is under the care of Dr. Jackson of Southsea.

25. A gentleman aged sixty-two; operation, Oct. 1873; phosphatic calculus. Had long passed all his urine by catheter and at short intervals. I removed a phosphatic calculus of considerable size, the result of constant cystitis; but he died exhausted from incessant catheterism about a year after.

26. A gentleman aged sixty-five; operation, Aug. 1873; uric-acid calculus. Seen again in the latter part of the year. Recovery perfect, but have not the address, and cannot learn any later particulars.

27. An American gentleman, aged sixty-seven; operation, Aug. 1873; phosphatic calculus. He wrote me in the following year that there was no return whatever of his complaint.

28. A gentleman aged sixty; operation, Aug. 1873; large uric-acid calculus. I cannot learn anything of this patient.

29. A gentleman aged seventy-seven; operation, Aug. 1873; uric-acid calculus. I have just seen this patient (June, 1875). He has had no return whatever of calculus symptoms, and is passing his catheter three times in the twenty-four hours on account of inability to empty his bladder from enlarged prostate. He is enjoying excellent health.

30. A gentleman aged sixty-seven; operation, Aug. 1873; uric-acid calculus. This patient has not been much relieved. He passes his urine chiefly, if not altogether, by catheter, and, in spite of all treatment, phosphatic matter forms and must be removed.

31. A gentleman aged fifty-six; operation, Nov. 1873; a phosphatic calculus. He had no return of it. Mr. Pearson, of Manchester, writes me that he died of malignant disease in January last.

32. A gentleman aged seventy-eight; operation, Nov. 1873; uric-acid calculus. His medical attendant, Mr. Hicks, of Easingwold, writes me (June, 1875): "The patient has been perfectly free from vesical troubles ever since."

33. A gentleman aged seventy-six; operation, Nov. 1873; uric-acid calculus. Have just seen him (May, 1875); he has had no return whatever of his complaint.

34. A gentleman aged seventy-two; operation, Nov. 1873; oxalate of lime. I saw this patient a month ago (May, 1875). He is in perfect health, and has had no return whatever of his complaint.

35. A gentleman aged sixty-three; operation, Nov. 1873; uric-acid calculus. His medical attendant, Mr. Robert Parker, of Malpas, Cheshire, has just written me (June, 1875) that this patient is "feeling as well as ever he did in his life."

36. A gentleman aged seventy; operation, Dec. 1873; He made a most excellent recovery; left me a hale and hearty man, and I have no doubt is quite well, but I have no clue to his address. I believe he is living in Dundee or its neighbourhood.

37. A gamekeeper at Balmoral, aged sixty-one; operation, Dec. 1873; a phosphatic calculus. He has just written me (May) that he "is keeping well and able for his duty."

38. A gentleman aged sixty-four; operation, Jan. 1874; a large phosphatic stone. Seen with Dr. Holman, of Reigate. Had not emptied his bladder some time before operation. Still uses his catheter. In good health, and has no return of his malady.

39. A gentleman aged sixty; operation, Feb. 1874. This was a uric-acid stone of unusual size, and the difficulties were remarkable. I saw the case constantly with Mr. Blaker, of Brighton. He had long-continued troubles afterwards from inability to pass urine by his own efforts and frequent catheterism. He has slowly improved, and is now in a comfortable condition, with no return of stone formation.

40. A gentleman aged sixty-one; operation, Feb. 1874; a uric-acid stone. I have lost sight of him, and cannot learn his address.

41. A gentleman aged seventy; operation, Feb. 1874. A uric-acid stone, complicated with advanced disease of the bladder. The former was easily removed, but no improvement took place, and he died of the latter about six months after.

42. A gentleman aged sixty-two; operation, Feb. 1874; a uric-acid stone. Called on me May, 1875. In excellent health; no reappearance of stone symptoms. Occasionally under the care of Dr. Macdonald, physician to the Duke of Argyll.

43. A gentleman aged sixty-seven; operation, Feb. 1874. Died suddenly of mitral disease about ten days after the stone, mixed oxalates and urates, was successfully removed.

44. A gentleman aged seventy-eight; operation, March, 1874; phosphatic calculus. Has many years passed all his urine by catheter, and had had a stone removed in 1870; the second in 1874, after which he lived about five months.

45. A gentleman aged sixty-six; operation, March, 1874; very large uric-acid calculus. This gentleman has just written me (June, 1875): "I am well pleased to inform you that I have been very well indeed until the latter end of March." He adds that he has lately had a little irritability of the bladder, which has passed off.

46. A gentleman aged seventy-two; operation, March, 1874; uric-acid calculus. Seen with Mr. Sibley, of New Burlington-street. Is now (June, 1875) in perfect health; no sign of his malady remaining.

47. A gentleman aged fifty; operation, March, 1874; a uric-acid stone. Has been in excellent health since. In January last he passed a small uric-acid calculus per urethram. He is now living at Antwerp, and is quite well.

48. A gentleman aged sixty-five; operation, April, 1874; a phosphatic calculus. This patient had for many years passed all his water by catheter, frequently doing so as often as twelve to fifteen times in the twenty-four hours. He has been quite well until lately, and has just called (June, 1875) to inform me that symptoms have reappeared. I find a re-formation of phosphatic matter, which I shall have to break up and wash out. Otherwise his health is excellent.

49. A gentleman aged sixty; operation, April–May, 1874; uric-acid calculus. He called on me in February last, in excellent health, and without any symptoms of his old complaint, and walking several miles daily.

50. A gentleman aged sixty-eight; operation, May, 1874; large uric-acid stone. Dr. Lambert, of Sunderland, writes (June, 1875) his "condition at the present time is perfectly satisfactory."

51. A gentleman aged sixty-one; operation, May, 1874; uric-acid calculus. Dr. Helsham, of Brixton-road, writes, in May, 1875, that this patient is travelling on the Continent in perfect health.

Wimpole-street, W.

ON THE

DYNAMICAL ORIGIN OF ANIMAL HEAT IN ITS RELATION TO THE TEMPERATURE ALTERATIONS OBSERVED IN CERTAIN INJURIES AND DISEASES OF THE NERVOUS SYSTEM.

BY C. A. RAYNE, M.B. LOND.

IN a letter published in THE LANCET of Sept. 26th, 1874, I called attention to a mode of origin of animal heat which had been till then unrecognised, or, at any rate, had not received that amount of attention which its importance seemed to require. In that letter it was shown that the whole of the mechanical energy originating in the contractions of the heart, must of necessity be converted into heat within the body; and that this heat, far from being a despicable item, as might have been supposed, amounted in quantity (in a human adult of average development) to as much as would be required to raise four pounds and a half of water from freezing to boiling point in twenty-four hours —that is, to about *one-tenth of the whole amount of heat* produced in the body. Further, it was suggested that this fact might have numerous important bearings, especially in regard to the relation which frequently subsists between cardiac, arterial, and capillary tone and temperature.

It will be at once evident, without much consideration, that the amount of animal heat produced in this way must be far more immediately and readily susceptible to fluctuation than that produced in any other way, and that the effect of such fluctuation will immediately be made manifest in local or general alterations in temperature. The subtraction of such a large proportion in the available supply of animal heat as one-tenth, or even much less, would lower the balance of temperature several degrees, whereas its addition would send it up to an almost corresponding extent. How far other modifying conditions might in time arise, especially should the abnormality be long continued, to restore more or less the normal equilibrium, it is difficult as yet to say, but that they would do so to some extent is probable.

We have now to inquire into the conditions which would lead to excess or diminution in the supply of this mechanically originating heat, both locally and generally. As it has its origin in the cardiac muscular energy, the *whole* of which, and neither more nor less, undergoes the conversion (this is capable of distinct *mathematical* proof), it will be sufficient to inquire into the circumstances under which *this* is increased or diminished.

(1) By agencies acting directly upon the heart itself. In this category must be specially named the stimulating effects of any irritation of the cardiac *sympathetic* branches and the depressing effect of irritation of the pneumogastric.

(2) By alteration in the resistances to the circulation, local or general, and the excess or diminution of heat will be locally manifested, where the increased or diminished resistance occurs. That the force of the normally-nourished heart increases, *pari passu*, with the resistance to be overcome is a sufficiently well-known fact, familiar instances of which are afforded in the hypertrophy which occurs in valvular and general arterial disease. What I wish specially to direct attention to, however, is the marked effect upon the resistance to the passage of blood produced by alterations in the calibre of the vessels through vaso-motor nervous agency. The resistance to the passage of a fluid, such as water, through a tube increases with the diminishing diameter of the tube (equal quantities of fluid passing in equal times) in the enormous proportion of the fifth power of that diameter.[*] Thus, if we diminish the diameter by one-half we increase the resistance (and the developed heat is directly proportionate to the resistance) *thirty-two times*.[†]

I have lately had some opportunities of investigating certain of the phenomena of tetanus which bear upon this subject, with results which appear to be in accordance with these views. The disease is not a very common one, especially in a provincial hospital, and many opportunities of observation do not usually fall to the lot of the same person. I would therefore take the liberty of suggesting to others that it is a matter of much importance, in this and in other diseases or injuries of the nervous system (especially the upper part of the spinal cord), to ascertain in a sufficient number of cases the *exact temperature range*, taken at short intervals throughout the course of the affection, certain details as to the *action of the heart*, and the *characters and variations of the pulse* from day to day.

To these points in the semeiology of tetanus, I will briefly refer.

(1) *The temperature* is, I believe, invariably found to be raised during at least some part of the course of the disease. This has been so in all the cases which have come under my own notice. The elevation is by no means uniform, but appears to bear a distinct relation to the frequency, duration, severity, and general character of the muscular spasms. During a long-continued and severe general spasm, it is by no means uncommon to get an elevation of 1° to 2° Fahr. over the preceding interval of rest, and this notwithstanding a semi-asphyxiated condition (shown by general superficial duskiness) and consequent impaired oxygenation. In an ordinary case the temperature ranges from 100° to 103° or 104°, but it is not unusual for it to rise much higher, and it has even been recorded as high as 112° (Wunderlich).

(2) *The heart's action* appears to be greatly exalted, and especially so during the paroxysms. The frequency of contraction may be even doubled, whilst at the same time the force is much increased, as estimated by the impulse and the intensity of the first sound. In the later exhaustive stages of the disease the action becomes necessarily much weakened.

(3) When we consider that the vaso-motor nervous centres are situated[*] in the upper part of the spinal cord, in the very midst of the intense nerve action going on there, it would *a priori* be thought extremely probable that they should, to a greater or less degree, participate in the disturbance. And we have direct evidence that this is actually the case in the *condition of the pulse*, both at the wrist and elsewhere. This is frequent, *small and hard*, and especially so during the attacks of spasm (in the later exhaustive stages of the disease it becomes soft), showing that the arterial muscular coats are in a condition of extreme tonicity, so that the expansion of the arteries is completely resisted, notwithstanding the increased force and number of the cardiac contractions, and consequent blood pressure within. It is further manifested by the blanched aspect of the face and surface generally at the commencement of a spasm, and before the duskiness consequent on impaired respiration has had time to show itself. The *dilatation of the pupils*, which is almost constantly present, also points to sympathetic irritation.

There are thus present the very conditions which are required to increase *very largely* the production of heat directly from mechanical energy. The increase will be directly proportional to the increased resistance to the passage of blood through the vessels generally, and this, as has been shown, is influenced to an extreme degree by their diameter. But also the mechanical action of the muscles generally will tend still further to impede the circulation, and it is certain that a large proportion of the energy which they evolve will be directly converted into heat—i.e., exactly so much and no more as is not manifested in work produced external to the body of the patient.

The elevation of temperature in tetanus is usually ascribed *directly* to "excessively active calorification consequent upon the greatly increased destructive assimilation which is going on.[†] That it is in some measure due to this appears probable, especially in those comparatively rare instances in which, death not having taken place by asphyxia, there is extreme tissue exhaustion and consequent proneness to rapid destructive metamorphosis. And it is probably in these cases only (as in certain other rapidly exhaustive diseases), and towards the end of life, that such excessive temperatures have been recorded, and that a small post-mortem rise has even been observed. It becomes, however, now evident that there is another and a very important factor concerned in this heat production, and that it is at least possible completely to account for it in the earlier sthenic stages of the disease, and throughout in the acute and rapidly fatal forms, without calling in the aid of immediately preceding chemical change at all. The remote source of the heat will, however, no doubt still be chemical, though its immediate source is mechanical. Possibly some therapeutic indications might be deduced from the evident implication of vaso-motor centres (themselves largely under the control of drugs such as belladonna, nitrite of amyl, &c.), and some of the intractability of the disease may be found to be due to complications of this nature, which may be more amenable to treatment specially directed towards them.

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[*] For this and other calculations I am indebted to the kindness of Professor W. C. Unwin, of the Indian Civil Engineering College, Cooper's-hill.

[†] It is not to be supposed that the increase is actually so great as this in the body, for the *flow of liquid* would of course be much reduced.

[*] See Carpenter's Physiology, seventh edition, p. 281.

[†] See Niemeyer's Medicine, translated by Humphreys and Hackley, 1871, vol. ii., p. 351.

The pyrexia of tetanus is interesting as affording an instance of elevation of temperature pure and simple, uncomplicated by conditions of toxæmia, as in the fevers. It is worthy of note that many of the concomitants of so-called fever are here absent (so much so that the disease is usually called non-febrile); they may therefore be presumed in other cases not to be due directly to elevation of temperature.

In alcoholic stupor, a condition of things is observed in many respects exactly the reverse of what is seen in tetanus. A young and robust man, a soldier, was lately admitted into the Radcliffe Infirmary, under the care of Dr. Acland, in this state. He was quite unconscious, but could be partially roused when loudly spoken to. The pupils, contracted to the size of pins' points, the feebly acting heart and soft relaxed arteries, all pointed to the semi-paralysed condition of the sympathetic and vaso-motor nerves. The temperature in the axilla, after being in bed some hours, was 95°. He was then partially roused as far as possible, and kept so for a few minutes. The pupils immediately underwent considerable dilatation; the pulse at the wrist recovered to some extent its tone, and at the end of the interval the temperature had slightly but quite perceptibly risen.

The remaining class of cases to which I desire briefly to direct attention, as being probably more or less connected with the question of the mechanical origin of heat, have always attracted a great deal of attention and excited much speculation. I refer to the *temperature effects of lesions of the upper part of the spinal cord.* These cases are, however, extremely difficult to deal with. No one who looks over the mass of literature which has been written upon the subject can but be struck with the great discrepancies of statement put forward by different observers. The causes of temperature alterations in these cases are no doubt often complicated and numerous, and no one cause is sufficient. But it cannot well be doubted by anyone who considers the subject, that, in the mechanical origin of animal heat, capable of being so readily and largely influenced by vaso-motor agency, we have a factor which *must* have in many cases very great influence, and the consideration of which, in attempting to arrive at their solution, ought by no means to be neglected.

It will be advisable to point out what might *a priori* be expected to be the temperature effects of vaso-motor injury after elimination of complications, such as shock, secondary inflammations, &c., and then to see how far such effects correspond with the facts of recorded experience.

1. When some part of the vaso-motor tract is so injured, *without irritation,* as simply to paralyse locally the vessels of a part, we shall get dilatation of those vessels with consequent increased afflux of blood, more or less active according to the state of the heart (the nerve-supply of which, it must be remembered, may be implicated in the injury). In this way the heat from the interior will undergo greater surface distribution; and it is not improbable that there may be increased tissue oxygenation for a time—that is, so long as a previously accumulating store of effete products exists, ready to take advantage of the excess of oxygen brought by the increased amount of blood. We may thus get a surface elevation of temperature, which may even mount above the normal blood heat. It is certain, however, that diminution will eventually supervene; for in addition to the mechanically developed heat being greatly reduced, the blood generally, from greater exposure, will undergo more rapid cooling, and the excess in oxygenation will also gradually cease.

Clinical evidence supports this view. Mr. Hutchinson states* what he considers has been hitherto overlooked—viz., that the increased temperature in vaso-motor paralysis is *only temporary,* and that subsequently it is diminished, and that in all cases of paralysis a low state of temperature eventually results. He quotes the case of a man with paralysed cervical sympathetic from injury, in whom the ear of the affected side was eventually always decidedly colder than the other. Tscheschichin also† has observed after section of the spinal cord in various situations a sinking of the general temperature to accompany suppression of vascular activity. No doubt where the nerve-supply is entirely cut off from a part, so that its nutrition fails, the diminished cell-change will contribute to this effect.

2. When the vaso-motor centres are completely paralysed, as by a crush to the upper part of the spinal cord, so severe as completely to destroy them, *without the possibility of irritation,* and thus to produce general vascular paralysis throughout the body, we may expect the same series of phenomena; but in this case the diminution of temperature will be more general and more marked, and will supervene almost immediately.

In a case related by Mr. Hutchinson in the clinical lecture referred to, these conditions existed in a remarkable degree. The patient, with all the symptoms of complete vaso-motor paralysis after crushed cord, and without much shock, had a temperature of about 95° during the whole five days that he survived. In the case of alcoholic poisoning already alluded to the same temperature and vaso-motor conditions existed.

There are other cases, however, which do not so clearly give support to this view; the general evidence indeed on the subject is frequently contradictory and unreliable. It must be remembered that there are many sources of fallacy: the condition of the vessels, as to their true state of paralysis or the reverse, is in some cases open to question; also one part of the vaso-motor nervous apparatus may be paralysed, whilst another, not so easy of observation, may be acting excessively from irritation; or the cardiac nerve-supply may be interfered with in one way or another. The whole subject needs carefully reviewing in the light of more detailed and accurate observation.

3. When the vaso-motor centres are so injured as to lead to their irritation and excessive action, what results may be expected to follow? This is probably by far the most common condition after spinal injury, and is, therefore, the more interesting. For it is far from probable that a spinal crush should be so absolute and complete as quite to destroy, through a considerable tract, the grey centres in its interior, although it may be sufficient to destroy its powers of conduction to parts below. Therefore, when inflammatory irritation supervenes, many of the nerve-cells will be thrown into excessive action, and amongst them no doubt many of those belonging to the vaso-motor centres. In support of this statement I may point out that it is usual in these cases to get evidences of spinal irritation elsewhere, such as pain, spasm of certain muscles, &c., but that where the injury is so great as to produce total vaso-motor paralysis such evidences are rare, as in Mr. Hutchinson's case already mentioned.

Now this vaso-motor irritation will produce more or less general vascular contraction, with, on the principles already laid down, immensely increased resistance to the blood-stream, and a proportionately increased development of heat, as in tetanus. This heat may be expected to develop, not immediately, but gradually, and on the supervention of inflammatory irritation. On reference to cases this supposition will be found to be strictly correct. In Mr. Hutchinson's cases, 1 and 2,‡ the temperature was at first low, with signs of sympathetic paralysis (soft pulse, priapism, &c.); and, as it ascended, symptoms of sympathetic irritation came on. The action of the heart we should expect to be increased, at least in force if not frequency, as appears to be the case.

See, also, experiments of Tscheschichin on the medulla oblongata of a rabbit, quoted by Wunderlich.§ He found elevation of temperature, accelerated circulation, and increased reflex excitability to be concurrent phenomena.

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* Clinical Lecture published in THE LANCET, May 22nd, 1875, fourth paragraph.

† Reichert's Archiv, 1866, p. 152, quoted in Wunderlich's Medical Thermometry.

‡ THE LANCET, May 29th, 1875.

§ Medical Thermometry, Sydenham Society's Translation, p. 151.

It will thus be seen that there is much probability that, contrary to the views usually accepted, vaso-motor irritation, and not vaso-motor paralysis, is the condition most frequently met with in conjunction with elevation of temperature in lesions of the spinal cord; and that the increased heat is at least largely due to direct mechanical conversion.

Radcliffe Infirmary, Oxford.

A Mirror of HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

INTENSE AND CHRONIC NEURALGIA IN THE TRACT OF THE RIGHT DENTAL AND AURICULO-TEMPORAL NERVES; OPERATION; RECOVERY.

(Under the care of Mr. Savory.)

For the notes of the following interesting case we are indebted to Mr. F. W. Strugnell, house-surgeon.

George P——, aged fifty-three, a thin, spare man, with grey hair, looking older than his years, was admitted into Kenton ward on March 20th, 1875. For the last seven years the patient had suffered from intense neuralgic pains in the face, occurring at irregular periods. The attack of pain commenced by a sensation of twitching in and near the first bicuspid tooth on the right side of the lower jaw. This was very quickly followed by lancinating pain, very excruciating, extending from this part to the angle of the jaw and upwards towards the right temple, spreading both backwards and forwards. The first fit, the man stated, was brought on by yawning. Eating, drinking (especially cold drinks), talking, or tapping the tooth, would cause an attack, but not always. In the early morning the fit most frequently occurred, when at breakfast. To take food the patient lay on his back, took very small morsels, and ate very slowly on the left side of the mouth. The more frequent the attacks the less severe they became; sometimes they would occur two or three times a day, occasionally there might be an interval of twenty-four hours between them. The twitching pain in the tooth and about it was permanent. At first the pain commenced in the last molar tooth, which was extracted; but the pain then shifted to the next, and each time a tooth was removed the pain was referred to the adjacent one. Several drugs had been employed, most of which relieved for a short time, some not at all.

When an attack occurred, the patient sprang up, his face became red, his eyes suffused, and there was an expression of intense agony in his countenance; he seemed to lose all command over himself, rushed about the ward, with his hands at one moment tightly holding his jaw, at another tearing at his hair, and he had evidently lost control over his actions. The fit subsided as suddenly as it began, and the poor fellow sank into his chair exhausted. The length of time an attack lasted did not exceed a minute. His previous history was good. He had had rheumatic pains in the knees and back for some years, but had felt nothing of them since the present affection.

On admission the patient was given bromide of potassium, and afterwards chloride of ammonium in twenty-grain doses, with seeming benefit for a short while. He slept well at night, the fits not occurring during sleep.

As the patient did not improve, and begged that something might be done, Mr. Savory decided, in consultation with his colleagues, to trephine the lower jaw and divide the dental nerve. This was done on the 21st of April. Two incisions, meeting below at an angle, were made in front of the masseter muscle on the right side of the lower jaw, and the triangular flap of skin raised; the bone was trephined. and a piece about the size of a sixpence removed; the dental nerve and artery were thus exposed in the horizontal diameter of the circle. Mr. Savory then cut out about one-third of an inch of the nerve.

For three or four days after the operation the patient still felt the twitching sensations, which on the second day were rather severe, but no fit occurred. Nine days after the operation he was able to eat an egg, and on May 2nd was allowed fish. He was discharged on May 16th, quite well, with no pain of any kind. On May 29th he was still perfectly free from any pain.

MIDDLESEX HOSPITAL.

CANCER OF OVARIES AND PERITONEUM AND UMBILICUS; COMPRESSION OF THE COMMON BILE-DUCT; JAUNDICE; DEATH.

(Under the care of Dr. Liveing.)

For the notes of the following case we are indebted to Mr. Arthur Tomes, house-physician.

Harriett B——, aged fifty-nine, was admitted into Northumberland ward April 23rd, 1875. She was emaciated, slightly jaundiced, had a furred tongue, was constipated, and suffered with the following symptoms:—Pain in abdomen, not localised, but general; loss of appetite; nausea and vomiting of bilious matter, and on one occasion of a little bright blood. The history of the illness was that three months before she caught an influenza cold; a month later jaundice appeared, preceded by great pain in the abdomen; this pain became more or less continuous, increased by food, and accompanied by frequent nausea and retching; the bowels had been sluggish.

On admission, no tumour could be found in abdomen; liver dulness was about normal; tenderness over surface of abdomen, especially in right hypochondrium; no enlargement of superficial veins; no varicose veins of lower extremities. The umbilicus was noticed to be hard and *button-like*, and adherent, as though tied down to subjacent structures. Urine (sp. gr. 1022) contained bile, but no albumen. The motions were pale, but contained some bile.

By the 28th the jaundice had become more intense, the pain and vomiting had increased in severity, and the patient was noticed to be continually on her right side.

On May 4th a subcutaneous injection of morphia was ordered to be given when she was in most pain. The uterus was examined per vaginam, and was found to be movable; the cervix slightly nodular; no sign of carcinoma.

In spite of all treatment, the symptoms became more and more aggravated; there was obstinate constipation, which had to be overcome by purgatives and enemata, until the 17th, after which date there was constant relaxation of the bowels, attended with much tenesmus, and a fetid discharge of watery fluid. Her urine was found to contain a little albumen. She died on the 23rd of May.

Post-mortem examination.—On opening the abdomen the liver was seen to extend about three fingers' breadth below the ribs. The parietal peritoneum, notably in the pelvic and iliac regions, presented several minute white nodules, and thickened puckered scar-like patches of cancer. Small white thickened patches of various sizes and shape were met with on each side of the pulmonary pleura, which, microscopically, were found to possess the alveolated structure, enclosing multiform cells, characteristic of cancer. The liver, enlarged and olive-coloured, contained bilious cysts in its posterior part, and the bile-ducts were generally dilated. The hepatic ducts were distended with bile, and were dilated to the size of the forefinger. Gall-bladder shrunken, and its coats thickened; it contained inspissated bile and a number of small gall-stones. The cystic duct was pervious, but the common duct was almost completely constricted at a point two inches from the duodenal orifice, and the probe could be passed through it only with difficulty. The lymphatic glands and tissues in the neighbourhood were all thickened and puckered, and were evidently the cause of the constriction by pressing on the common duct. The right ovary was enlarged to thrice its normal size, hard, and fibrous, presenting the naked-eye and microscopical appearances of scirrhus cancer. Close to it lay another oval mass, the size of a hazel-nut. The left ovary was also enlarged, but softer and more vascular than the right.

Sections of the thickened and dense tissue underlying the skin of the umbilicus presented, under the microscope, infiltration of the corium with cells of an epithelial type, arranged more or less within alveoli. The cells assumed very various shapes, and contained large nuclei. Sections of the lymphatic glands in the hilus of the liver showed also typical spaces containing "cancer cells."

The post-mortem examination and microscopical sections were made by Dr. Sidney Coupland, curator.

DUNEDIN HOSPITAL.

FRACTURE OF TIBIA AND PARTIAL DISLOCATION OF ASTRAGALUS; OPERATION; RECOVERY.

(Under the care of Dr. HULME.)

ROBERT I——, aged thirty-nine, miner, was admitted Sept. 22d from Tuapeka Hospital. When working in a tunnel seventeen months previously, the earth caved in, causing a fracture of the patient's right fibula, and a partial displacement of the astragalus outwards. The skin was inflamed over the projecting portion of the astragalus and walking was very difficult.

On Feb. 8th the projecting portion of the astragalus with about half an inch of the body of the bone was removed by Dr. Hulme. The wound healed favourably, and the patient gradually gained strength in the joint and left the hospital on Jan. 4th, 1874, able to walk tolerably well. He now gets daily employment in a saw-mill.

TRAUMATIC ANEURISM; OPERATION; RECOVERY.

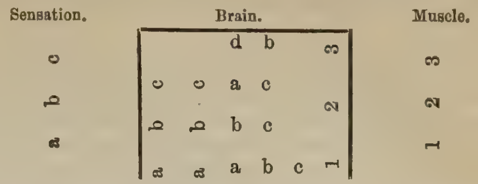
Hugh B—— was admitted March 5th, 1875, with traumatic aueurism of the radial artery. Two months previously he received a wound in the right forearm two inches above the wrist. The wound healed, but shortly there appeared a small swelling, which increased to the size of a duck's egg. The patient was then under the care of a Chinese doctor, who poulticed the swelling and occasionally punctured it with a needle. Dr. Hulme opened the sac and tied both ends of the artery. The ligatures came away on the sixteenth day, and the man was discharged cured on the 29th of the month.

It may be of interest to note that an infusion of bluegum leaves (4 oz. of fresh leaves to a pint of water) has been given by Dr. Hulme, in several cases of diarrhœa requiring astringents, with the best effect. But in cases of chronic dysentery it appears to be inferior to sulphate of copper.

Reviews and Notices of Books.

The Mind of Man, being a Natural System of Mental Philosophy. By ALFRED SMEE, F.R.S. Bell and Sons. 1875.

MR. SMEE has, we think, in this book made the mistake of attempting to compress far too much into a small space. He has laboured to be brief and has become obscure. In the compass of about 250 pages he presents us with a system of mental philosophy, a system of moral philosophy, and a theory intended to show that the action of the nervous system is essentially that of a voltaic battery, or, rather, of a series of voltaic batteries. Each of these subjects would demand a volume in itself, and the result of his efforts is, that the book as a whole wants coherency and betrays its origin in a series of separate papers and lectures delivered or written at various times. He coins an extraordinary number of new terms—"aisthenics," "syndramics," "normics," and compounds of these, till the reader is fairly bewildered; whilst in more than one place he has introduced diagrams, with letters or figures, and with so little attempt at description that they resemble those ingenious cyphers that are unintelligible to all who do not hold the key. This is particularly the case with that on page 181, which, as Mr. Smee holds that by it he can account for all the phenomena exhibited by animals, we here append, leaving our readers to extract what they can out of it.



All the explanation Mr. Smee affords us of this diagram is, that volition or actions through the nerves, marked 1, 2, 3, would depend upon the character of the impression in the respective parts of the combination battery a b, a c, b c, a b c.

The chief objections to Mr. Smee's theoretical nervous combination of man—in which he represents by three spaces the nervous expansion of the skin, ear, and eye, with cords proceeding to (1) an aisthenic centre, containing ganglionic cells that give off branches to (2) the syndramic centre, which again communicates with (3) the aisthenic normic centre, which sends fibres to (4) the syndramic normic, which communicates with (5) the pneuma normic centre, which sends fibres straight to the muscle—are that this plan does not provide for the reflex actions which may take place at the successive planes of Mr. Smee's ganglionic cells; that is to say, at the plane of the sensory ganglia, ideomotor ganglia, &c., whilst it exhibits what certainly does not take place, that the fibres for the muscles emanate directly from the highest centre.

The book absolutely teems with statements that would require a volume for their elucidation and illustration. Thus in one place he observes, that "on a study of the laws of human action we find that the child is born with a will which is unrestrained, and free to act in any manner." Is this so? Has heredity nothing to do with the mode of action? Many of the statements, too, are very loose. Thus Mr. Smee states that an artificial blood-corpuscle may be made by placing a little persalt of iron in animal membrane. Now we can scarcely think that Mr. Smee can really believe that we can thus imitate a blood-corpuscle in any one of its relations, physical, chemical, or physiological. And so, again, in regard to the "voltaic mechanism of the nervous system," we must confess that we are profoundly sceptical of Mr. Smee's views and arguments. We think he mistakes the effect for the cause. We have no doubt that manifestations of electrical disturbance can easily be shown in nerve and muscle and blood, but these are due to chemical changes of varying activity taking place in the several tissues, according as their composition is more or less stable and the supply of oxygen is more or less free. These chemical changes are attended in living nerve with the development of nerve force, the electrical manifestations being entirely secondary and subsidiary phenomena. We cannot admit that the nerve force and electrical force are identical, or that the former can be expressed in such terms as the following:—

> "The most simple idea of a voltaic element in the nervous system would be obtained by a circle of one motor nerve and one sensor nerve, the termination of one end of the sensor nerve being situated in the organ of sensation in the body in aqueous matter in the tissues, and one end of the motor nerve being in contact with aqueous matter in the muscle. The other extremities of the two nerves are inserted in the moist tissue of the grey matter of either the brain or spinal cord, the two connecting nerves being insulated conductors, similar to the wires of our telegraph, except in this respect, that the interior of the nerve-fibres consists of fluid, whilst the connexions of telegraphs are made of metal."

Throughout this chapter the identity of voltaic electricity and nerve force is calmly assumed, though it is as yet an utterly unproven hypothesis. The wonderful disposition of

Mr. Smee to be discursive is exhibited in this chapter to its fullest extent.

Notwithstanding the failings we have noticed in this book, Mr. Smee has managed to make it interesting, and we recommend our readers to get it, if only to exercise their ingenuity. The best bit of work in the whole volume is the index, for which Mr. Smee states in the preface that he is indebted to his daughter, Mrs. Odling, and which is a model of its kind.

Therapeutics and Materia Medica. By ALFRED STILLÉ, M.D. Fourth Edition, thoroughly revised and enlarged. In Two Volumes. Philadelphia: H. C. Lea. London: Trübner. 1874.

MANY English and more American readers will welcome heartily the fourth edition of Dr. Stillé's treatise on therapeutics and materia medica. Its proportions are huge, the two large volumes containing nearly two thousand pages. The pharmaceutical aspect of the subject is subordinated, the therapeutics are given in almost exhaustive detail, the results of modern European research being very fully reproduced. To the account of every drug a history of its use is prefixed, and the information thus given is in many cases of great interest. The work is, indeed, one of which it is not easy to speak in too high terms. The various drugs are grouped according to their actions, and the account of each group is preceded by a sketch of their general properties and modes of action. The additions to the fourth edition bring this work fairly down to the present stage of therapeutics. They comprise in all about 250 pages, and include a chapter on electricity, by Dr. M. J. Grier, of nearly sixty pages, which gives a good and useful account of what is now known on the subject.

We are surprised to find that pepsine is omitted from the present edition, being dismissed from the materia medica with the note that "experience has shown that the notions entertained for a time of its virtues were illusory, and as the history of this preparation has furnished a fresh demonstration that *a priori* conclusions on therapeutics are generally valueless, any account of its preparations and uses appears superfluous." As far as we are aware, there are no published facts which afford sufficient ground for such an abrupt dismissal of an agent still in wide use. That carefully prepared pepsine possesses the alleged property of dissolving albumen is unquestionable, resting upon ample evidence. There can be no doubt that the best specimens of commercial pepsine, prepared both in Germany and this country, possess the same property. In the opinion of many of the physicians of largest experience in this country, good pepsine is of considerable value in the treatment of gastric troubles, at least if we are to judge from the fact that it is still frequently prescribed. Many pepsine preparations are quite inert, both those prepared in this country and in America, but this is hardly sufficient ground for excluding it from the Pharmacopœia, into which, in this country, it was introduced only last year!

The Borderland of Insanity, and other allied Papers. By ANDREW WYNTER, M.D., M.R.C.P. Lond. London: Robert Hardwicke. 1875.

IN these papers Dr. Wynter has, we think, opened up a new subject of research. If we could only get at the "early warnings" which foreshadow brain disease, no doubt in many cases, where there was no hereditary taint, we should be able to ward off the attack, although we may not be quite so sanguine as Dr. Wynter, who says that "the first stage of insanity, where there is no hereditary taint, is far more curable than an attack of pneumonia." Nevertheless we quite agree with him when he says that it is greatly to be regretted that it has been the practice to look upon insanity as a specialty, apart from general medicine, which students are rarely called upon to study. We are glad to see that he treats mental disease as arising from a purely physical cause, and therefore to be attacked by the same means. This being the case, the necessity of educating the general practitioner in psychological medicine is clearly indicated. He it is who is most likely to be informed of the first beginnings of mental alienation, and would be the better able at an early date to stem its advance. Dr. Wynter has, we think, struck a true note when he asserts that brain disease in the convalescent stage is best treated by associating the patient with healthy minds. He objects to such cases being mingled with the mass of asylum patients "sodden with insanity." He thinks that in such cases the family life in the house of the physician is by far the best method of cure, and he justly quotes the good influence of the companionship of healthy minds upon even chronic cases by the known results, both economically and psychologically, of the insane colonies of Gheel in Belgium, and of Kennoway in Scotland, where the insane go forth to their daily labour with the same population in the fields, to the great advantage of the former.

Dr. Wynter pleads, in these pages, for a still further advance in the direction of non-restraint. "We have got rid of the fetters to the body, but the fetters to the mind still remain unnecessarily severe and galling to the tender susceptibilities of the mental convalescent." Here we think he is right, and after a certain period, when all acute symptoms have subsided, "the family life" in the house of a physician is by far the best medicine for the ultimate cure of the patient.

The allied papers are full of striking illustrations bearing upon the happy title chosen for this volume, "The Borderland of Insanity." The discovery of the early warnings of insanity may be called at present unknown ground—a psychological North Pole, in which the diligent explorer is sure to find facts that will amply repay him for his research, and Dr. Wynter has done his share in this volume in furthering the quest.

Ure's Dictionary of Arts, Manufactures, and Mines. By ROBERT HUNT, F.R.S., assisted by F. W. RUDLER, F.G.S. Seventh Edition, completely revised and greatly enlarged. London: Longmans. 1875.

THE appearance within a few years of three editions of so bulky a work as Ure's well-known dictionary is itself a sufficient proof of its value. So well was it compiled and written by the original author—a man of vast knowledge and singular lucidity of thought and language,—and so excellent has been the editing since his time, that the work has for more than half a century retained a leading position among scientific treatises. Mr. Hunt has been assisted by a zealous staff of writers, many of them men of European reputation, and we find that the difficult tasks of addition, excision, and rewriting have in most cases been exceedingly well executed. Comparing the new edition with the old, we find many important additions and improvements. It is sufficient to point to the articles on Iron, Coal, Artillery, Calico-Printing, and Aniline Colours, as examples. The smaller additions and alterations are almost infinite in number, and add very materially to the value of the work.

Absolute perfection in a dictionary of this kind cannot be expected. Omissions and errors can always be detected by the dozen in a closely printed reference work of over three thousand pages, but it would be hardly fair to dwell upon them in so short a notice. "Ure's Dictionary," as it now appears, is a most admirable book; it has no rival, and will not easily be displaced from its pre-eminence.

THE
GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1875.

MONDAY, JUNE 21ST.

A LETTER was read from the Local Government Board, enclosing a copy of the order recently issued from that department with respect to the qualification of the medical practitioner by whom a certificate is required to be given to entitle a district medical officer to a fee for amputation performed in the case of any pauper, the order removing the previous restriction and extending the qualification in accordance with the principles of the Medical Act.

The communication was ordered to be entered on the Minutes.

The Council then went into committee, and resumed the consideration of the report of the visitors of the examinations of the Royal College of Surgeons of England.

Dr. **STORRAR** referred to the history and position of the College of Surgeons, which he said had always been a body of pure surgeons, and there had been a tacit understanding between it and the Apothecaries' Hall that one should take one part of the examination, and that the other should take the other part. The Act of 1858, however, gave to the members of the College of Surgeons the right to registration. That was not the act of the College, but of the Legislature, and was the result of the bad drafting of a clause. The College never sought the privilege conferred upon it, and was now promoting a Bill to enable it to enter into a scheme for a conjoint examination. When that scheme came into operation, the College would no longer be open to the remarks which had been made respecting its examinations. He was glad to find the College taking the honourable course it was now pursuing. He had often spoken of it in hard terms, but it was really something exhilarating to see the warm breath of liberal common sense telling upon the icy resistance that had long been manifested in that body. It had been in their power to hinder the progress of medical education, it was now in their power to promote it, and henceforth he hoped that the College of Surgeons might be regarded as an advanced body.

Sir W. **GULL** suggested that it would be a great improvement if the students, in their clinical examination in surgery, were taken to the hospitals, where there were numerous cases of accidents, instead of having patients brought to the College.

Mr. **QUAIN** said that every one going to the College of Surgeons was told that he must get a qualification in medicine elsewhere, so that there was no such thing as a person being qualified by the College of Surgeons only. Then it should be borne in mind that the real surgery of the country was in the hands of the *fellows* of the College. There were two diplomas, and one did not necessarily lead to the other. The examinations were quite distinct; and it was not necessary to be a member in order to become a fellow of the College. The fellows were examined clinically in the hospitals, and more extensively on other subjects; moreover, they must be twenty-five years of age, and required two years more study than members. With regard to natural sciences, under the old system a young man came to his school with at least sufficient knowledge to enable him to follow the lectures; but at present they came without a particle of knowledge. A young man had told told him that the greater part of his first year was occupied in getting as much knowledge as would enable him to understand the lectures he was required to attend.

Mr. **MACNAMARA** inquired whether a member of the College of Surgeons in Ireland would require the diploma of the College of Surgeons in England in order to hold the office of surgeon in a country hospital.

Mr. **QUAIN** replied that the hospitals are supported by private contributions, and that the governors make what rules they please.

Mr. **MACNAMARA**.—Would he not be entitled to become surgeon in the army?

Mr. **QUAIN**.—Yes; but he would have to go into the Army School of Medicine and Surgery.

Dr. **THOMSON** said it appeared that the College of Surgeons might grant licences to be registered upon qualifications which, in the view of the Council, were imperfect. The whole effort of the Council had been to make the qualifications complete; and it was clear that every candidate should possess the knowledge which the Council held to be requisite to entitle him to become a member of the profession. The College of Surgeons were no doubt right in paying special attention to anatomy and surgery, but it ought not to neglect any of the branches of knowledge required by the Council.

Dr. **HUMPHRY** said they were told that the surgery of the United Kingdom was in the hands of the fellows of the College of Surgeons; but it appeared that only eleven gentlemen passed the fellowship examination last year. He understood that there was a difficulty in filling even the higher appointments in London with the fellows of the College. The reason was that the regulations requisite for a fellowship were such as to preclude the great mass of the surgeons in England from being candidates at the examination. This was a serious question, and he was glad to have an opportunity of mentioning it. He hoped that such an alteration would be effected as would fully and fairly admit the members to the fellowship examinations. He agreed with Sir W. Gull that the examination for the members as well as for the fellows should be made more clinical.

Sir W. **GULL** said it was hard upon him to be called the Rhadamanthus of the Council; but it was also a reflection upon some other members who failed to do their duty. He (Sir W. Gull) ought not to have to move in the matter of the College of Surgeons; but he should think it his duty to move that special attention be drawn to the incompleteness of the physiological part of the examinations, and the deficiency of the clinical examinations for the membership. He was utterly astonished to hear that the members of the College of Surgeons were not fitted to perform the higher operations of surgery. He had often been astonished at the skill exhibited by them in the most obscure cases, when called upon to act at a moment's notice. They certainly ought to have every facility for acquiring the requisite knowledge. It was the duty of the Council to urge that the clinical examinations should be more complete, so that the country might be better served. The members of the College should all be qualified to perform the higher operations, and the fellowship should not be given for practical dexterity so much as for higher scientific qualifications. In the present day almost as much medicine was wanted as surgery, especially in what was called "conservative surgery." He would strongly urge that the medical and surgical examinations should be henceforth clinical.

Dr. **PARKES** said that the examination at the College of Surgeons was certainly practical, though it did not take place at the bedside, and the same thing might be said of the examination at the Apothecaries' Hall. There were sixteen or twenty patients present, and the examiner asked each candidate in the space of time allowed (ten minutes) to examine a case, and give a rapid diagnosis. It appeared to the visitors that to that extent the test was a fair one.

Dr. **WOOD** said that one of the objects of the clinical examination was to direct the attention of the students to the importance of attending cases in the hospital. Since clinical examinations had been introduced in Edinburgh the students had been far more diligent in attending the visits of the surgeons and inquiring into the cases. He thought that attention should be called to the fact that a member of the College of Surgeons might be put on the Register without having undergone an examination in chemistry.

Dr. **ROLLESTON** pointed out that the Royal College of Surgeons in Ireland had a clinical examination in surgery. With regard to chemistry, he objected to one board accepting the imprimatur of another body. An examination should be thorough in all points before a candidate was allowed to pass.

Mr. **MACNAMARA** dwelt on the importance of due attention being paid to physiology.

Dr. **FLEMING**, as one of the visitors, said that they had thought it sufficient to state the facts they had witnessed.

Sir WM. **GULL** then moved, "That attention be drawn to the incompleteness of the physiological part of the examinations, and the deficiency of the clinical examinations for the membership; also to the total want of any examination in chemistry and materia medica, though these subjects are in the curriculum."

Dr. Wood seconded the motion.

Mr. Quain said it was his duty to call the attention of the College of Surgeons to the recommendations of the visitors of the Council, and there was therefore no necessity for such a resolution. With regard to the clinical examination, all the cases referred to as having been examined at the Royal College of Surgeons in Ireland might have been as easily examined in an ordinary room as in a hospital. It did not, for example, require that a case of hare-lip should be examined when the patient was in bed. As to physiology, the two questions given by the visitors, together with questions given orally, would, he thought, be an adequate test. If the oral questions were not asked the examiner did not perform his duty.

Sir Wm. Gull said that the members of the Council were not sent to it to defend the deficiencies of their own particular bodies, but to represent the interests of the public and of medical and surgical science. He therefore thought that it was Mr. Quain's duty to vote for his motion.

Dr. A. Smith supported the motion. It was possible that the representative of a particular body might omit some point that it was desirable to notice, and the only safe course was to pass a resolution calling special attention to the matter.

Dr. Parkes said the case of the College of Surgeons was not so serious as that of the College of Physicians, and he did not think that any censure was called for.

Sir Wm. Gull.—It is not a censure; it is only calling attention to a deficiency.

Dr. Sharpey opposed the resolution, believing it to be unnecessary, the visitors being of opinion that the examination was well carried out so far as the opportunity was supplied. It was no doubt objectionable that so little reference was made to physiology, but a considerable advance had been made since he visited the examinations with Dr. Parkes some years ago.

Dr. Begbie said he should vote against Sir Wm. Gull's motion, not because he was indifferent to the existence of the defects to which reference had been made, but because he regarded the presence at the Council of the distinguished representative of the College as a sufficient guarantee that those defects would be inquired into.

Sir W. Gull said if the motion were not passed he should move that the resolution with regard to the College of Physicians be rescinded.

Dr. Thomson said that, as one of the minority in regard to the resolution respecting the College of Physicians, he should have been glad to avoid voting for the present motion, believing that no advantage was gained by the Council proceeding in the way suggested; but, in common justice, the one motion having passed, the other ought not to be rejected. Should it, however, be rejected, he was glad to think that there would be an opportunity of rescinding the former motion.

Dr. Humphry opposed the motion, and hoped that the previous one would be rescinded.

The motion was then put and negatived, 8 members voting for it and 12 against.

Sir Wm. Gull said that, on further consideration, he would not move to rescind the resolution respecting the College of Physicians, as it would seem ridiculous to do so. He would rather that the Council should be inconsistent.

The Council then proceeded to the consideration of the report of the visitors of examinations of the King and Queen's College in Ireland, which, after a brief conversation, was ordered to be sent to the College for consideration and remarks.

The next report was that of the visitors to the examination of the Apothecaries' Hall, Ireland.

Dr. Leet said he was glad to find that a large portion of the examinations had met with the approval of the visitors. They stated, however, that the oral examination in anatomy and physiology was confined to osteology. If it was the opinion of the Council that the examination should be more extended, he would undertake to say that it should be done. Dr. Leet proceeded to notice several other parts of the report, especially referring to the remarks on the clinical examination, which was said to be insufficient.

Dr. Wood called attention to various deficiencies pointed out by the visitors. At the clinical examination there were only two candidates, who were both rejected, though the visitors were favourably impressed by them.

Sir D. Corrigan called attention to the mode in which the examiners were appointed. He said they must be shareholders in the corporation; and shares were offered for sale for the purpose of giving a qualification. He read the following advertisement in reference to this subject:—"Apothecaries' Hall. For sale, one Share in the Apothecaries' Hall, Ireland. Offers for it will be received by the undersigned to 31st March inst. This Corporation has latterly been paying dividends at the rate of £20 per share per annum. Cornelius Carleton, 12, Eden Quay, Dublin." It was scarcely to be wondered at, he said, that under these circumstances the clinical examination should be defective.

After some further observations,

Sir W. Gull ridiculed the clinical examination, at which, he said, the candidates were asked to recognise a case of delirium tremens, but were asked no questions as to the symptoms, prognosis, differential diagnosis, or treatment; and he moved, "That attention is specially desired to the defects in the anatomical and physiological parts of the examination, and also to important deficiencies in the clinical examination."

Dr. Rolleston seconded the motion.

Dr. Quain opposed the motion, believing that it would be sufficient to send down the reports to the bodies without special comment.

Mr. Macnamara had no doubt that due attention would be paid to the recommendations of the visitors; if not, he should be prepared to support Sir W. Gull's motion. If the wishes of the Council were not complied with, the Apothecaries' Hall could be reported to the Privy Council.

Dr. Rolleston said if the reports were to be sent down to the bodies without comment, they might as well be sent *en masse*, and the Council was only wasting its time in discussing them.

Sir W. Gull said that the clinical examinations of the Apothecaries' Hall were a mere sham, and he was surprised that any hesitation should be felt about calling special attention to their deficiencies.

After some further discussion Sir Wm. Gull's motion was put and negatived, 9 voting for it and 13 against.

Dr. Rolleston then brought forward a motion to rescind the resolution that the reports of the visitors be considered *seriatim*; but, after a short conversation, the motion was withdrawn.

Dr. Humphry moved,—"That the visitations of examinations be continued, so as to effect the visitations of the examinations, in part or in whole, of two or three of the licensing bodies in each year; and that it be referred to the Executive Committee to consider in what manner this may best be done, and to report to the next meeting of the Council." The Council, he said, had done a good and a great work by means of the visitations. All the bodies had been reported upon, and the public and the profession could now form an opinion as to the manner in which the work had been carried out. A large number of the bodies had modified their examinations; others contemplated doing the same, and in all probability all the examinations throughout the country would be more or less improved. The work, though an expensive one, had been carried out with great economy of time and money, notwithstanding the number of examinations visited. This was due to the admirable arrangements of the Executive Committee, to the hearty assistance of the visitors who were not members of the Council, and to the cordial co-operation of the licensing bodies themselves. He had had at first some apprehensions in taking part in the labour of visiting; but as soon as he entered upon the work all his apprehensions ceased. These examinations should be limited to two or three bodies in the year, which would be sufficient to keep up the interest of the work.

Mr. Macnamara seconded the motion, and said he thought the work of visitation had been the most important of any undertaken by the Council. If it were continued, he thought we should soon arrive at a high standard of medical education.

Dr. Sharpey supported the motion, and suggested that the bodies not visited in any year should be requested to make returns as to certain particulars of their examinations for the information of the Council.

Dr. Wood thought that there ought to be a Sabbatical year in regard to the visitations. The bodies were doing their best to comply with the wishes of the Council, but that they ought not to be pushed on too fast. On the score of economy also, it would be well to defer the visitations, the Council having during the past year exceeded its income by £1000.

Dr. Bennett also thought that there should be a respite, so as to give an opportunity to the bodies to effect the desired improvements.

Dr. Quain expressed a similar opinion.

Mr. Quain suggested that the various schools should be visited. At present, he said, there were no opportunities of ascertaining whether the students had ample means of education.

The motion was then put and carried.

On the motion of Dr. Sharpey, seconded by Dr. Rolleston, the following motion was agreed to:—"That the following be referred to the Executive Committee for their consideration and report: That, in the case of examinations not visited in any given year, the respective licensing bodies be requested to furnish the Council with returns to the following effect:—(*a*) The names of the examiners. (*b*) Copies of the written or printed questions; the time allowed for answering them; and the judgment passed on the answers. (*c*) The time devoted to the oral and practical examinations; the plan followed in conducting them; the nature of the specimens, preparations and other appliances made use of; and the practical exercises the candidates were called on to perform. (*d*) An account of any changes introduced since the date of the last information received by the Council."

On the motion of Mr. Macnamara, seconded by Dr. Pyle, it was resolved, "That the following motion be referred to the Executive Committee for their consideration and re-

Statement of the Degrees, Diplomas, and Licences of the Candidates for Commissions in the Medical Department of the Army, who, on the 10*th August*, 1874, *presented themselves for Examination, showing the number that passed, and did not pass, distinguishing the Qualifications, both Medical and Surgical, under the several Licensing Bodies.*

Names of Licensing Bodies.	Qualifications.						Remarks.
	Number of Qualifications.			Deficient in			
	Total.	Number passed.	Number failed.	Anatomy.	Surgery.	Medicine.	
Royal College of Surgeons, Ireland	8	7	1	...	1	...	
King and Queen's Coll. of Physicians, Ireland	9	9	...	...	...	...	Total number of Candidates 23
Queen's University in Ireland	5	5	...	...	...	...	
Royal College of Surgeons, London	4	4	...	...	...	...	
University of Edinburgh	2	2	...	...	...	...	
Royal College of Surgeons, Edinburgh	5	5	...	...	...	1	Succeeded in obtaining Appointments 17
Ditto Physicians, Edinburgh... ...	8	7	1	...	...	...	
Society of Apothecaries, London	1	1	...	...	...	...	
Faculty of Physicians and Surgeons, Glasgow	1	1	...	...	...	...	
Queen's University in Ireland ... ... M.Ch.	2	2	...	...	...	...	Succeeded in Examination, but not in obtaining Appointments, there being only 17 vacancies... 5
Ditto Ditto ... ... M.D.	3	3	...	...	...	...	
University of Edinburgh ... ... M.B.	4	4	...	...	...	...	
Ditto Dublin ... ... M.B.	3	3	...	...	...	...	
Ditto ditto ... ... M.Ch.	1	1	...	...	...	...	
Ditto Edinburgh ... ... M.Ch.	4	4	...	...	...	...	
Ditto Aberdeen ... ... M.B.	1	1	...	...	...	...	Rejected 1
Ditto ditto ... ...]{... ... M.Ch.	1	1	...	...	...	...	23
Total... ...	62	60	2	...	1	1	

Statement of the Degrees, Diplomas, and Licences of the Candidates for Commissions in the Medical Department of the Army who, on the 15*th February*, 1875, *presented themselves for Examination, showing the number that passed, and did not pass distinguishing the Qualifications, both Medical and Surgical, under the several Licensing Bodies.*

Names of Licensing Bodies.	Qualifications.						Remarks.
	Number of Qualifications.			Deficient in			
	Total.	Number Passed.	Number Failed.	Anatomy.	Surgery.	Medicine.	
Royal College of Physicians, Edinburgh ...	2	1	1	...	...	1	
Ditto Surgeons, Edinburgh	3	2	1	...	1	...	Total number of Candidates 11
Royal College of Surgeons, London...	2	2	...	...	...	...	
K. and Q. College of Physicians, Ireland ...	3	3	...	...	...	...	
Royal College of Surgeons, Ireland...	2	2	...	...	...	...	Succeeded in obtaining Appointments 8
Society of Apothecaries, London	1	1	...	...	...	...	
Faculty of Physicians and Surgeons, Glasgow	1	1	...	...	...	...	
University of Edinburgh ... ... M.B.	1	1	...	...	...	...	Succeeded in Examination, but not in obtaining Appointments, there being only 8 vacancies 2
Ditto Ditto ... ... M.Ch.	1	1	...	...	...	...	
University of Dublin ... ... M.B.	2	2	...	...	...	...	
Ditto Ditto ... ... M.Ch.	2	2	...	...	...	...	
Total	20	18	2	...	1	1	Failed in Examination 1

port:—That it be a direction to the Executive Committee, in their future selection of visitors of examinations, so far as practicable to arrange it so that visitors shall not be called upon to report upon examinations held in that division of the kingdom in which the visitors themselves may be resident.

The Council then adjourned.

Tuesday, June 22nd.

ARMY RETURNS.

The returns from the Army Medical Department (see page 13) were laid before the Council.

The returns were ordered to be inserted on the Minutes, and thanks were voted to the Director-General.

EXAMINATIONS IN ANATOMY.

Mr. Macnamara moved—"That, in the opinion of this Council, all examinations on anatomy should, as far as practicable, include the performance by each candidate of actual dissections, and that all those on surgery should include the performance by each candidate of two or more operations on the dead subject." It was more important, he said, for the student to be properly grounded in anatomy than in any other branch of medical science. Other subjects could be worked up afterwards, but this could not. The subject of anatomy was now enforced by the Royal College of Surgeons in Ireland; and he was informed by a gentleman very largely engaged in teaching that the attendance in the dissecting-rooms had been greatly increased in consequence. As to the practicability of his proposal, he was informed that at the Queen's University as many as 120 candidates had been examined in actual dissections at one examination; and the same system was adopted with success at Trinity College and at the Royal College of Surgeons in Ireland. The fact that a candidate would be liable to be called upon to dissect and operate would lead him to take up the subject at an early period of his career.

Dr. Pyle seconded the motion.

Dr. Rolleston said the members were all at one as to the importance of practical dissections; the only difference between them was as to the methods of securing it. He would propose as an amendment—"That it is desirable candidates in examinations in anatomy should understand that they may be called upon to perform actual dissections, and that candidates in examinations in surgery should understand that they may be called upon to perform one or more operations on the dead subject." The words "as far as practicable," in Mr. Macnamara's motion, were, in his opinion, somewhat too elastic. Every candidate should be obliged to go through a certain amount of constructive, synthetical, and microscopic examination. He thought that a candidate who could write a good paper, recognise dissections shown to him, and prepare microscopical preparations, might be regarded as competent.

The amendment of Dr. Rolleston was then put and carried.

THE COUNCIL AND THE LICENSING BODIES.

Dr. Parkes proposed—"That the Registrar be directed to write to the several licensing bodies, and to inquire what steps have been taken to carry out the 17th, 18th, and 21st Recommendations of the Council in Section v., page 17 (Professional Examination) of the 'Recommendations and Opinions of the General Medical Council, 1874.'"

The Recommendations referred to are as follows:

"17. That the Council recommend that, in the case of certificates presented before admission to the examinations of the several licensing bodies, each should include a statement from the teacher or teachers that the candidate had satisfactorily attended examinations, from time to time, held on the subject of study to which the certificate relates. (Minutes of General Council, July 15, 1874, p. 51.)"

"18. That it is desirable that, in the examinations on several of the subjects of the curriculum—such, for example, as botany, zoology, chemistry, and materia medica—the area of examination should be limited and defined. (Minutes of General Council, July 15, 1874, p. 51.)"

"21. That it is desirable that observation with the microscope should form part of the examinations of candidates for a licence. (Minutes of General Council, July 16, 1874, p. 60.)"

Dr. Apjohn seconded the motion.

Sir D. Corrigan referred to the difficulty of carrying out the recommendations in question.

Mr. Turner thought that the recommendations should be forwarded to the teachers of schools.

The President thought that the subject would be a fit one for the consideration of the Executive Committee, whose attention, he believed, had already been called to it. He thought that the matter should be left with the Executive Committee with the full understanding that they should make the recommendations public in the way they thought best.

Dr. Sharpey said there was no provision in the Medical Act for any official communication between the Council and the schools; all such communication should take place with the licensing bodies.

Dr. Thompson said there need be no difficulty in the matter, because if the licensing bodies chose to act in accordance with the recommendations, they had simply to give it out that their examinations would be shaped accordingly, and all teachers would be then aware of the fact.

Dr. Wood doubted whether the licensing bodies had been paying attention to the recommendations. If they were sent down as proposed the bodies must take cognisance of them.

Dr. Bennett saw no objection to the motion of Dr. Parkes, but he thought that attention had really been paid to the Council's recommendations by most of the licensing bodies. The proper course would be to communicate with those bodies, who would give effect to the recommendations in their requirements.

Mr. Macnamara said that the College of Surgeons in Ireland had, in deference to the wishes of the Council, introduced the microscope at its examinations.

Mr. Quain alluded to the importance of class examinations.

Dr. Rolleston referred to the difficulties experienced in reference to recommendation No. 17, and proposed, "That in Dr. Parkes's motion the word '17th' be omitted, and the words '19th, 20th,' be introduced after the word '18th.'" No. 19 required the presence of two examiners, and No. 20 stated that in no case should an examination be conducted wholly or in great part by the lecturer or teacher.

Dr. A. Smith seconded the amendment.

Dr. Parkes said he had not included Nos. 19 and 20 because they had been already referred to in the answers of the licensing bodies.

Dr. Rolleston said he objected to No. 17 on the ground that the judgment of the examiners should be founded entirely upon the actual examination independently of any certificate of teachers, which might open the door to corruption. If a candidate showed that he possessed adequate knowledge, it was really of no consequence how he came by it. They had no right to interfere directly with the methods of teaching, but only indirectly by means of examination. With these they were potent to deal, but they need not inquire as to the mode in which knowledge was communicated. He was in favour of teachers having a share in the examinations, but not of their keeping it all in their own hands, and he considered that one examiner should have the power of plucking.

Dr. Parkes said he would consent to include Nos. 19 and 20 in his motion if Dr. Rolleston would allow him to retain No. 17.

Dr. Rolleston declined to accede to this suggestion.

Sir W. Gull thought that recommendation No. 17 involved a dangerous principle. Examiners should rely upon their own examinations exclusively, and he would vote against any rule giving weight to the certificates of teachers.

Dr. Storrar, alluding to recommendation No. 18, protested against the excessive legislation in such matters, which, he said, should be left to the common sense of examining bodies.

Dr. Wood said if Dr. Storrar was more acquainted with the machinery of examinations, he would know that there was a *raison d'être* for the regulation in question. The students were greatly overloaded with subjects for examination, and unless their areas were somewhat limited it was impossible to have a satisfactory examination. By such a limitation the candidates could be examined more stringently than if the whole area were left open. He protested against getting rid of the recommendation by the side wind of refusing to send it down to the licensing bodies. It was appalling to think of the number of rejections at some of the examinations, but he believed that if the recommendations of the Council were duly carried out, the evil would no longer exist. The same discredit did not now attach to being plucked as formerly. A plucked man used to be reckoned a pariah, but now a student did not care a fig about it.

Dr. HUMPHRY said that Dr. Wood had given the real reason for the adoption of recommendation No. 17. He believed that too much stress was sometimes laid on the final examination. Whatever the final examination was, there would be a system of cramming men for it in a short space of time. The great desideratum was, not the final examination, but good teaching. Where there was good teaching there would be good men, and the great element in good teaching was repeated examinations during the course of instruction. He therefore supported the retention of recommendation No. 17.

Dr. QUAIN said that the recommendations had been deliberately adopted by the Council, and he thought that a discussion as to their propriety was now out of place.

Dr. APJOHN said that at Trinity College periodical examinations were held by the professors with great advantage. With regard to the limiting the area of certain subjects referred to, he feared that it would favour mediocrity and discourage high attainments.

Dr. THOMPSON thought that by sending down the recommendations in question, the Council would be diminishing the weight of other recommendations as to which no such inquiry was made.

Dr. SHARPEY thought that the transmission of the recommendations would be the means of eliciting some useful information from the licensing bodies.

Sir D. CORRIGAN suggested that all the recommendations should be sent down, instead of selecting three or four. The propriety of the recommendations ought not now to be discussed, the Council having deliberately adopted them; nor could the Council now reopen the question as to the relative merits of education and examination. He concurred with Sir W. Gull on that point, and dissented from the views of Dr. Humphry. All they had to do was to ascertain whether the candidates possessed the required knowledge.

Dr. PARKES expressed his willingness to adopt Sir D. Corrigan's suggestion.

Sir W. GULL thought the best form of resolution would be to instruct the registrar to write to the licensing bodies to inquire whether they had any observations to offer to the Council on the recommendations of 1874 respecting the professional examination; and also to inquire how far they had been enabled to carry such recommendations into effect.

Mr. TURNER expressed his concurrence in that view.

The other proposals were then withdrawn in favour of Sir W. Gull's, which was unanimously adopted.

A COMPLAINT.

A statement was read from Mr. R. Vandaleur Kelly, licentiate of the College of Physicians and the College of Surgeons, Edinburgh, complaining of the conduct of the President of the College of Surgeons in Ireland, in permitting Dr. G. Stokes, a fellow of that College (who, together with himself was a candidate for certain medical appointments in Ireland) to take a copy, which was certified by the President, of a record of the College showing that he (Mr. Kelly) had been rejected at an examination instituted by that body, which record was made use of to his disadvantage by his rival candidate. The statement was accompanied by a lengthened correspondence between Mr. Kelly and the College of Surgeons, Ireland, which was also read.

Mr. MACNAMARA explained, in answer to Dr. Wood, that Mr. Kelly asked for an examination of the College of Surgeons, because the licence of that body was necessary in order to enable him to fill the office for which he was a candidate.

On the motion of Sir W. GULL, seconded by Dr. QUAIN, the Council resolved that the case of Mr. Kelly was not one for their consideration.

STATE MEDICINE.

The following letter was read from the representative in the Medical Council of the University of Oxford, respecting examination in State Medicine, referred by the Executive Committee to the General Council:—

Anatomical Department, Museum, Oxford,
February 9th, 1875.

SIR,—I have been requested, as the representative of the University in the Medical Council, to lay the following resolutions before the Medical Council:—

Extract from Report of Committee on Medical Education of the Hebdomadal Council of the University of Oxford.

"That it is expedient to provide, or to assist in providing, an examination in the subject called State Medicine or sanitary science."

"That it is thought best that such a qualification should not be granted severally by different licensing bodies, but, like the qualification for general practice, should depend on an examination authorised by all, or as many as possible, of the licensing bodies acting conjointly."

Resolution of the Hebdomadal Council thereupon.

"That the medical representatives of the University be authorised to inform the Medical Committee of Reference, and the Medical Council, that the Council has adopted the recommendations of the Committee, and is prepared to recommend corresponding action to the University when the proper time arrives."

I am, Sir, yours faithfully,
GEORGE ROLLESTON,
Representative of the University of Oxford
in the Medical Council.

To the President
of the Medical Council.

Mr. TURNER would be glad of a little more information as to the proposed examination and degree, and what the University of Oxford had done in the matter.

Dr. STORRAR deprecated raising the question of State medicine with reference to the University of Oxford only; other bodies having taken action in the matter.

Sir D. CORRIGAN objected to letters being received from a member of the Council (Dr. Rolleston), who, being present, could make any verbal statement that he might desire.

Dr. QUAIN said that Dr. Rolleston's letter enclosed the resolution of an important body, which was very properly brought before the attention of the Council.

Dr. PARKES said the subject was one of great importance, and he thought the Council ought to express approval of any effort in the direction indicated.

It was resolved that the letter of Dr. Rolleston be entered on the Minutes.

MISS GREENSTREET'S CASE.

A letter from Mr. Ouvry was read expressing an opinion that Miss Greenstreet, whose case was mentioned at a previous meeting of the Council, was not entitled to register the licence in midwifery which she had obtained from the King and Queen's College in Ireland.

On the motion of Dr. Smith, seconded by Dr. Thomson, the Council, acting on the advice of its solicitor, declined to register Miss Greenstreet's qualification.

FINANCE.

The following Report of the Finance Committee was read and received:—

"The Finance Committee report that the income of the Council during the year 1874 has been £6004 6*s.* 2*d.*, a sum which exceeded the income of the year 1873 by £666 5*s.* 7*d.* The expenditure of the Council during the same period has been £6882 16*s.* 9*d.*, a sum which exceeded the expenditure of 1873 by £1757 13*s.* 8*d.* It appears that the expenditure of the year 1874 has exceeded the income of the year by the sum of £878 10*s.* 7*d.*, and that the increase of expenditure during the year in certain items is £1336 1*s.* 2*d.* Of this sum £688 18*s.* 6*d.* has been spent in reprinting the Pharmacopœia and Additions, an outlay which is in course of reimbursement. A second large item of expenditure is for house expenses, incident to coming into possession of the new premises. On the other hand, a decrease in certain items of expenditure to the amount of £262 7*s.* is shown, leaving a net increase of expenditure by the General Council during the year 1874, as compared with 1873, of £1073 14*s.* 2*d.*

"In former reports approximate estimates of the income and expenditure for the year ensuing were given. Little advantage has resulted from this practice, and, as much uncertainty must for the present exist as to the expenditure in connexion with the new offices and premises, it has been thought undesirable to present an estimate for the next year.

"The Committee report that, in accordance with the resolution of the Executive Committee (Jan. 21st, 1875), the accounts of the General Council were submitted for audit to Messrs. Quilter and Ball, professional auditors, and were found correct.

"Richard Quain, M.D.,
"June 21st, 1875." Chairman.

REPEAL OF THE 46TH SECTION OF MEDICAL ACT.

A report was read from the Committee appointed to consider the proposed repeals of parts of the Medical Acts, submitted to the consideration of the Council by Mr. Rickards, the Speaker's counsel.

Some discussion took place as to the privileges conferred by clause 46, and several members expressed an opinion that it would not be desirable to relinquish them. Ultimately the consideration of the subject was withdrawn.

It was moved by Mr. Turner, seconded by Dr. A. Smith, and agreed to, "That it be referred to the Executive Committee to employ an expert for the preparation of a general index of the first ten volumes of the Minutes of the General Medical Council, to be printed before the meetings of Council in 1876."

The Council then adjourned.

Wednesday, June 23rd.

The Council again went into committee on the reports of the visitations of the examinations, and proceeded to consider that of Trinity College, Dublin.

Dr. Apjohn referred at some length to the report, and gave explanations as to the remarks of the visitors, which, however, were for the most part inaudible.

Dr. Stokes expressed the pleasure which he had derived from the perusal of the report of the visitors. Referring to the suggestion of the visitors that the time devoted to the *vivâ voce* clinical examination was too short, he expressed his belief that a judgment as to the *mens medica* of the candidate could be better arrived at by a written description of a case than by answers to any number of oral questions. Remarking on the proposed exclusion of the professorial element from examining boards, he said it implied a want of confidence in the morality of the examiners.

Dr. Storrar doubted the expediency of allowing a candidate to come up at different times for different parts of his examination, which rather favoured a superficial knowledge that could easily be obtained by cramming.

Dr. Haldane, one of the visitors, said he was greatly pleased with the oral clinical examination, but the time was no doubt rather too short.

Dr. A. Smith thought that the time of examination was sufficient, and said that the best papers were often written in the shortest time.

Sir D. Corrigan said if the visitations were continued it would be necessary to instruct the visitors as to the special matters to be inquired into. On examining the reports he found in them no identity of purpose and no similarity of information. He then called attention to the regulation of Trinity College permitting any person to attend the medical lectures on the payment of a fee of 5*s*. This was a regulation to which he thought the visitors ought to have called attention. They ought also to have noticed the fact that a student was permitted to take a licence in medicine after four years' study in medicine and two years' study in arts; and that on completing his arts course, and taking a degree of M.B., he was not subjected to a further examination in medicine.

Mr. Quain said he believed that in other universities a man might take a medical degree without any degree in arts at all; so that there was no special transgression on the part of Trinity College.

Dr. Storrar stated that at the University of London the student was not compelled to take a B.A. degree before taking the degree in medicine.

Dr. Humphry said it was the same at Cambridge, but the candidates had to go through a very similar examination to that required for the arts degree.

Dr. Rolleston said that at Oxford the medical candidates were required to go through the arts curriculum and also to take the degree. He urged the Council to take into consideration the question of permitting different parts of examinations to be taken at different times—a practice that favoured the grinding system, and often led the examiners to intensify their questions to such an extent as to make them beyond the capacity of average students.

Mr. Macnamara said at Trinity College the examination of the licentiate was exactly the same as that for the degree of M.B.

Sir D. Corrigan repeated that there was no special examination for a degree of M.B., but that the degree could be taken by completing the arts course and paying the requisite fees.

Sir W. Gull said that the examination for the licence was also an examination for the degree of M.B. The only difference between them was that one person had a longer university career than the other.

The report of the visitors was then ordered to be sent to Trinity College for consideration and remarks.

The report of the visitors of the examinations of the Durham University was then considered.

Dr. Pyle made some comments on the report, and, alluding to the remark that the examination was conducted exclusively by the teachers of the University, said that was an accidental circumstance, and not in accordance with the system usually adopted. In the arts course the University had for the last thirty years had one or two examiners from Oxford, so that he could hardly understand how it was that a candidate at the examination (a graduate of the University) should show such deficiencies as were alluded to in the composition of his thesis.

Dr. Wood thought it very remarkable that a university should confer the degree of M.A. upon a man who was ignorant of composition and spelling. Such an occurrence was neither creditable to the University nor to the profession. It was thought that no responsibility in regard to such matters rested with the medical examiners; but he maintained that they ought to reject any candidate who showed a want of general education. No illiterate man should ever be allowed to enter the profession. When such candidates, who had obtained arts degrees, appeared at professional examinations, he thought that the examiners should take special notice of the circumstance, ascertain who were the examiners in general education, and report to the Council in order that the matter might be remedied.

Mr. Turner called attention to the fact that a candidate was allowed to present himself a second time for practical chemistry on the ground of his papers in anatomy and physiology being considered good, and his paper work in chemistry fair. This candidate, however, was said to have made a very indifferent dissection. Under the circumstances, he thought that the candidate should not have been allowed a second chance. He also maintained that no thesis should be accepted unless it was creditable in a literary as well as in a scientific point of view. He demurred to a remark made by Sir D. Corrigan, that the writing of a thesis was a sham. At Edinburgh they required the candidate to certify that his thesis was of his own composition, relying upon his honour for the correctness of the statement. The thesis was required to be a good literary composition, and to contain the results of the writer's own inquiries and observations.

Dr. Storrar said that the University of Durham had the merit of having introduced the system of practical examinations at a very early period. What they really wanted was to have outside examiners. It was creditable to the University that it had resisted the temptation of granting in the north of England the old-fashioned St. Andrews degrees.

Dr. Humphry said that importance of dissections was shown by the circumstance mentioned in the report that the candidate who had made such a "hash" of his dissection had obtained 93 marks out of 100 for his paper on anatomy.

The President said that when he visited the University fifteen years ago a similar circumstance occurred to that mentioned by the visitors with regard to the examination in arts, and he then used almost the same words as the visitors had done—viz., that it was hard upon the professional examiners that they should be placed in the dilemma of passing persons who could not write or spell English, and who ought never to have had an arts degree. It was in consequence of the indelible impression then made upon his mind that he was led in his address to remark upon the condition of the arts examinations. Sooner or later it would be the duty of the Council to consider whether those examinations were what they had a right to require.

The Council then adjourned for an hour, to give an opportunity to several of the Committees to continue or complete their labours.

At the reassembling of the Council

Dr. Wood moved the adoption of the resolutions of the Committee of the Council with reference to the reports of the visitors.

Sir W. Gull seconded the motion.

Dr. Thomson moved as an amendment that the resolutions be adopted, with the exception of that passed with reference to the Royal College of Physicians. That body, he said, was the only one whose attention was especially called to deficiencies in the examinations, although there were other bodies whose examinations were shown to be defective. The proceeding was, he thought, a partial one. He believed that it would have been better to send down the reports without comment. They had not yet been considered by the bodies themselves, and special allusions were therefore at present inexpedient. At any rate, it was undesirable to single out one body for remark.

Mr. Quain seconded the amendment.

Sir W. Gull thought that the amendment would but confirm the Council in a vicious mode of proceeding. It was not enough, he thought, to send down the reports of the visitors; and he deprecated the waiting policy so often advocated by members of the Council.

Mr. Quain complained that Sir W. Gull, in reference to this matter, had not been so courteous as he might have been to the other members of the Council.

Sir D. Corrigan could not admit the argument, that because the Council had failed to censure other bodies, therefore no remark should be made with reference to the College of Physicians. To be consistent, however, the better course would be to introduce all the other bodies into the resolution, so as to deal with all alike.

The amendment was then put and negatived, 8 voting for it, and 10 against. The motion was put and carried.

Dr. Storrar gave notice that he would move at the proper time: "That the duties to which the General Medical Council are appointed are defined by the Medical Acts, and the Council are of opinion that their appointments do not authorise them to represent to the Government the views of the profession on the large social question of the expediency or otherwise of admitting women to practise medicine."

Letters were then read from Miss Jex Blake and Mr. Arthur Norton with reference to the registration of women; and also a letter from Dr. Shuttleworth on the subject of Mr. Cowper Temple's Bill. These letters were ordered to be entered on the programme.

The Council then adjourned.

Thursday, June 24th.

REGISTRATION OF WOMEN.

The Council took into consideration the letter addressed to the President from the Medical Department of the Privy Council, and which will be found in our last number, p. 891.

The President asked the opinion of the Council as to what course should be pursued. The Chairman of the Committee proposed to move the reception of his report; but they must decide in what way they would deal with the notices of motion which followed on the programme—namely, those of Sir Dominic Corrigan, Dr. Andrew Wood, and Dr. Storrar. There was also a notice of motion given by Dr. Bennett, which was in the printer's hands. This motion, like the motions of Sir Dominic Corrigan and Dr. Wood, was an alternative report, so that there were, in fact, three alternative reports claiming the attention of the Council. The motion of Dr. Storrar stood in a somewhat different category; it was not an alternative report, but it was definitely an amendment. Unless there was an objection to such a course, he would call at once upon the chairman of the committee to move the reception of his report.

Dr. Storrar wished it to be understood that he should have the privilege of bringing forward his amendment before the report of the committee was considered.

Sir D. Corrigan objected to that course, his own amendment coming before that of Dr. Storrar on the programme.

The President said the fairest course would be that all three of the alternative reports should be treated in the same way as the original report, as regards being received and entered on the Minutes, as sooner or later they must be.

After some further discussion as to the order in which the various proposals should be discussed, the President called upon Mr. Turner to move the reception of his report.

Mr. Turner.—The Council will observe that this motion is purely a formal one, that the report be received and entered on the Minutes; but at your suggestion, Sir, I think this may be the right stage for me, acting as chairman of the committee, to explain the report which we have handed in. Going, then, to the proceedings which have taken place during the last few days, I may say that the committee have arrived at the conclusions stated in that report with a due sense of the responsibility of the task imposed upon them by the Council, and that the conclusions arrived at have not been arrived at hastily. We have had four meetings, and we have spent several hours in the discussion of the various points raised. All the members of the Council, I have no doubt, have read Mr. Simon's letter written by direction of the Lord President; and all are aware that there are two important questions raised in that letter, the first with reference to the Bill introduced by Mr. Cowper-Temple to amend the Medical Act of 1858, so far as relates to the registration of women who have taken the Degree of Doctor of Medicine in a foreign university, and the opinion of the Medical Council is requested on the subject. We are asked also to favour the Lord President with our observations upon it. Now, I think, Sir, there can be no doubt at all that the consideration of this Bill falls within the legitimate province of this Council. We are a Council of Medical Education and Registration. The registration of foreign degrees is specially referred to in one of the clauses of the Act under which we are constituted, so that clearly any emendation of that Act or that clause comes naturally before us. The committee, therefore, had no difficulty in taking into consideration this part of Mr. Simon's letter, and I think I am right in saying that the committee came to a unanimous conclusion as to the kind of answer which should be given to the Lord President on this matter. The answer of the committee will be found on page 7 of the programme of business of this day, and I may as well read the terms of the answer which we apprehend should be sent to the Lord President. "In regard to Mr. Cowper-Temple's Bill, the Council cannot approve of a measure intended to confer on women the privilege of registering certain foreign degrees from which, under clause 46 of the Medical Act, men are debarred, and over the education and examination for which the Medical Council have no means of exercising that supervision and control to which all licensing bodies of this country, whether universities or medical corporations, are subjected." The Council are asked to express an opinion with regard, on the one hand, "to women who desire to obtain legal status as medical practitioners in this country"—(I am quoting from Mr. Simon's letter)—"and, on the other hand, to the examination rules or other conditions which prevent them from accomplishing their wish. His Grace would be glad that the observations with which the Medical Council may favour him should not be restricted to the particular proposal of Mr. Cowper-Temple's Bill, but should discuss, as fully as the Medical Council may see fit, the object to which that proposal would contribute." With reference, then, to the more general question raised in this part of Mr. Simon's letter, there is naturally room for a much greater difference of opinion than was found in connexion with the first point—namely, Mr. Cowper-Temple's Bill. The opinion was expressed at the committee, and I should observe that it is the opinion also of another member of the Council not a member of the committee, and he has expressed this opinion in the form of the motion on page 14—I refer to Dr. Storrar's motion,—that this was a subject which did not legitimately fall within the province of the Medical Council—that we are a Council of Medical Education and Registration, and we have nothing whatever to do with the consideration of so wide and general a question as that which has been brought before us. Now, I have no doubt that Dr. Storrar is technically correct in the view which he has taken up, and which he has embodied in his motion; but the question that the committee had to consider was, whether we should avoid by a mere technicality the expression of our opinion; whether, when the question is directly submitted to us by an important department of the Government, we should not express some opinion on that question; whether, for example, it would not be a breach of courtesy on our part if we declined to enter into the consideration of this matter which has been submitted to us. And I may mention that I have heard complaints expressed that the Government did not sufficiently consult the Medical Council on various questions connected with the medical profession on which this Council might fairly be asked to express an opinion. Certainly, if we were to refuse to enter into this matter, it is not likely that we should ever be again appealed to by the Government. On this ground, therefore, if on no other, I think it very important that we should, as far as we can, endeavour to give some opinion, whether it be favourable or not, as to the question which has been submitted by the Lord President. The committee, then, taking this view of the case, considered that we were bound to say something on the general question. But, Sir, another preliminary question was raised in the committee before we felt ourselves prepared to go into the consideration of the general matter, and this question has been embodied in a motion, notice of which has been given by Sir Dominic Corrigan, and which you will find expressed at page 10 of our programme to-day. Sir Dominic's idea is this—and he submitted it to the committee for consideration,—"that the members of the Council do not feel authorised in expressing a decided opinion without first submitting the matter to the consideration of the several licensing bodies whose representatives they are; and, if it seem fit, to the Lord President, that the members of the Medical Council should obtain the views of the licensing bodies whom they represent, they will, as soon as possible, obtain the information for the Lord President." The committee considered this proposition, and they decided that if they adopted this proposal of Sir D. Corrigan it would be, practically, shelving the question for an entire year. The Government do not ask for the opinion of the various licensing bodies, but they ask for the opinion of this Council; and, therefore, we ought not to hesitate to express our opinions in the matter. We, therefore, decided on the following paragraphs in our report, which paragraphs, with your permission, I shall read. "The committee, having taken this letter into consideration, recommend the General Medical Council to adopt the following as the reply to be sent to the Lord President of the Privy Council:—In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council have to state that, being thus directly appealed to by the Lord President, they have felt bound to consider the question of the admission of women to the medical profession." Then, having decided that we should take up this question, the next point for our consideration was what answer we should give, and this was a much more intricate matter,—what answer should be given to the question propounded by Mr. Simon's letter—whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood. This naturally excited very considerable discussion in the committee; but, after framing several paragraphs in reply, and after much consideration, we at last decided upon recommending the two following paragraphs, which I shall, with your permission, Sir, now read. "After due deliberation, the Medical Council have to express their opinion that the study and practice of medicine and surgery, instead of offering a field of exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely ignored, and some of which cannot be obviated. Instead of medicine offering more facilities and less difficulties for women than other professions, the Medical Council believe that, as the whole question is looked into, there will be found peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Moreover, they desire to add that if it be admitted that women should enter the medical profession, the existence of an equal fitness for other professions must be assumed." Now, Sir, perhaps it may not be considered out of place if I should give one or two reasons why I agree to the statements made in these two paragraphs and in giving these reasons I do not wish to commit any other member of the committee to the reasons which I may advance. These are my own personal and individual reasons. Doubtless other members of the committee will be quite prepared to state why they agree to the admission of paragraphs expressing these very decided sentiments. In giving my reasons I can assure you that there is no wish on my part to say anything that might hurt the feelings of anyone, either man or woman, in this matter. It would ill become me, who throughout all my life have had domestic relations with the opposite sex which are all that could be desired, to say one word which might be regarded as depreciating the sex which we all value and esteem so highly. Still, however, there are certain general facts which I think ought not to be ignored in discussing this question, and facts which, I am sorry to say, have been too much ignored in looking at the important bearings of this question. I have heard it argued that men and women are alike in capacity, that what is open to the man to do ought to be open to the woman to do; that woman has no distinctive sphere. I have heard that point broadly stated, and I have heard great ridicule thrown upon those who have asserted that woman has a distinctive sphere. Now, Sir, to my mind all such statements as these are mere idle talk. No amount of special pleading or ingenious argument can break down the physiological barrier which separates the two sexes from each other. Woman is not man any more than man is woman. The sexes are not on a footing of equality. They ought not to be rival claimants for the same object. Each has its own excellence, and one is the complement of the other. I believe, Sir, that it is a perfectly sound physiological doctrine when I state that the physical framework of a woman is inferior in its capacity and power to the physical framework of a man. Her muscular apparatus is less powerful, her bones are more slender, her skull is smaller, and, if I may say so, exhibits a smaller amount of departure from the infantile condition than is to be found in a man. Her brain, also, is smaller and lighter. Now, clearly, Sir, these important anatomical differences find some physiological expression. The difference between the weight of the brain in a man and in a woman respectively is, on an average — and I am referring only to averages because there are exceptions, of course, in both cases —the difference between the weight of the brain in a man and in a woman is as much as 10 per cent., and that difference is in favour of the male. Now this, I think, is a fact of great physiological significance. If we regard, as we all do, the brain as the centre of the intellectual faculties, and as the centre of the sensori-motor activity, it is clear, I think, that this lower brain-weight implies a smaller capacity for concentration of thought, for intellectual activity, and for prolonged exertion, either mental or bodily. But, Sir, it is not merely in connexion with the physical attributes that the two sexes differ. In woman the emotional qualities greatly preponderate over the logical. Now this is one of the most valuable characteristics of women—the preponderance of the emotional qualities. It gives them all those characteristics which we value so much in a wife and mother, and which are also of the greatest importance in connexion with the functions of a nurse which she is so often called upon to perform. These qualities, therefore, are those which make her truly a helpmeet for the man. But the preponderance of the emotional qualities in woman's nature, I submit, ill adapts her for the performance of those duties which are entailed upon those who enter the profession of medicine. In the profession of medicine, what is so much desired is the clear exercise of the logical faculty. If medicine is to be advanced as a science, it can only be by the application of scientific principles to the study of disease. Now, Sir, while the pages of history bristle with the names of men who have added to our scientific knowledge, I am not aware that the name of a woman occurs in connexion with the discovery of any leading scientific fact, or scientific theory. Hence, I think, Sir, that the whole history of our race shows that in this matter of the possession of logical and scientific faculty, women have not yet shown that they possess any power of coming to the front. I put forward these considerations as arguments in support of one of the statements contained in one paragraph that I have read—that there are peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Sir, it may be said that all men do not possess the logical faculty. It may be said that there are many members of the medical profession who have not this faculty, who have not the power of eliminating, in the consideration of a case, all sources of error, and of limiting themselves merely to the consideration of those facts which are based upon a correct consideration of the case in question. Undoubtedly this is true. But I doubt very much whether the introduction of a new element into our profession—an element as to which, I think, experience has shown us that the logical or scientific faculty has not yet exhibited itself—I doubt very much whether this would tend to improve the standard of medical practice in this country. I would especially direct attention to that part of the paragraph on page 5 which reads thus:—"Moreover, they desire to add that if it be permitted that women should enter the medical profession, the existence of an equal fitness in women for other professions must be assumed." This, also, was carefully considered by the committee before it was introduced into our report; and I think I may say that it was felt that the medical profession had been made a sort of battle-field upon which was to be fought out this question which has come so prominently forward of late years, as to the equality of the two sexes; and many of us felt that it was not right or fair to our profession that it should be made the battle-ground on which this great question was to be fought out. Those, then, were my reasons for agreeing to the introduction of the two paragraphs which I have referred to. It will be seen, therefore, that we had many weighty objections to bring to the consideration of the Lord President against the introduction of women into the medical profession. Still, we felt that if the Government and the Legislature should in their wisdom see fit to give facilities and offer encouragement for the introduction of women to the profession of medicine, it would be seemly for us to indicate how this might be done, and to lay down certain propositions or conditions that we thought ought to be carried out, if possible, in connexion with this matter. Accordingly, you will find on pages 5 and 6 certain recommendations of the committee. The first of these recommendations is to the effect "that in the interests of public order the education and examination of female students of medicine should be conducted entirely apart from those of males." Now, Sir, I do not think that I need dilate upon this matter. All of us who are sitting round this board know exactly what a medical education is. We know what medical students have to go through in their endeavours to obtain such an education, and we know that circumstances are constantly arising which render anything like a mixture of the two sexes extremely improper; so that I do not apprehend that there should be any difficulty at all in the Council agreeing to a condition of this kind. Then in the second paragraph we say: "With regard to the examination rules or other conditions which prevent women from obtaining a legal status as medical practitioners in this country, it would be sufficient if an Act of Parliament were passed which should enable the Medical Council to recognise the examinations of the licensing bodies under Schedule A of the Medical Act, separately or conjointly, or such other examination or examinations as the Medical Council may, from time to time, deem sufficient for the purpose of granting admission of women to the Medical Register under the title of 'licensed practitioners of medicine.'" Well, now, we had considerable difficulty indeed in coming to the conclusion as to how women should be admitted to the Medical Register. That was obviously a matter of great difficulty, and also one of great importance, whether women should be allowed to present themselves for the usual examinations for licences and memberships and degrees of universities and so on, or whether there should be some special licence created for the purpose of granting admission to the Register. You will observe that we have recommended that a special licence should be created for their special behoof. It seemed to us that if they were allowed to obtain the ordinary licences and degrees, not only should we be giving them power to be inserted in the Register, but we should also be giving them certain rights and powers in connexion with the corporations or universities from which these degrees were obtained. Now it seemed to us that we had no right to recommend any such course to the Medical Council, but that that was a matter that went beyond the remit that had been made to us, and we thought that the proposal we have made was the best mode of meeting the difficulty. Then there is the paragraph numbered 3:—"That examinations of female candidates for a licence entitling their names to be placed on the Register should be of the same character as those of males." As to the inclusion of this clause there was some difference of opinion. One member, if not more, of the committee thought that there was no need for it; but it was felt by the majority that it was advisable to put forward a public declaration of this kind so that it might be seen that we did not wish imperfectly educated persons to be put on the Register—that is to say, persons who had received a lower standard of education than the men. We considered that the standard of education for the two sexes should be the same. Then we have the fourth paragraph—"That the education and examinations for these licences should be under the supervision of the Medical Council in the same way as is required for the other licences of this country." We were all agreed as to that. I do not think that there was any difference of opinion in the committee, and I should apprehend that there ought to be no difference of opinion in the Council, because the clause merely recommends what is provided by the Medical Act for the supervision of the licences at present granted. The last paragraph on the page is one which includes one or two principles of importance. I will read the first sentence: "As to other than mere legal difficulties which prevent women from accomplishing their wish to engage in the practice of medicine and surgery, the Council are of opinion that such difficulties must be overcome by private exertions, and that no special legislation is called for, except, perhaps, in the case of midwifery." We found that all those questions connected with the providing for the education of women, and providing schools and teachers for them, should be left, as in the case of male medical students, to private exertions. I understand, for example, that in London all the hospital schools are organised and kept up by the private exertions of those that are particularly interested in them; and we felt that the women and their friends might fairly be asked to undertake all this part of the necessary work for themselves. The last clause of this same paragraph is one of very considerable importance. "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in Schedule A, in respect of the medical education of women, is undesirable." I think that if this clause be adopted, I should suggest a little addition to it. I would suggest the addition of the words "examination and licensing" after the words "medical education," so that it would read, "in respect of the medical education, examination, and licensing of women." We felt that there should be nothing done by the Legislature to interfere with the free action of corporations in this particular. Then the last part of our report is one which bears upon the question of a special Register, especially in connexion with recognising the competency of women to practise midwifery. I think I am right in saying that this last paragraph embodies very much the spirit of the report of the committee presented to the Medical Council in the year 1873, of which you, Sir, were the chairman; and it was with special reference to the report of this committee that the last paragraph was inserted by us in our report. It was the intention of one member at least of the committee that we should have a clause authorising a copy of this report to be sent to the Lord President, along with the communication from the General Medical Council to be made in reply to Mr. Simon's letter; and perhaps, if the Council should decide upon adopting this report, which I am now submitting to you, we may add to it a clause authorising the report of the committee to be forwarded. Such, Sir, are the remarks which I have to make in connexion with the report which I have now submitted to you.

Mr. QUAIN seconded the motion, which was put and unanimously carried.

Mr. TURNER then moved "That the Medical Council approve of the report of the committee on Mr. Simon's letter."

Sir WILLIAM GULL seconded the motion.

Dr. ANDREW WOOD: If we carried this motion, then there would be no means of amending certain clauses of the report. I think if we could come to some sort of arrangement by which we shall adopt the principle of the report and then go into committee upon the clauses *seriatim*, that would be the better course.

Sir **William Gull** suggested that the Council should resolve itself into a committee to consider the report.

Mr. **Turner** said, that in that case he would withdraw the first motion and move "That the Council resolve itself into a committee to consider the report on Mr. Simon's letter paragraph by paragraph.

Dr. **Storrar** said he presumed that now was the proper time to move the amendment which stood in his name:—"That the duties to which the General Medical Council are appointed are defined by the Medical Acts, and the Council consider that their appointments do not empower them to represent to the Government any authorised opinion on the large social question of the expediency or otherwise of admitting women to practise medicine." He said: The observations that I shall make will be very much shortened by omitting the reference to the greater part of Professor Turner's speech, except so far as to say that I doubt very much whether I differ from him as to the views which he has expressed. My opposition to this report does not arise from any essential difference of opinion from him as to the proper function of women, but from a difference of opinion as to the expediency of the Council taking up this question at all. My view of the matter is that this Medical Council is a corporate body acting under a common seal for definite purposes. What are those definite purposes? They are defined by the Medical Acts. Certain persons were appointed by the Queen and by the various medical bodies to administer these Acts; and what we are to administer is contained in the body of the Act. The points are very few: they are, chiefly, the registration of medical practitioners, with the power of omitting names from the Register, the power of supervising the education of medical practitioners, and the authority to make a British Pharmacopœia. In these three, with very small exceptions, are comprised all the duties of this Council, and I apprehend that we have no capacity whatever to discuss any question outside the area of these matters. The medical bodies that send us here reserve to themselves the duty of deciding, if they choose, upon questions that are not within the scope of these Acts, and we have no right to enter upon their province. Take my own case. I speak of it because it is the one with which I am most familiar. I represent the University of London, and I am the representative to administer what is contained in these Acts. But, Sir, we have had this woman's question up before the University of London, and the popular house passed a resolution in favour of admitting women to the degrees; but the Senate, which is the administrative body of the University, have decided that they will not take any steps to enable them to confer any degrees upon women. The question therefore is so far decided as regards the University of London; and the members of the Senate of the University of London may fairly turn round upon me and say, "What right have you to take up this, or to take a share in the settlement of a question, possibly in an opposite direction from the settlement which we have made, when we in fact, so far as we are concerned, have settled this question already." It is on that ground that I propose this amendment. I feel that we, as a Council, are not here as a promiscuous body, thrown together to fire at every object that happens to be thrown up in the air; but we are here for a definite object, and nothing can be more distinct than the duties assigned to us. But, Sir, it seems that some members of this Council are impressed with the honour of the distinction that has been conferred upon them by the reference of this question by the President of Her Majesty's Privy Council to us. Sir, I cannot say that I entertain so strong an impression of the distinction conferred upon us by the reference. I cannot help recollecting all that has transpired in past years between us and the Privy Council office. It would be a long story to go back to all the transactions that have occurred between us and successive Governments, but I will only go back to the time when we were discussing a Medical Bill which the Privy Council undertook to carry through Parliament. They did carry it through the House of Lords, and they withdrew it in the House of Commons. And they have shown a disposition to push us aside on every or any occasion when we happened to appeal to them on this particular subject. I am sure that you will recollect that two or three years ago we waited upon the Marquis of Ripon to ascertain whether he, as the head of that department, was prepared on the part of the Government to introduce a Medical Bill. We were kept with him for the better part of an hour, and I think that you will agree with me that when we were outside the room on the pavement we knew just as much of the intentions of the Government as we did when we entered the room.

Dr. **Parkes**.—When was that?

Dr. **Storrar**.—About two years ago.

Dr. **Parkes**.—After the withdrawal of the Medical Bill?

Dr. **Storrar**: Yes: and we found it utterly impossible to ascertain from the Government what the intentions of the Government were. All these difficulties have spread over a series of years. Governments have changed. At one time it was the Duke of Marlborough in office; at another time it was the Marquis of Ripon; and now it is the Duke of Richmond. But, Sir, whatever government may be in office, and whatever the source of authority, whatever has been communicated to us has passed through the same channel. The letters have always been signed "John Simon," and whatever may be the source, it is impossible not to see that views of the Government have received peculiar expression in passing through the channel of communication. In whosesoever hand the department has been we can see that though the hand is Esau's, the voice is Jacob's. I must say that I am not one of those who are impressed with the sense of honour which has been conferred upon us by the reference of this question to the Council. I look upon it in quite another light. I look upon it as a Trojan horse. It contains the elements of disputation in this Council; and I can very well conceive the persons in the Privy Council saying among themselves, "What are we to do with this Bill of Mr. Cowper-Temple? The House of Commons is not very clear about it. The country is not very clear about it. Nobody seems to have very definite ideas about it. It will be a nice bone of contention to send down to the Medical Council. Let them worry over it for a few days." We have worried over it, and we have got no less than three reports out of a small committee, and Professor Turner speaks of the difficulty that he had in the preparation of the report. In these difficulties I sympathise with him heartily. Now, Sir, what I feel is that if once we get into the entanglement of a discussion on this great social question, with which in my opinion we have nothing to do, we shall find ourselves, probably, at loggerheads with the bodies we represent here—the universities and medical bodies. They will ask us what right have we to supersede them. What authority, for instance, have we got to step in and exercise a function which is no function assigned to us under the Medical Acts? And they will think that they have got a right to an independent opinion upon it. I confess, I could not defend myself against a charge of this kind. Then as regards the point itself. If we decide in favour of the admission of women, the chances are that we shall have a very considerable number of persons finding fault with us, laughing at us, discussing the matter with us, and, as I say, telling us that we are interfering with matters with which we have no concern. On the other hand, if we decide against the women, it will be said of us as has been said already, "Of course you decide against the women because you are a trades union." That is the remark that has been made, and, I suppose, will be made again. But from the commencement—from the year 1858 to the present year—we have kept clear from these subjects. We have never questioned the right of women to be registered if they will produce the certificate of any of the bodies that we are authorised to recognise. There is Rhoda Garrett Anderson on this Register, and Miss Blackwell, and there may be many others. Let me make my position clear in another respect. I do not call in question the great propriety of the Privy Council appealing to us as to what is to be done with regard to the registration of foreign degrees. That is another thing. Apart altogether from the admission of women under these degrees, the question of registering foreign degrees is one regarding which there is a good deal to be said; but I am anxious, as far as my own views are concerned, to condense them as much as possible. There are many points into which I might diverge; but I am exceedingly anxious to take my ground upon principle, and simply to state, in the narrowest possible terms, what that principle is. I beg, therefore, to propose this motion.

Dr. Parkes.—I do not think it is fair to the Marquis of Ripon that the statement of Dr. Storrar should remain without my saying one word. You will find on page 202, volume 10 of our Minutes, the answer to the deputation. What took place was shortly before the Medical Bill, which was introduced by the Marquis of Ripon, had been dropped by the House of Commons.

Dr. Storrar.—It says:—"The deputation appointed March 28th to ascertain from the Government whether they are willing to aid the Council in the removal of any legal difficulties that may exist in carrying out the objects of Clause 19 of the Medical Act, reported that they had waited, by appointment, on the Marquis of Ripon, Lord President of H.M. Council, and that two other Cabinet ministers, Earl Granville and Mr. Bruce, Secretary of State for the Home Department, were present at the interview, and took part in the conference. That the conference lasted an hour and a quarter. That there was no difference of opinion as to the desirability of the medical authorities in each division of the kingdom combining their examinations, so as to reduce the number of entrances into the profession; but the Lord President was not disposed to introduce into Parliament, for this purpose, a measure which would be limited to conferring on the medical authorities a merely permissive power to combine."

Dr. Andrew Wood.—Go on.

Dr. Bennett (reading).—"His lordship was favourable to the introduction of a measure of this limited kind by some private member of Parliament, but with the understanding that it would not preclude his consideration of a larger measure if, on further thought, he should find it expedient."

Dr. Storrar.—Precisely so. He simply said, "Take what course you please, and I shall reserve to myself the right of opposing or supporting"; so that it amounted to absolutely nothing.

Dr. Parkes.—I submit that that is very inconsistent indeed with the statement that Dr. Storrar just made about the Marquis of Ripon.

Dr. Thomson.—In seconding Dr. Storrar's motion, it is not my intention to offer any observations upon the wide question that threatens to come before the Council, but merely to explain the grounds upon which I rise to second the motion. He has so clearly explained those grounds that I may say, in the first place, that I thoroughly agree with him in the reasons he has given showing the propriety of such a motion being introduced at this stage of our proceedings. I do not think it comes within the province of the Council to give any general declaration upon the subject which has been proposed. I think it is altogether beyond the province of the Council to express, either for themselves or, as it might appear, for the profession at large, any opinion on this subject. The admission of women to the rights of practitioners is a question that can only be settled by the licensing bodies or by the Government. If it cannot be settled by the licensing bodies, then it is a larger question that must be settled by the Legislature. I do not pretend to say by which. I have no hesitation in seconding the motion because I think this is a stage at which it should be brought forward. At the same time I should like to say that in any answer which is given to the letter of the Lord President the utmost courtesy should be shown to the Lord President and to Mr. Simon. I quite feel that the motion in its present state does not meet all that is required. I am aware that an answer must be given to that part of the letter which refers to the registration of foreign degrees; and I hope that in the course of our proceedings such a motion may be framed as will combine the sense of Dr. Storrar's motion with that amount of courtesy which I am sure we all desire to show to the letter from the Privy Council.

Dr. Rolleston.—I have listened with pleasure to what Dr. Thomson has said. He has taken a large view of this matter. If it is to be settled by the Legislature it cannot be settled by the licensing bodies. Now, since 1858 the licensing bodies have taken no step whatever. Between that time and 1875 public opinion has been declaring itself not only by means of clever and able writers who (following the method adopted in this country) do not sign their names, but by others who have forced their names upon the public, and through the public upon the Legislature. We have had, for example, Mr. Mill's book on the subjection of women, one of the wisest and best books that he has written; and that is the sort of reasoning that we have to deal with; that is the sort of reasoning that influences the Legislature at the present moment. And what is the Legislature going to do? Is it going to act without advice? Will it take the advice of these clever writers, or, as Sir Wm. Gull suggested to me, is it coming for coun*sel* to the Coun*cil*? It wishes to act upon the best advice; it is acting with more wisdom in the matter than some other Governments have done; it wishes to get advice from the very best source. I feel very strongly that the Council should not run away from what is its duty. I care comparatively little whether it says yes or no upon this question whether a couple of dozen females shall have what some think justice done to them; but I do say that it would be a slur upon the Council if it failed to consider the question and give its opinion respecting it. With reference to what Dr. Storrar has said, I used to think that the older universities had practised the art of how not to do it. We have rather dropped that art during the last ten or twelve years.

Dr. Storrar.—So it seems.

Dr. Rolleston.—Let me remind the members of the University of London they they owe their *raison d'être* to the way in which we practised that art. We refused to do justice to one-half the males of this country—the dissenters—and the result was that the London University was established. Now some persons are refusing to do justice to one-half of the human species.

Dr. Storrar.—It is assumed that we are doing them justice.

Dr. Rolleston.—That is an assumption of which I shall speak presently. With reference to this matter, let me say that if the London University sends here its representative—whom, by the way, it can scarcely call a representative—but rather a delegate——

Dr. Storrar.—I am not a delegate.

Dr. Rolleston.—If you are tied down in the way you are suggesting you are scarcely a representative.

Dr. Storrar.—I am elected, in the highest sense of the word, to exercise my judgment on matters that form the proper function of this Council, but I have no right, by delegation or election, to deal with any other matters.

Dr. Rolleston.—I am sorry I cannot entirely agree with Dr. Storrar in that matter either. If you will look at the able report of the committee, you will see it says: "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in Schedule A, in respect of the medical education of women, is undesirable." Now, whether the London University chooses to do what we did a generation ago—that is, not to do it,—or do what I believe the older ones will do now—that is, do it,—it will make no difference one way or the other; but it is a serious matter entering upon this line of not doing things, unless they have something absolutely wrong about them. Holding your tongue when you are asked to speak is one of the very worst things you can possibly do. If we older bodies had not studied the art, I am sure we should not have had a representative of the London University present at this board, for there would have been no London University but for our refusing to do justice to one-half of the Queen's subjects—that is, the dissenters. Now, let me say what I have to say. "Strike, but hear," should be our motto. We know that this proposed admission of women has been tried elsewhere. Again, we know that we had such a person as Queen Elizabeth; we know that we had such a person as Queen Caroline (the first, not the second); and we know that we have at this time Queen Victoria on the throne of this country. Nevertheless, women are totally unfit; their brains are smaller. Prof. Turner omitted to add, their bodies also; and we know that there is a good deal of relation between the size of the brain and the size of the body. Let us say all this if we like, but do not let us run away from our duty. Let us take for our motto that of the fine classical novel of "Ivanhoe," "*Adsum, cave!*" Do not let us run away, but let us do the duty that lies before us.

Dr. Thomson.—In consequence of what has fallen from Dr. Rolleston, I wish to say that in seconding Dr. Storrar's motion I did not express any opinion one way or the other; that will be for the future.

Sir Wm. Gull.—I think the whole of Dr. Storrar's argument falls to the ground when I consider why am I here. Why is Dr. Stokes here? Why is Dr. Sharpey here? Why is Dr. Parkes here? Why is Dr. Quain here? Whom do we represent? Where do we get our authority? If we have none, why has Dr. Storrar any? If he has none, neither have we. It seems to me that that consideration cuts away all the ground from him.

Dr. Storrar.—You have no power beyond ours.

Sir Wm. Gull.—That is what I wish to be understood. But I wish you to take a larger view of your own powers. You have taken too narrow a view; that is the fault you have committed. According to your views, as Dr. Rolleston has said, you are rather a delegate than a representative.

Dr. Storrar.—No.

Sir Wm. Gull.—I cannot take the position of a delegate, for I have nobody to delegate me but the whole country. I have to consider what are my duties to this country at this Board. Dr. Storrar says our duties are alike.

Dr. Storrar.—They are.

Sir Wm. Gull.—Then you are to consider your duties to the whole country at this board, and not merely your duties to the London University.

Dr. Storrar.—The two must go together.

Sir Wm. Gull.—What defines my duty equally defines Dr. Storrar's. We are not delegates at all. We come here to give counsel on the great affairs of this country with respect to medicine and medical practice. That is the view I choose to take. I am not sent here merely to act the part of a policeman, which I dare say any tolerably respectable man at £3 a week could do as well as I could, and perhaps a great deal better. The Government have taken me from my important duties, to do what? Not to do next to nothing; they have sent me here to consider the whole question. I read in the first line of the Medical Act: "Whereas it is expedient that persons requiring medical advice should be enabled to distinguish qualified from unqualified persons." The Register is only subordinate to that. It is for us to consider what the Register shall include.

Dr. Storrar.—The schedule tells you that.

Sir William Gull.—Dr. Storrar seems to think that the Register can only be of a certain character; but I think that the Council is here to determine what that Register shall be, what shall be its extent, and what the conditions under which people shall be put upon it. That takes in the whole question whether it is expedient for women to look to medical practice as a means of livelihood; and if they may so look, then we shall consider the conditions upon which they shall be put upon the Register. The Government has sent representatives here having equal power with other members; and therefore our duty is to the country above all things, and not to the corporations: our duty is to help the public to determine who are fit persons to consult; and if the public say, "we wish to consult women," we are bound to consider under what conditions they may consult them safely. If that be not consecutive and logical I am inconsecutive and illogical. If that be the fact, we cannot escape from our duty. What is the meaning of the word Council? I ask the President if he can tell me the scope of it. If this is a Council, surely it has some function beyond looking after the registration of these people. Dr. Storrar says the Government has not treated us well. Then let us give them good for evil. Let us be ready to offer them the best of our services in the best way we can, and they will treat us better in future. I cannot see that that is any argument. Then he says that the letter has come from Mr. Simon. Well, let it be taken *quantum valeat*. I have an intense personal respect for Mr. Simon.

Dr. Storrar.—So have I.

Sir Wm. Gull.—I do not know why his name should have been introduced. We are bound to consider the letter as coming from the Privy Council. The Lord President said to me to-day—I am at liberty to use his name—"I am much interested in the matter [he knew we should be discussing it], and I shall be happy to confer with the Medical Council at any time they may desire." So that you see the Government is interested in this question. This is not a corporate question at all. The report states that the corporations should be left free to do as they like. It is said that we ought to inquire what the profession has to say. Does any man pretend that he does not know what the profession will say? It has been discussed again and again. I should like to know how you will get at the voice of the profession. How can it be got at better than it is at present? We have the public journals, and the whole thing has been discussed there. We have talked of it on all occasions. Does this Council represent the profession or not? If it is a representative Council of the medical profession, let us act for ourselves and not adopt the policy which was referred to yesterday—the policy of waiting and putting off, and going back to the corporations. I say if I am here for any purpose I am sent by the Government to fulfil a large and important duty, to give the advice to the Government that they may ask for in the best way I can, and to take as large and constitutional views of the whole question as I can. We are not sent here for the mere limited purpose of keeping the Register as it now stands. We ought to enlarge that Register and help the public in every way we can to know whether they are consulting qualified or unqualified persons.

Dr. Quain.—There are two questions before us—one a question of law, and the other a question of expediency. No one can doubt that Dr. Storrar is perfectly right in saying that by law we have no right to express any opinion such as is asked of us. ("No, no.") Our duty is to carry out the Act of Parliament. Then there is the question of expediency as to whether we should send a suitable answer to the question that is put to us. I agree with every word that Dr. Storrar has said, but I shall be obliged to vote against him, because I think it is expedient that we should give an answer to the question. There is only one other word I wish to say. I cannot understand why the question of delegates or universities should be introduced. Dr. Storrar never said a word about it.

Dr. Rolleston.—He spoke of the London University.

Dr. Quain.—He merely asked what right we had to express an opinion about the functions of those bodies.

Dr. Rolleston.—He said that the Senate had opposed it, but that the popular body had voted for it.

Dr. Quain.—Considering the expediency of answering the President's letter, I shall vote against Dr. Storrar's motion. I do it with regret, because I think that he is right.

Dr. Wood.—I shall vote against Dr. Storrar's motion for a different reason, and that is because I disagree with every word he has said. I consider that we are not sent here as delegates by anybody. I would not sit here as a delegate. When my college appoint me to come to the Council, they leave me at perfect liberty to deliberate upon all matters coming before the Council; and if they are not pleased with the way in which I do that, they can act upon their own judgment and turn me out, and put in somebody else. Therefore, I do not consider myself a delegate; I consider myself a representative, and I believe this Council to be a representative council. If it is a representative council, what does it represent? It must represent the medical profession. We are all medical men here. We are all sent in the interests of the public in order that the public may get the best medical aid that can be got. I am astonished that a slur should be thrown upon the Government because they come with a courtesy and kindness and a deference which I am glad to see, and ask us for our advice. There have been occasions when they have not treated this Council with the deference they deserve. "But many things have happened since." When the Duke of Richmond, who was most anxious to do what is right, asks our opinion, why should we not give him an answer? He may ask the opinion of anyone. He may go and ask the opinion of Miss Jex Blake if he likes. He may ask the opinion of the Royal Society, or of any other body whom he wishes to consult. But he says "Whom shall I consult with the greatest hope of getting good advice? Shall I not consult the men who are assembled in London at this time, and who represent the medical profession?" And shall we say to the Duke of Richmond, "Oh, your Grace, we are much obliged to you for communicating with us; but really we decline to give you an answer upon the subject, because, forsooth, it is not within the clauses of the Medical Act that we are to give advice to the Privy Council upon the education of women?" I say when a great revolution is threatening our medical profession—for I consider the introduction of women into it would be a great revolution,—and when it is pressed upon the Government to take up this question, and when the Government are anxious to have the best advice before taking any steps one way or the other, shall the Council say, "Your Grace, you have asked our opinion; we will give you no opinion; we are a mere Council for registering practitioners, and therefore we do not consider ourselves a Council to whom you should refer?" Sir, I am thankful to the Duke of Richmond. He has treated us with the utmost courtesy—he and the other ministers—the Marquis of Ripon among the rest—and we ought to give them the best advice we can. We are not to be considered the infallible advisers of the Government, but the Government will consider the arguments we lay before them, and if they approve of them they will adopt them; if not, they will reject them. I hope the Council will not adopt the motion, because if it does it will lose an amount of influence which can never be restored.

Sir D. CORRIGAN.—With a very slight alteration in Dr. Storrar's resolution I should feel bound to vote for it, although I consider the motion of which I have given notice is very much better. I quite agree that we are not authorised to take up this question. Dr. Storrar says that we never could take it up; but I do not go so far as that. For myself, I feel that I am not justified in coming here to decide upon so important a question without going back to my constituents and consulting them as to what are their opinions. What I therefore propose is that the answer should be deferred until we have had time to consult our constituents. Dr. Wood has said that we ought not to delay, and the same doctrine has been preached by Mr. Turner. It amounts to this: the Government has treated us badly for a series of years. It has snubbed us; there is no question about it. They would not tell us what they were going to do, and now that they evince a desire to throw themselves into our arms, forthwith we are to accept their repentance and suddenly answer the question that is sent to us. I cannot assent to the proposition that we are to answer the question suddenly without consulting our constituents. Dr. Wood has said that we are representatives of the profession. Technically speaking we are not. We are representatives of nineteen licensing bodies, and there is a wide difference between representing the profession and representing those bodies. You know that there has been a struggle going on for many years between the British Medical Association and this Council with regard to getting admission to this body. I do not want to take one side or the other; but I say technically we are not representatives of the profession. The question is a very important one, and it has been decided on by a committee which I must observe was not at all unanimous. We differed on nearly every proposition, and we are called upon now suddenly to bring forward those propositions, every second one of which is inconsistent with the one before it. I regret that I must vote against Dr. Storrar's motion, although to a certain extent I agree with him.

Mr. MACNAMARA.—Clause 18 enables us to take into consideration generally the requisites for obtaining qualifications. It seems to me that that entitles us at the present moment to take into consideration whether being of the male or the female sex is requisite for the licence.

Dr. SHARPEY.—In voting upon this occasion—not that my vote will count for much—I must vote against Dr. Storrar's motion. I heard with some pain the introduction of the word "delegates" as applied to members of this body. I have had the pleasure of sitting on this Council many years now with Dr. Storrar, and I must say that the whole tenor of his conduct and proceedings in this Council has been anything but that of a mere delegate. But let that pass. My reason for rising is to point out to Dr. Storrar that he is mistaken in supposing that our function is restricted to the carrying into effect the provisions of the Medical Act, because we are frequently called upon to propose amendments under the Medical Act, and we have again and again proposed amendments of it to the Government. That is quite a different thing from merely carrying into effect existing provisions. I beg to remark further that in the report which was read and commented on by Mr. Turner, there are proposals which would involve amendments in the Medical Act. The report proposes that certain additional powers should be granted to the Council—powers which they have not now under the Medical Act. I think, therefore, that the technical objection of Dr. Storrar is not sufficient. Independently of the question of expediency, I think it quite competent to give an answer to the Government on the question which they have submitted to us. Sir William Gull has very properly pointed out that some of us are not directly commissioned by any Act of Parliament in the kingdom, but are understood to represent here the public interest. No doubt it is understood that we all do that more or less directly, and I think we should be shrinking from an important duty to the country if we declined to aid the Government in this matter.

The amendment was then put and lost.

On the motion for the adoption of the report,

Sir D. CORRIGAN proposed the following amendment:—"That the following letter be forwarded to Mr. Simon in reply to his of the 8th June." To the questions which Mr. Simon asks concerning Mr. Cowper-Temple's Bill, I think there is not a second opinion in the Council. I know that on the committee we were unanimous in the opinion that the Bill would admit on the Register the names of women with foreign degrees given by universities over whose course of education and examination we have no control whatever. While the men are denied the privilege of having these degrees recognised, women are to have that privilege. That part of Mr. Simon's question I consider to be decided; and I may state that that part of my proposed answer which conveys our views with regard to his letter coincides with the reply in the report of the committee which Prof. Turner has read. The portion of my reply which I refer to is—"The first part of the letter expresses a desire that His Grace the Lord President of the Council should be favoured with the views of the Medical Council on a Bill introduced by Mr. Cowper-Temple to amend the Medical Act of 1858 so far as it relates to the registration of women who have taken the degree of doctor of medicine in a foreign university. In reply thereto, I am directed to observe that the Council cannot approve the Bill, seeing that it would propose to confer on women the privilege of registering foreign degrees, from which privilege men under the Medical Act, 1858, are excluded, and in the opinion of the Medical Council properly excluded, for this reason, that the Medical Council has no means of exercising over foreign degrees and their holders the supervision and control to which all the licensing bodies of this country, universities, and corporations, and the holders of their degrees and licences are subject under the Act of 1858, which supervision and control are most necessary on social, moral, and professional grounds." On that question we are all agreed. With regard to Mr. Cowper-Temple's Bill, I believe the sentiment here is in strict accordance with the views of the Medical Council. Now, the next question raised in Mr. Simon's letter is that of general practice—that is, whether women are to be entitled to look to general practice as a means of livelihood, and of course to be registered. And then he puts a question which, I think, has been ignored in the report of the committee. He puts the question whether they are to be admitted to general practice, and then the question as to whether they are to be admitted to certain branches of it. I do not think this last branch of the question is sufficiently and distinctly dwelt on in the report. The last part of the letter to which I will direct your attention is this: He goes on to inquire what are the conditions with regard to women who desire to obtain legal status as medical practitioners in this country; and, on the other hand (I will ask your attention to this), to the "examination rules or other conditions which prevent them from accomplishing their wish." Now there is not a single word in the answer with regard to that. He simply asks you for information as to the conditions or circumstances which prevent them from accomplishing their wish. And what is our answer? Why the report of the committee passes that by, and it says, "In order to accomplish their wish such and such regulations ought to be passed." That is not an answer to the Lord President. The Lord President, or Mr. Simon for him, asks what are the conditions which prevent women from accomplishing their wish, leaving to the Lord President and the House of Commons to devise what are to be the means by which those objections are to be removed, or what course the House of Commons might follow. But instead of informing the Lord President as to the conditions which prevent women from accomplishing their wish, the report of the committee passes that by totally, and simply lays down a plan for the Government, by which they may be enabled to gain admission. The Lord President asked one question, we have answered another question which has not been put. He never asks us in that letter what are to be the means by which these objections or obstacles are to be removed; he simply asks the question, "What are the examination rules or other conditions which prevent them from accomplishing their wish?" and that question we have passed over completely, for we have not acquainted him with what are the conditions which prevent them from accomplishing their wish. Now, this forms in my mind a very serious objection to this answer from the committee, for I think it is a very good rule that you should answer as fairly and as fully as you can the questions asked, but I do not think it is a proper course to evade a question asked and give an answer to a question that is not asked. The Lord President has not asked us what is the Parliamentary measure that he ought to introduce, or what is the Parliamentary measure that we should recommend; he has asked us no such question, and yet we have gone into the question of what it ought to be and what the House of Commons ought to do. Now, this, I think, is the most serious objection to the whole answer and the whole course proposed by the committee. The letter of the committee says: "In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council beg to state that, being thus directly appealed to by the Lord President, they have felt bound to consider the question of admission of women to the medical profession." I feel myself bound to consider it, and in that I differ from Dr. Storrar; but I am not bound to consider it on so short a notice as twenty-four hours, and without consulting the University which I have the honour to represent. In my answer I do not propose at all that we should evade the question; I simply propose that we should have an opportunity of going back to our constituents to put the letter of the Lord President before them, and then, armed with their opinions and their views, give an answer. It is said by Dr. Wood that we ought to give an answer immediately. Well, how long have we had a conjoint scheme before us? Three years, and we have not felt ourselves bound to give an answer up to the present. Now there comes before us from the Lord President, and very properly, a most important question—first, as to Mr. Cowper-Temple's Bill, on which we have given an answer, because we know distinctly the opinion of the whole profession on the point; and next, with regard to the other bodies admitting women; and next with regard to their entering certain branches of the profession. I cannot think that the Lord President, who knows of what consequence it is to have due deliberation, even upon the most minor considerations that come before the House of Commons, would hurry us, or should be imagined to hurry us, into a decision upon that very, very important question. Now we come to an opinion expressed—and it may be right or wrong; but I do say that we have come too suddenly to it. It is in paragraph 2 of the report of the committee. It says, "After due deliberation the Medical Council have to express their opinion." What is due deliberation? The report is only put before us to-day.

Mr. Turner.—Yesterday.

Sir D. Corrigan.—Well then, yesterday. How do you call that due deliberation? I think, after the many avocations which we have had to go through in London in relation to professional questions, and the hospitality which has been exercised towards us in London, we have been unable to give the matter due attention. Now, the next paragraph to which I have to draw attention is one which ought not to be adopted. "Instead of medicine offering more facilities and less difficulties for women than other professions, the Medical Council believe, that as the whole question is looked into, there will be found peculiar hindrances, moral and physical, to the successful pursuit of medicine by women. Moreover, they desire to add that if it be admitted that women should enter the medical profession, the existence of an equal fitness in women for other professions must be assumed." I do not think that that is common logic. Are we to assent to such a ridiculous proposition as that, if we admit women into the medical profession to study medicine and practise it, therefore, forsooth, a little girl of thirteen or fourteen may be sent as a "midshipman" on a ship of war? That paragraph appears to me to be utter nonsense. Then it says, "If, notwithstanding such objections, it should appear expedient that women should not be debarred from obtaining that status." We have in the paragraph a few lines before this a statement that "There are special difficulties which cannot be obviated."

Mr. Turner.—The report says, "Some of which objections cannot be obviated."

Sir D. Corrigan.—It is all the same to me whether there is one objection which "cannot be obviated" or three or four; it makes no difference. If there is one which "cannot be obviated" women cannot enter the profession. "If, notwithstanding such objections, it should appear to the Government and the legislature expedient that women who desire to obtain a legal status as medical practitioners in this country should not be debarred from obtaining that status, the Council recommend that it should be under some such condition as the following." Now that, converted into plain English, means, "If the members of the Government should make fools of themselves and pass a ridiculous Act of Parliament, we will make ourselves parties to it." There is a suggestion on the part of the Chairman of the Committee that we ought to meet the Government half way.

Mr. Turner said he did not use that expression.

Sir D. Corrigan.—No, it was I who introduced it. Now I think that instead of aiding the progress of a measure which we have distinctly stated is objectionable on "moral, professional and social grounds," and as to which there are difficulties which we have said "cannot be obviated," the more straightforward, manly, independent, and proper course is this—that, instead of the paragraph which I have read, we should say that, "Having expressed our opinion so strongly upon women pretending to go into the profession of medicine, and considering that there are special difficulties which cannot be safely ignored, and some of which cannot be obviated, it is our duty, as men who are advocates of social order and propriety, to say to the Lord President that we are obliged to decline being parties to any compromise or to any measure that would admit women into the practice of the profession." That appears to me to be our proper course. Now we go on to say "That in the interests of public order, the education and examination of female students of medicine should be conducted entirely apart from those of males." The second condition is "That with regard to 'the examination rules or other conditions,' which prevent women from obtaining a legal status as medical practitioners in this country, it would be sufficient if an Act of Parliament were passed which should enable the Medical Council to recognise the examinations of the licensing bodies under Schedule A of the Medical Act, separately or conjointly, or such other examination or examinations as the Medical Council may from time to time deem sufficient for the purpose of granting admission of women to the Medical Register under the title of 'Licensed Practitioners of Medicine.'" Now there are to my mind two objections which cannot be got over with regard to that paragraph. In the first place, we take up a question which has not been asked at all, and we give the Government advice as to what they are to do. The Government does not ask us for it. The Government has simply asked us to state for their information what are the conditions which at present impede the way of women who desire to obtain a legal status as medical practitioners in this country. That is the only question that they have asked on the point, and we have evaded that question and advised them to pass an Act of Parliament. Now let us come to this wonderful Act of Parliament. We have been for years working on a conjoint scheme. Well, I think all our exertions in that way have not hitherto been successful; but, what are we now proposing? It is to pass an Act of Parliament which, to say the least of it, will make three or four examining bodies in addition to those already existing; so that we are blowing hot and cold. We are saying, on the one hand, that the licensing bodies ought to be diminished in number, and here is a proposal that the Government should give this Medical Council, on certain conditions, power to grant admission to women (I am quoting from Condition 3)—it proposes to grant admission to the Medical Register, and the examination is to be "such examination or examinations as the Medical Council may from time to time deem sufficient." Do you think that if that were admitted, three months would pass over in London, or Dublin, or Edinburgh, or Glasgow, or any such places, without the women coming forward, having a meeting in St. James's Hall, or somewhere else, and saying that they were not fairly treated—that they did not get proper examinations? Now we come to Condition 3: "That the examinations of female candidates for a licence entitling their names to be placed on the Register should be of the same character as those of males." If that means anything at all it means that it should be the same examination. But at the middle of page 7 we find an observation that is utterly inconsistent with it. It is that "The Council believe that the education and examination of persons with such views" (that is with a view to practise midwifery) "will not be found to differ greatly, upon the whole, from those required of candidates for ordinary licences to practise." "Nevertheless, women might be fit for registration on a special register without passing an examination in various parts of surgery, and indeed of medicine." Now it is impossible that those two things should stand. One says that the examinations ought to be of the same character as those of men, and the other says that women might be fit for registration on a special register, without passing an examination in various parts of surgery, and indeed of medicine. I now go back to a paragraph that I do not understand at all. "As to other than mere legal difficulties which prevent women from accomplishing their wish to engage in the practice of medicine and surgery, the Council are of opinion that such difficulties must be overcome by private exertions, and that no special legislation is called for, except, perhaps, in the case of midwifery." But you have not stated what those difficulties are. You say, "other than mere legal difficulties." I do not know any other than legal difficulties; I do not recognise anything but legal difficulties; nor does this paragraph point out in what direction the special exertions of women are to be directed to attain the end in view. I think it a very confused sentence, and one unworthy of this Council. Now, Sir, I have shown, I hope, sufficient reason for the course I have taken in criticising this report, paragraph by paragraph. I do not think that it is a report worthy to go before the Lord President and the Privy Council; I do not believe that it is a report that can be amended so as to make it, as I have said, worthy of us. I believe that if my amendment is thrown out, the proper course would be to withdraw the report altogether. Now my letter goes on, in the first place, to answer the first question, which relates to Mr. Cowper Temple's Bill. Then, I say, "The second part of your letter resolves itself into two questions:—Firstly, whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood?" The branches are not enumerated, but the question as to women looking to certain branches of medical practice as open to them equally with men may be considered, the Council suppose, as specially referring to midwifery. Well, I do not know any other branch that may be considered to come under that view. "On this the Council have to observe that, by established usage, women from the earliest times have practised midwifery." The practice of midwifery at all times, so far as we know, has been pursued by women. In Ireland, at the present moment, midwives are licensed by private individuals, and on those licences salaries are awarded to them. I think that this is a very improper course; and if the system of midwives attached to Poor Law medical appointments is continued for the sake of the public, the licences ought to be issued by bodies who have no pecuniary interest in selling their certificates. I will tell you what has occurred within my own knowledge. A man who never attended a case of midwifery bought his licence, I will not say where. He went into the country to practise as a dispensary doctor, and when the first case presented itself he did not know what to do. It was a foot presentation; and when he found the head was in the vagina, and the feet outside, he twisted it round and round till he left the head in the vagina, and had the body in his hand. Similar instances might be multiplied in England, Ireland, and Scotland. That is a thing that has occurred, and it ought to be put a stop to, and we ought to prevent midwifery licences being granted except by the legitimate corporations. I come now to Dr. Storrar's resolution. He says that the Medical Council was appointed under the Act of 1858 to carry out the provisions of that Act. Now I have said, and I say again, that this question never before came before this Council, and yet we are asked in 24 hours to give an answer to it. In 1873 there was a committee appointed to draw up a report on the special education of women, and I think our respected President was the chairman of that committee. They drew up a report. That report never came before the Council. Two years passed away, and yet it is said that we ought at once to give an answer to that important question, while the report of the committee on the same subject has been published and handed about; but the Council has never had the courage to take it up. I hold that we ought not to be asked to decide in a great hurry upon such an important question. My letter continues:—"The Council may in the mean time append these observations. First. They are aware that there exists a diversity of opinion in the profession and among the licensing Universities and Corporations as to the admissibility of women to general medical practice." I know that that diversity exists, for the subject came before the Queen's University, and as a preliminary step we had the opinion of the law officers of the Crown. I cannot say what the decision might have been; but the discussion was stopped in consequence of the law officers of the Crown declaring that we had not the power to give a licence to women. There was a diversity of opinion in the Senate of the University, and there is a diversity of opinion in the corporations; and where that exists I think that we ought to go back to those corporations, and get an authorized statement of their opinions. The next observation I have appended is this—"There appear to exist very great difficulties with regard to the details of education and examination of women desirous of entering the medical profession, on social, moral, and professional grounds; and it does not appear that the Council can at present do more than bring the whole subject under the consideration of the licensing bodies of the United Kingdom, and obtain their views as to the admission of women who may desire to obtain legal status as medical practitioners, or to practise certain branches, and also the information desired by the Lord President as to 'the examination-rules or conditions which prevent them from accomplishing their wish'"—(that is the pith of the whole letter from Mr. Simon, and that we have not answered at all)—"and then forward the communications to the Lord President, with such observations as the Council may deem it necessary to add." Now, does anyone believe or think that there is any very great necessity for extraordinary hurry at this present moment? Does anybody think that either Mr. Disraeli or anybody else will take up this question? Now, when we are almost in the month of July, and after the Government have declined to take up measures of great consequence (such as, for instance, the holiday question and the Brighton Aquarium), is it likely that they will take up the consideration of this matter? I do not believe that the delay will do any harm if we simply pass a resolution that the members of this Council be directed to obtain the views of the corporations on Mr. Simon's letter, and bring those views forward at the next session of the Council. There can be no real delay by postponing it, and if that course were adopted I should have no objection to withdraw my amendment. If the report be persevered in, I shall take the opinion of the Council upon it.

The PRESIDENT.—I think it is my duty to the Council, as having been formerly the chairman of the committee to which Sir Dominic has referred, to state that I feel I owe an apology to the Council for not having prosecuted the matter; but it hardly represents the exact state of the case to say that this report never was before the Council. On the contrary, I find that on the 2nd April, 1873, a motion was carried reappointing the committee, and empowering it to proceed with the subject. It would hardly be desirable that the Council should suppose that nothing had been done, and that this report had not been received. If there were a motion on the subject, I could explain why nothing was done.

Sir D. CORRIGAN.—It stands, then, as I have said—namely, that the committee was appointed in 1873; but the Council never gave an opinion upon that report; they never having had it before them.

The PRESIDENT.—That is not the fault of the Council; it is the fault of the committee.

Dr. AQUILLA SMITH.—I rise to second Sir Dominic Corrigan's motion; and one reason for my doing so is, that it differs very materially from Dr. Storrar's motion which has been discussed. Sir Dominic Corrigan's motion does not ignore the question, and does not take the power from the Council of considering it in future. I concur that it is the bounden duty of this Council, when it has been honoured by a communication from the Privy Council, to entertain the question, and, at any rate, to return a becoming and courteous answer to the head of the Government on any question that could be discussed by the Council. But I also support this motion because I take it that Sir Dominic's object in proposing it is, that his motion should supersede the report that has been received from the committee. I shall not go over the matters that Sir Dominic has so fully drawn the attention of the Council to; but I shall just state, very briefly, my reasons for objecting to the report and objecting to the motion which is now before the chair. I was very much struck this morning by the very remarkable contradictions in the report, contradictions as flat as can be. The paragraphs Sir Dominic Corrigan read, beginning at the bottom of page 41, point out, in clear and strong language, the incapacity of women to compete with men in the medical profession. That is admitted. In the latter part of the resolution the committee suggest that an Act of Parliament should be passed to introduce them into the profession, after expressing, in very clear language, that they believe that women are utterly incompetent to compete with men as medical practitioners. Then, taking that recommendation of the Government, they say, "It would be sufficient if an Act of Parliament were passed which should enable the Medical Council," and so on. Then looking at the 6th paragraph we find, "Moreover, the Council are of opinion that any course of legislation which would interfere with the free action of any of the universities and corporations mentioned in Schedule A in respect of the medical education of women is undesirable." Those appear to me to be such contradictions in the report that I cannot give my sanction to it. To recommendation No. 3 also I have a very great objection, "That the examination of female candidates for a licence entitling their names to be placed on the Register should be of the same character as those of males." I will ask those who are teachers, would they feel themselves warranted in going into the very important and wide subject of syphilis and all its consequences? Would the ladies be instructed in that? ("Yes.") I have reason to know from a document which, by accident, has come into my possession since I arrived in London, that there is one lady who aspires to medical honours who would not shrink from the inquiry into syphilis in its most revolting forms. I have great pleasure in seconding Sir Dominic's motion, because it is an important matter. I take the view of Sir Dominic, that this subject has certainly never been brought under the consideration of the body whom I have the honour to represent, and I should not feel myself warranted in stating an opinion that females should be admitted according to the suggestions of the report.

Dr. ANDREW WOOD.—I beg to recall the attention of the Council to the actual subject under debate on this motion. We have had a long discussion on the report of the committee; but the great question involved in Sir Dominic Corrigan's amendment is that we should tell the Privy Council that we are not ready to give an answer to this question that they put to us, and that we must send the matter down to the licensing bodies. That is the whole question, and I say that a great many of the statements that have been made by the gentlemen who proposed this motion are quite outside the question which they have discussed. Therefore I hope that we shall now go to the vote, and say whether we shall go on to consider this question in the Council, or whether we shall agree that we are not ready to take up the question. The question is not new to me, certainly in Edinburgh; and all through the country there has been nothing going on for a great many years that has excited so much attention as this subject of female doctors. I therefore hold that to go to the Government and say that we have not had time to consider the question, when we have been considering it for years, would be a great stultification. I hope we shall vote without further delay.

Sir WM. GULL.—If we are stopped here we are stopped altogether. This is not in the least a question of corporations or universities; they have nothing whatever to do with it; it is a question for the public, the Medical Council, and the Government. We particularly say in the report that the Medical Corporations and Universities shall be left free, and that we deprecate any interference with their system. Women are outside these bodies. The Government wants to know whether women are to have this freedom that they desire; and what will you do? Go and ask people who have nothing at all to do with the question? The London University has nothing to do with it, unless it likes to take it up. Sir D. Corrigan thinks that he and others who represent corporations have as much power as we have who do not. Then they have power outside their corporations; but to send this question back to the corporations is to admit that there are on this Council members who are nothing but nominees and representatives of different bodies.

The amendment was then put and negatived.

Dr. WOOD.—I shall not intervene between the Council and the committee by proposing what I have put upon the programme, because a large part of it is actually in Professor Turner's report, and I shall have an opportunity in the course of the discussion upon the different clauses of moving any parts of my report that seem to be different from it, and also of discussing the general question, which has not yet been touched on.

Mr. TURNER.—I should like to ask in what position we are placed with reference to Dr. Bennett's motion. If we agree to certain propositions in this report, it then becomes the report of the Council.

Dr. BENNETT.—I see the difficulty. My proposed report is in the hands of the printers, but if it is desired I can read it, so that the Council may know what is to come before it. I assume that our answer will come in the form of a letter from yourself, Sir, to the Lord President; and the letter I propose is this:—

"Sir,—In accordance with the request of the Lord President, as conveyed in your letter of the 8th instant, I have the honour to inform you that I have brought under the consideration of the General Medical Council the Bill which has been introduced in the House of Commons by Mr. Cowper-Temple, to amend the Medical Act, 1858, so far as relates to the Registration of Women who have taken the Degree of Doctor of Medicine in a Foreign University. To this Bill of Mr. Cowper-Temple, as well as to the collateral and wider questions to which your letter refers, the Council have given full and careful consideration. With regard to Mr. Cowper-Temple's Bill, considered by itself, and apart from its bearings on the 'general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men, as a profession and means of livelihood,' the Council have found no difficulty in forming an opinion. By the Medical Act, 1858, the Council are precluded from granting admission to the Medical Register to persons holding foreign degrees, and, consequently, have been compelled repeatedly to refuse to register foreign degrees held by men. The reason for this is obvious—viz., that the Council have no means of exercising that supervision and control over the education and examination required for foreign degrees, to which the licensing bodies of this country, whether universities or corporations are, by the Act of 1858, subjected. But this privilege, which the Medical Act refuses (and the Council believe, very properly refuses) to men, Mr. Cowper-Temple's Bill proposes to grant to women. To such a proposal the Council feel bound to offer a respectful but decided protest, as being subversive of the main principle of the Medical Act; and, though in appearance of very limited scope, calculated to be productive of serious evils. With regard to the general question referred to, and on which the Lord President desires to have the observations of the Medical Council, they would in the first place remark that it is a very wide subject, and one that appears to them to involve the discussion of very grave questions, moral, social, and political, which appertain to the Legislature, rather than to a Council of Medical Education and Registration. If the Legislature should determine that the learned professions, and, therefore, that of medicine among them, should be thrown open to women as well as men, and that a legal status should be given to women as medical practitioners in this country, it would be the duty of this Council to offer every assistance in their power to the Government in framing rules for the education and examination of women, and in suggesting conditions for giving them admission to the Medical Register. The Council, however, cannot conceal from themselves the serious difficulties that would attend the framing of such rules and conditions, involving, as they would, the peculiar, and in the opinion of many, almost insuperable hindrances, moral, as well as physical, to the efficient education and successful pursuit of medicine by women, and demanding, in the interests of public order, that both the education and examination of female students of medicine should be conducted entirely apart from those of males. The Council have already had their attention drawn to the importance of securing more efficient instruction for women who engage in the practice of midwifery, and whose services are largely employed, especially by the poor of this country. The Council feel very strongly that it is desirable that some means should be adopted for securing a better education, and granting certificates of competency to women who act as midwives. For, whilst fully admitting that for the safe and efficient practice of midwifery as a branch of medical science, a full and complete education both in medicine and surgery is required, the Council believe that a much more limited and less expensive education might be afforded to women, who after due examination might, as midwives, render valuable service to the community, and supply a deficiency long felt and expressed. For women thus educated and certificated, it might be desirable that a special Register should be provided, and which the Council think might be secured by an alteration in Schedule (D) of the Medical Act.—I have the honour to be, &c."

Mr. TURNER.—I would suggest that we suspend the further discussion of this matter till to-morrow, when we shall have Dr. Bennett's motion in type.

Dr. ROLLESTON.—Having listened with great attention to Dr. Bennett's report, it seems to me that it is in many respects an improvement upon that of the committee. Of course it is an easy thing for an accomplished person to improve upon phraseology when he has the *corpus vile* before him. With Dr. Bennett's letter before us, I think we can at once take up the consideration of the report. Let us keep on at full swing; and as each clause is submitted, we can consider Dr. Bennett's amendments.

The Council then went into committee on the report.

Mr. Turner moved, and Sir W. Gull seconded, that the first three paragraphs of the proposed reply to Mr. Simon's letter be adopted.

Dr. Parkes moved that the paragraphs be omitted, because in his opinion they expressed a great deal too much, and yet too little. They did not contain any real answer to Mr. Simon's question, and would very likely land the Government in great perplexity. It was stated that there were special difficulties in the way of women which could not be safely ignored, and some of which could not be obviated, and yet it was a well-known fact that women were practising in various countries. No answer had been given as to what the "special difficulties" really were. No doubt there were certain portions of medical practice in which women would never be able to compete with men, but there were other portions in which, on the whole, he believed they had a superiority over men, specially with regard to diseases of women and children. He thought that the paragraph as to the "peculiar hindrances, moral and physical" to the successful pursuit of medicine by women, was extremely objectionable, and he felt it his duty to vote against it. He also objected to the statement of the report that if women entered the medical profession it must be assumed that they were equally competent to enter other professions—a most illogical conclusion to arrive at.

Dr. Bennett seconded the amendment, and suggested that the different points in Mr. Simon's letter should be taken up in the order in which they were there stated.

After a long discussion as to the form in which the question should be brought before the Council,

Mr. Quain said he would accept the paragraphs proposed by Mr. Turner as a kind of compromise, seeing the opposition there was in the committee to the recommendation being carried, unless they were prefixed with some such statements as those contained in the opening paragraphs of the proposed letter.

Dr. Rolleston, in opposing the motion, said he thought the paragraphs in question should be retained for the sake of unanimity in the Council.

The amendment was put and carried.

It was then moved that the amendment be carried as a substantive resolution; when

Dr. Rolleston moved, as an amendment, that the report be remitted to the committee, and brought up on the following day, and that Dr. Bennett be added to the committee.

Mr. Turner seconded the amendment, which, after some discussion, was ultimately carried and agreed to as a substantive motion.

The Council then adjourned.

BASKET-BURIAL v. GLASS-LID COFFINS.

To the Editor of The Lancet.

Sir,—Mr. Haden's plan of basket-burial lies open to the following objections:—1st. It is novel and repugnant to our present feeling on the subject to be buried in a basket. 2nd. It requires a special manufacture. 3rd. Though cheap now, it would become expensive from scarcity of material, if universally adopted. 4th. It fails in its prime object, which is the speedy decay of the body, especially in those cases where the double basket is used with the lining of charcoal. 5th. Unless the charcoal be used, it would allow a smell to escape in all cases; and in cases of death from infectious diseases would be dangerous to the survivors. 6th. Where the charcoal is used, which in most cases would be necessary, the plan would be bulky and clumsy.

Now a very simple plan might be used, which is open to none of these objections, and has certain special advantages of its own. Let the coffin be made of some soft easily decaying wood, well joined together, and pitched inside. Let the lid be a framework of wood, filled in with thin glass painted black, or whatever colour be adopted, all except a portion which would correspond with the face of the deceased. When the body is placed in this coffin, let it be surrounded, all but the face, with carbolised tow, or with quicklime mixed with McDougall's disinfecting powder (if we desire a speedier process of decay), and covered at once by the lid. On the day of burial the face portion of the glass lid must be painted over, or covered by affixing a breast-plate, made of paper, linen, or leather, on which the name, age, and date of death are painted or embossed. On being deposited in the grave, which would be dug simply in the earth, the coffin would be thinly covered with quicklime and then by the earth. It is evident that the weight of the superincumbent soil would quickly break the glass lid, and permit dust to mingle with kindred dust.

The advantages of this plan peculiar to itself are:—1st. It would require no special manufacture, but could be carried out by our ordinary undertakers. 2nd. It would be cheap. 3rd. It would be safe to the survivors. 4th. It could be applied soon after death. 5th. The survivors could see with safety, and without smelling any odour, the face of the deceased up to the day of burial. 6th. The body could be kept a considerable length of time, especially if the coffin were made air-tight, and the air afterwards exhausted. 7th. As the process of decay in the grave would be very quick, the ground could be used very frequently for reburials, and, being in course of time well fertilised, would be well adapted for making Mr. Haden's beautiful garden, even though it were situated, as he proposes, in the Essex marshes.

I am, Sir, yours truly,
Colin Henderson.

Redcliffe-gardens, South Kensington, S.W.

ROYAL COLLEGE OF SURGEONS.

The result of the elections at the Royal College of Surgeons on Thursday last will give general satisfaction. There was a large attendance of fellows, and for a time the contest was spirited. As we ventured to predict, the three successful candidates were Mr. Prescott Hewett, at the head of the poll with 127 votes; Mr. Cooper Forster stood next, with 110; and Mr. Birkett third, with 109 votes. Mr. Spencer Smith, one of the retiring members, on whose behalf great efforts were made, polled only 97 votes, although a very large proportion were "plumpers." Mr. Alfred Smee gained 30 votes, and Mr. Hussey, of Oxford, 29.

BIRMINGHAM MEDICAL INSTITUTE.

Mr. Edwin Chesshire presents his compliments to the Editor of The Lancet, and begs to be permitted to announce through its columns that, in consequence of the admission of homœopathic practitioners to the Institute, he has thought it his duty to resign his connexion therewith; also to express his intention to withdraw his donation of £25, and give it to other and more deserving medical institutions. Mr. Chesshire will further be obliged by the publication of the following letter:—

"83, Newhall-street, Birmingham, June 28th, 1875.

"Dear Sir,—Would you oblige me by removing my name from the list of members of the Institute, though I deeply regret having to separate myself from a society in the prosperity of which I should have taken great interest, and in which amongst its members are to be found many of my warmest and best friends. The unfortunate course which has been adopted since the formation of the society constitutes, in my opinion, the most unwise, the most unjust, and the most illiberal act which has happened to the medical profession in the present generation.

"I am, dear Sir, yours very truly,
Edw. Chesshire, F.R.C.S.

"G. F. Evans, Esq., M.D., Hon. Sec.

"P.S.—I shall reserve to myself the privilege of sending a copy of this communication to the medical journals."

THE LANCET.

LONDON: SATURDAY, JULY 3, 1875.

In addition to the discussion by the Council of the Reports of the Visitors of Examinations, to which we have devoted another article, we have to notice a subject of considerable interest which occupied the attention of the Council on the two remaining days of its session—Friday and Saturday last.

The debate on the fitness of the medical profession for women was very creditable to the Medical Council. Our readers will have read for themselves the letter of Mr. Simon, written under the direction of the Lord President of the Council, and to be found at page 891 of The Lancet of June 26th. We can almost imagine Mr. Simon, earnest and scientific, and withal statesmanlike though he be, getting a little sense of—we must not say fun nor mischief—but some compound of these two sensations, out of the duty of composing this letter in the name of the Lord President. The Medical Council, as its name implies, is made up of the grave and reverend representatives of all that is regular and conservative in the constitution of the profession. They have known the profession only as it is—made up of male units who have gone through a certain well-prescribed course of study, observed certain "examination-rules and other conditions," and so passed into the great calling of which hitherto they have had the monopoly. Fancy the medical adviser of the Privy Council having, in the name of a Conservative Government, to propound to the Medical Council the general question—whether women ought to be able to look to medical practice, or certain branches of it, as open to them, equally with men, as a profession and means of livelihood, and in the name of His Grace to ask for the observations of the Council on this subject. Without pretending to divine Mr. Simon's sensations as he penned his letter, it is certain that no communication has caused such a sensation in the Medical Council, or produced such lively embarrassment, since the receipt of another celebrated letter from the same pen on the subject of Conjoint Boards in the year 1869. One would have thought that the views of the Medical Council on such a question might have been taken for granted, and that if any legislative action had to be taken in favour of women the Council might have been spared the delicate duty of either sanctioning or opposing it. But the Lord President seems to have thought otherwise, and considered that it would be a help to the Government to be in possession of the opinions of a body so technically and generally informed as the members of the Medical Council.

As we have said, the discussion of the subject and the answer to the Lord President are altogether creditable to the Council. Two or three replies to the Lord President's letter were open to the Council. One was to the effect that, sitting as mere administrators of an Act of Parliament, it was no part of their duties to give their views on questions not raised in the Act itself. Dr. Storrar proposed this reply, but was only supported in doing so by the seconder of his motion. Another reply was to the effect that women are totally unfit by nature for the stern duties of the medical profession, and that law ought to be consistent with such unfitness, as it is at present. This was the spirit of the manly and outspoken speech of Dr. Andrew Wood and of the reply which he proposed to send to the Lord President. But the Council took a different course, and we think one entirely consistent at once with its dignity and its opinions. The tenor of its answer will best be gathered from studying the following paragraph, first as it stood in the original report of the committee appointed to consider the matter, and then as it stood finally on the amendment of Dr. Parkes, who must be considered as the friend of the ladies on this important occasion:—

"The Medical Council are of opinion that the study and practice of Medicine and Surgery, instead of affording a field of exertion well fitted for women, do, on the contrary, present special difficulties, which cannot be safely disregarded."

Professor Turner fought well for this way of putting it. Dr. Parkes, on the other hand, as an amendment, proposed to end the paragraph by putting after the words "cannot be safely disregarded" the words "but the Council is not prepared to say that women ought to be excluded from the profession"; and he carried the amendment by a majority of 14 to 7. This amendment of Dr. Parkes expresses well the feeling of the majority of the Council on the whole question. It was voted for by the representatives—to take them nearly in the order in which the names occur in the division list—of the College of Surgeons of England, of the University of Oxford, of Cambridge, of Durham, of Glasgow, of the King and Queen's College of Physicians, of the College of Surgeons of Ireland, of the Apothecaries' Society of Ireland, and by five out of the six representatives of the Crown. Having made the admission that the Council is not prepared to say that women should be excluded, they go on to express the opinion that, if it should appear to the Government and the Legislature that women who wish it should not be debarred from obtaining a legal status as medical practitioners, it should be obtainable only under certain conditions and arrangements, which will be found specified in our report, and the principal of which most properly is that "in the interests of public order the education and examination of female students of medicine should be conducted entirely apart from those of male students."

The significance of this kind of reply from the Medical Council will probably be overrated by the eager ladies who are so anxious to distinguish themselves as medical practitioners, and by their political allies. To be rightly understood, it must be read in connexion with the speeches by which Dr. Parkes's amendment was supported, which certainly were the most telling speeches in the debate. If we might single out those which probably influenced the Council most, we would specify those of Dr. Rolleston and Dr. Humphry. Sir Dominic Corrigan did not vote, but he leaned to Dr. Parkes's amendment, while he said that, rather than see his daughter enter the profession, he would prefer to see her in her coffin. This is too strong, but in less extreme terms the same feeling was expressed. In other words, while the Council, realising its responsibility as a medical body having relations with the State, and actually consulted by Government, was unable to justify the legal exclusion of women, it made no secret of its opinion that the profession as a calling is most unfitted for them. The Council says that, so far from being well fitted for women, the study and practice of our profession present "special difficulties which cannot be safely disregarded." Not one of the speakers advised women to study medicine. And even Dr. Parkes assented to the view that medicine was a profession of special difficulties for them. Here the question must rest as far as the Council is concerned. If statesmen are to legislate for the admission of women, it will be on their own responsibility, and they will have to devise means of separate study for women, and to confess that, if they are to be admitted to the profession for which they are least fitted, they cannot be excluded from any other. Our opinion is not different from that of the Medical Council. We do not see it right or necessary to exclude women by law from a profession which physiology and common sense should teach them is meant for men, and is a hard calling even for these.

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In making a few observations on the Visitors' Reports of Examinations we would remark, that they promise to be of the greatest service in raising generally and equalising the standard of education throughout the country. In a few years we hope it will no longer be possible for a candidate who has been rejected for gross ignorance and incompetence at one board to disappear for a fortnight and return with the diploma of another. The General Medical Council has acted throughout in a thoroughly wise and lenient spirit. They have never exerted the power they undoubtedly possess of appealing to the Privy Council, by whom certain alterations might be directed to be made in the conduct of the examinations; but they have trusted to the steady and irresistible influence of public opinion, which will slowly, it may be, but surely lead to improvements. These improvements upon the old plan of examining are, first, that every examination should consist of three parts—a written, an oral, and a practical. It is not, of course, every subject that admits of such a division; but in the three examinations that are now held to be requisite for a degree or licence to practise, and which, by whatever names they are called, are equivalent to a preliminary, an intermediate, and a final examination, there are always subjects which can be thus treated. Thus, in the Preliminary Examination, Chemistry and Botany; in the Intermediate, Anatomy, and perhaps Physiology, and Materia Medica; and in the Final Examination, Medicine, Surgery, Midwifery, and Forensic Medicine,—may all be examined upon by written papers, by word of mouth, and by demanding some evidence of the acquirement by the candidate of that manipulative dexterity which is of the highest importance in practice, and which cannot be got from books, but requires attendance and work in the laboratory, the dissecting room, and the wards. No examination can be held complete from henceforth which neglects these three methods of examination. They have already been adopted by the best and most advanced of our examining bodies, and those who neglect them in the future will be thrown out of the race altogether, and their diplomas, if taken at all, will possess a very inferior value. Difficulties there may and must be in carrying out some of the necessary arrangements of these subjects, especially when the number of candidates is considerable, and this is notably the case in the performance of dissections; but we are persuaded that these could be overcome by a little exertion and forethought on the part of the examining bodies. The improved methods of preserving subjects enable them to be retained for several weeks, or even months; and with economy and care many candidates could be examined on two or three subjects even though some dissection were required from each.

For the written examination fair time should be allowed to the student—three hours at least on every subject; and in the more important ones—Anatomy, Physiology, Medicine, Surgery, and the like—six hours cannot be regarded as too much. The oral examination must be left to the discretion of the examiners. A good man may be dismissed in five minutes; a doubtful one may require half an hour before his passing or rejection can be decided upon.

In the next place, two examiners should be appointed at each examination on every subject, each having the power to pass, but not to reject without conference. Thus, whilst responsibility is shared, the student has a guarantee that he has not been rejected from any personal peculiarity on the part of his examiner. With this duplication of examiners we would gladly see conjoined the plan so strongly and consistently advocated by Professor Humphry, of the introduction of a foreign element into the constitution of the examining board of every university or college, so that the candidates should not be examined by their teachers and lecturers exclusively. Need we add that the foreign element should be the best that can be obtained for love or money?

A perusal of a considerable number of the examination questions given in these reports suggests some curious reflections; for whilst some bear evident marks of careful consideration, others give the impression that the writers have not clearly distinguished between Anatomy, Physiology, and Histology.

One point more. Since students cannot be expected to be experts in a score of different subjects, would it not be well that in the regulations for examination the amount required should be restricted, but clearly laid down and rigorously exacted?

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We beg to direct particular attention to an important article which we publish this week respecting an inquiry by Sir Henry Thompson into the condition of fifty-one cases of lithotrity in elderly adults, made at periods of from one to two years after the operation. It will be remembered that in our columns for April 3rd Sir Henry published a brief record of 100 cases of stone in the bladder, 96 being in males and 4 in females. Of the 96 males, 87 were operated on by lithotrity and 9 by lateral lithotomy. The mean age of the 87 operated on by lithotrity was sixty-three years and a half, and the mean age of the 9 operated on by lithotomy was also sixty-three years and a half. Of the former 4 died, and of the latter 2 died. There were therefore, in the two operations, 6 deaths in 96 cases, or 1 in 16. The result as concerned the lithotrity cases was very satisfactory, the deaths being only about 1 in 22. Mr. Thomas Smith, however, suggested an important question—namely, the relative condition of patients on whom lithotrity had been performed at any period not less than twelve months after the operation. Sir Henry Thompson has now published his answer. With great care and trouble, he has ascertained, by personal examination, or by the reports of the various medical attendants, the condition of the patients at a period varying from two years and a half to thirteen months after the operation. Within the prescribed period lithotrity was performed on 53 persons, of whom 2 died. For the full details the reader must turn to Sir Henry Thompson's own statements. Suffice it to say that of 45 cases 11 have died and 34 are still living, of whom 28 enjoy good health and active existence, at a mean age of sixty-three years and a half (6 have been lost sight of); 6 have shown signs of recurring calculus, 2 having had newly formed calculi removed; of these all are well but one. But even these figures do not fully represent the relative advantages of lithotrity, for, as Sir Henry suggests, there are many instances in which recurrent phosphatic accumulations are readily removed again and again by the lithotrite. Persons so afflicted really owe their lives solely to surgical art, and, except for lithotrity, must soon perish, or frequently submit themselves to the more hazardous operative procedure of lithotomy. In the interests of surgery and of humanity this investigation is of inestimable value, and too great praise cannot be awarded to Mr. Thomas Smith for his pertinent suggestion, and to Sir Henry Thompson for the able and careful manner in which he has met it.

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A Royal Commission has been appointed to inquire into the practice of subjecting live animals to experiments for scientific purposes, and to consider and report what measures, if any, it may be desirable to take in respect of any such practice. The Commission is composed of Lord Cardwell, Lord Winmarleigh, Mr. Forster, Sir John Karslake, Mr. Erichsen, Prof. Huxley, and Mr. Hutton; and those who, like ourselves, desire to see the subject calmly and dispassionately considered from all points of view will regard these names as a guarantee that such will be done.

The statements that appeared from time to time regarding some of the real or alleged practices on the Continent under the name of vivisection excited a good deal of indignation, and raised a feeling of unnecessary alarm lest a similar wholesale system of animal experimentation should be pursued at home in the supposed interests of science. We entertained doubts as to the accuracy of the alleged statements of what was done abroad, but, whether these were true or false, we never had any doubt that they afforded no fair indication of what was done, or likely to be done, in this country. It appeared to us that many very exaggerated assertions had been made, and that a good deal of irrelevant matter had been introduced into the discussion on both sides. Because power over the lower animals has been given to man, that is no reason why he should arrogate to himself the right to use it regardless of the suffering he causes or a sense of the responsibility he incurs. Still we have never entertained a doubt that experiments on animals are perfectly justifiable within certain limits and under certain circumstances, and we wanted to know, if possible, what these limits and circumstances were, in order that any necessary restraint should be imposed. But it was, first of all, essential to ascertain something as to the extent and prevalence of vivisection in this country. It seemed to us that all attempts at legislation would be futile and like leaps in the dark without some more precise information than is at present available. We strongly urged the importance of appointing a Commission as a preliminary step. With the composition of that Commission we think the public has every reason to be satisfied. Those whose minds have been strongly made up one way or the other will, of course, be dissatisfied with a Commission which promises that the matter will be divested of false issues, and quietly and impartially deliberated upon. Lord Cardwell has the reputation of possessing a judicial tone of mind, and he has had the benefit of a legal training. Mr. Forster is an eminently fair and broad-minded man. Mr. Hutton has a keen, logical intellect and a lively sensibility; his constitutional dislike to the infliction of pain of any kind has probably led him to take an active part on one side, and he can scarcely fail to become more fully instructed in the subject by understanding the views of men like Professor Huxley and Mr. Erichsen, with whom he is associated in this inquiry. We claim to have approached the matter ourselves in a dispassionate spirit, and with the sole desire of getting all the light that can be thrown on a difficult subject before anything in the way of legislation be undertaken in regard to it; and we believe that the Government has adopted the wisest and best, if not the only practicable, course in appointing this Royal Commission.

Annotations.

"Ne quid nimis."

THE COUNCIL AND THE CONJOINT SCHEMES.

The representative of the College of Physicians, Dr. Risdon Bennett, put a question to the President of the Medical Council as to the present position of the Conjoint Scheme for England. Dr. Apjohn also asked Mr. Macnamara, as the representative of the Irish College of Surgeons, whether the Council of the College still adheres to the scheme agreed to by the other Irish bodies and sanctioned by the Medical Council. Dr. Acland's answer was studied, and if not sanguine, yet not desponding. He had no reason to believe that the College of Surgeons had withdrawn from the scheme. There was a little ambiguity in his words about the action of the College. "It had always maintained or implied the right to secure the nomination of a certain proportion of the examiners in surgery and anatomy. If the right be *now* insisted on, the consent of the other bodies and of the Medical Council is obviously necessary. These circumstances show that the negotiation is one which in its nature requires time, but they do not indicate that the scheme will come to an end." If the College is only asking for what it has always asked, seeing that the scheme is now two or three years old, it is rather curious to hear that "time" is still wanted. Mr. Macnamara says that the Council of his College is still pledged to the scheme approved by the

Council, "but during the past year the question has fallen into abeyance. The present feeling in Ireland is that we should be very much influenced by the steps which may be taken in England and Scotland in this direction." And so this great matter remains "in abeyance," the subject of a mere chance question at the tail end of the session of the Council, Ireland waiting to see what England and Scotland will do, and nothing decisive being done in the matter. We confess to being less sanguine than Dr. Acland. But *nous verrons.* Sir John Lubbock's Bill will soon be law, and we shall learn whether the ingenuity of obstructiveness is yet exhausted.

OPIUM TRAFFIC.

IN the debate on the Indian opium monopoly on the 25th ult. there was much difference of statement as to the consequence to the system of the habitual consumption of the drug. That its ultimate effects are most serious there is no doubt. The temporary endurance and strength which it supplies afford no ground (as some speakers imagined) for denying its injurious influence. Even in moderation its effects on the system are very enervating, and, as with all other stimulants, moderation seems to be impossible to a large number of those who indulge in the use of the drug. The opium-eater soon becomes absolutely dependent upon it for whatever capacity he possesses of work or enjoyment, a capacity which soon it is beyond the power even of opium to preserve. Moreover, the sketch of the peasant and his innocent after-dinner pipe of opium is very fallacious. Those who have seen much of Eastern natives, in country districts as well as in towns, affirm that it is very rare for opium to be taken in one form only. The opium-smoker is almost always the opium-eater also. Nor is the argument for the use of opium which has been drawn from the consumption of alcohol in this country of greater point. Opium as a stimulant may be better or worse than alcohol, but the ultimate effects of even a slight habitual excess of alcohol are sufficiently grave. No argument, then, drawn from the innocuity of opium can excuse the Government of India for the prominent position it occupies as, practically, the great producer of the drug. It is much to be regretted that the financial prosperity of India should be dependent, as it seems to be, on the amount of drunkenness in China. It is still more to be regretted that the Government occupies so invidious a position as the farmers of the whole opium cultivation of Bengal. Against a transfer of the mode of raising the revenue from the cultivation to the taxation of opium, from production to prohibition, the uncertainty and fall of revenue seems the only real objection, and it may be hoped that prosperous seasons and a wise government may soon render the objection trivial, and that the means may be found to abolish what has long been felt to be a grave injustice.

EUCALYPTUS GLOBULUS.

OUR readers are aware that the result of extensive administration of the Eucalyptus globulus in intermittent fever has hardly corroborated the promise of early and more limited experience. It appears to have very little power of arresting the frequency of the attacks, or of warding off the grave organic consequences of the disease. But it is interesting to find that its alleged influence on malaria has received some substantial confirmation. Dr. Cosson recently announced that its effect in Algeria had been very marked. Since the growth of plantations of this tree around the lake of Fezzara, the malaria which formerly was intense has almost disappeared.

The village of Ain Mokra, according to Captain Ney, furnishes an equally striking instance. The station was formerly so unhealthy that it was necessary to change the French garrison every five days on account of the number of men attacked. Fever has, however, become much more rare since plantations of Eucalyptus globulus have been made on the shores of the lake and the sides of the railway, which include altogether 60,000 trees. A writer in the *Temps* mentions a still more singular effect—namely, that parasites (phylloxera, &c.) disappear from vines growing near the eucalyptus. The experiment, made during several years and in several vineyards, had been uniform in its result.

It is interesting, in connexion with these facts, to observe that the leaves of this plant contain an ethereal oil, of which even half-dried leaves contain 6 per cent., and that this oil, according to Gimbert, is a very powerful antiseptic. It will preserve blood and pus as long as carbolic acid (five months and more), and far longer than oil of turpentine. It prevents also the appearance of fungi or vibrios. These observations have received independent confirmation from Binz, in Germany.

DR. GUY'S HARVEIAN ORATION.

IN the Harveian Oration, delivered at the College of Physicians, Dr. Guy did not depart from the tradition which assigns to the life-work of Harvey the paramount place in the thoughts and words of the orator. Previous orations have, as Dr. Guy observed, either been devoted to Harvey and his labours, or else to some topic connected with modern discovery and research having more or less close relation to the subjects which occupied Harvey's fruitful intellect. The great discovery of the circulation of the blood was the somewhat trite theme which Dr. Guy selected. He contrived to invest it with some new interest from the aspect in which he considered it—that of the personal character of Harvey's work. Great as were the obstacles Harvey had to encounter, all was not against him. The conditions of his own life, of his own education, were all favourable. He came of a wealthy family, and had independent means of his own, so that he could command the very best education which England or Italy could give, besides which he was able to obtain by royal favour or otherwise access to other sources of study beyond the general reach. It was an age of some vigorous thought, and Harvey was in close contact with whatever of intellectual activity was going on in Europe. His great characteristic, that of careful sceptical observation, freed him in great measure from the trammels of previous theory, which, more than anything else, hinders the discovery of truth. But Harvey's discoveries were far more than mere instances of happy and acute observation. They were careful inductions of remarkable sagacity and of the highest order of logical thought. They were also of very varied character. In no one, perhaps, does the part played by imagination in scientific discovery appear with such signal power and effect. It appears in every line of the history of his discoveries, and is seen, as Dr. Guy pointed out, in his tendency to personify the objects of his investigation, until sometimes his solid footing seems to fail him, and vague mysticism obscures the clear light of his intellect, and leads him on to a too ready credulity where his own individual observation could not penetrate. A curious instance of this is Harvey's belief, alluded to by Robert Boyle, that certain tumours might be dispersed by the touch of a dead man's hand. The cobwebs of hypothetical explanation, which his own mind swept lightly from the facts beneath, still obtained in the eyes of his contemporaries, and hindered the reception of his discoveries, as in all ages they have hindered knowledge and embarrassed the discoverer. Much of his time had to be spent in detailed discussion and disproof of the erroneous views which were generally held on the points to which his discoveries referred. The versatility of Harvey's mind was as remarkable as the extent of his researches and the minuteness of his investigations. The subjects on which he had thought and intended to write comprehend a large part of physiological science, and his thoughts ranged over a still wider area, and found relaxation in mathematical and classical pursuits.

Harvey united in singular completeness the practical and scientific elements of character which are alike indispensable to the highest order of intellect. A large share of his success as a discoverer is due to the ingenuity with which he devised and executed his experiments; and his own writings show how readily he utilised in actual practice his own great discoveries. Of the originality of those discoveries, Harvey himself, as Dr. Guy clearly showed, entertained not the smallest question.

THE PUBLIC HEALTH BILL.

The Public Health Bill would appear to be about to pass through the House of Lords with as little difficulty as it passed through the House of Commons. The Duke of Richmond, in moving the second reading of the Bill, gave a clear statement of the present position of sanitary legislation and of the advantages to be gained in future legislation by a consolidation of existing law. With reference to the few amendments proposed to be introduced other than those which the Bill had received in the House of Commons, he said that, under existing provisions, "the local authority had the control of sewers as well without as within their district, and were empowered to carry water mains beyond their district underground. This power did exist at present in regard to sewage, and it seemed only reasonable that it should exist in regard to water, which was equally necessary to the health of the community. Further, the waterworks clauses were incorporated in the Bill in accordance with the recommendations of the Select Committee. Another clause increased the limit of the cost of the water-supply to twopence per week. Then power was granted to local authorities to suppress trade nuisances; to urban authorities to purchase or provide gasworks by agreement; to sanitary authorities generally to proceed against joint contributors to a nuisance; and to the Local Government Board to unite districts and appoint medical officers of health. The provision as to joint contributors to nuisances was framed because it was sometimes difficult to distinguish who the offending party really was." The Duke of Somerset took exception to the Bill generally because it was what it professed to be and not something else; the Marquis of Salisbury, Lord Aberdare, Lord Redesdale, and Earl Fortescue supported the Bill. Lord Aberdare intimated his intention of moving an amendment for strengthening the hands of the Local Government Board in dealing with local authorities who failed to do their duty. The Bill was read a second time.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.

On the 26th of June the annual meeting of the North of Scotland Medical Association was held at Aberdeen, and was attended by a fair muster both of town and country members. The proceedings were opened by an excellent address from the president, Dr. R. Jamieson, superintendent of the Royal Lunatic Asylum, who, in the course of a review of the progress and improvement in the treatment of the insane, took occasion to advert to the great increase of insanity in Scotland — an increase not only absolute but relative, as shown by the great extension of lunatic asylums and the lunatic wards of poorhouses, and to such an extent that the last Census shows the ratio to be 1 in every 430 of the population—a ratio which seems steadily on the increase. This increase Dr. Jamieson is inclined to attribute to an artificial system of living, to the race after wealth which more or less characterises all classes of the community, and to the excessive system of cramming and urging the brain to overwork which marks the present plan of education in the young, more especially in children. The great experience which Dr. Jamieson has had in the treatment of the insane gives force and value to his opinion on such a subject, and is well calculated to make us pause and think whether our high-pressure civilisation is really worth the cost it entails, or whether the loss in health to the community may not counterbalance the advantages obtained in other ways.

The Association then took up the question of a proposed Scottish Medical Association—a scheme which has been mooted by some of the medical societies in the south of Scotland, but which has not yet assumed a tangible form. The Association, without committing itself definitely to the proposal, agreed to appoint a committee to confer with the proposers of the new Association, and report.

The question of a code of ethics, which has been in one form or another before the Association for some two years, was then taken up; but the discussion did not result in any definite action being taken.

SUCCESSFUL REMOVAL OF THE LARYNX.

Our readers have not forgotten that Professor Billroth, of Vienna, performed this operation, and that the patient died several months afterwards. Professor Bottini, of Novara, (*Gaz. Med. di Torino*, No. 10, 1875) has just followed his example. The patient is a healthy young man, who, on account of dyspnœa, had already had laryngotomy and galvanic cauterisation of the larynx performed. The operation lasted ninety minutes, and left the patient much exhausted. He was, however, revived by injection of beef-tea and wine. It was found that the larynx was quite obstructed by a greyish-red tumour. In spite of an attack of erysipelas and a series of abscesses, the man gradually improved, regained the power of deglutition, and was able to cough, breathe, and sleep well. The wound has healed up, and the case, save future accidents, may be looked upon as successful.

SANITARY DIFFICULTIES AT LEEDS.

An influential deputation recently waited upon the Marquis of Salisbury, in order to point out the difficulties that would exist at Leeds in carrying out the provisions of the Rivers Pollution Bill, if this Bill, now before Parliament, became law. Leeds, as everyone knows, contains a number of dyeing and other factories, that require for their daily use about 50,000 tons of water. When this water has been utilised, and thus polluted, it is discharged into the river Aire, whence a large proportion of it had come. The Act above-mentioned will of course prevent any such discharge into the river, and so the manufacturers say, What shall we do with it? For if the refuse water be discharged into the sewers, the river will be deprived of its proper volume, and so injure those interested whose works are situated below the town of Leeds. It may be mentioned that the authorities are now endeavouring to purify their sewage by the A. B. C. process, which, though not remunerative, produces a sufficiently good effluent water to satisfy the terms of the Chancery injunction, under which the town is now prevented from discharging its sewage into the Aire. Practically speaking, the refuse water from all factories except tinplate and galvanising works and wire-drawing, can, according to the testimony of Dr. Frankland (given before the House of Lords in 1873), be treated at the outfall with the sewage, and in order to neutralise the objections stated above, it is proposed to pump the effluent water from the sewage works back to the town, which can be done at a smaller cost than that charged by the authorities for their own water-supply, the effluent water being quite fit for all manufacturing purposes. The products of the sewage are not likely to be valuable, for though Leeds has a population of 259,212 inhabitants, and 55,827 inhabited houses, it possesses no less than 13,500 middensteads of the old type, which, according to Mr. Netten Radcliffe, are perpetuated by the building laws of the corporation, some of these gulfs being so vast that an individual falling accidentally into them might readily lose his life. We quote this latter fact to indicate that neglect on this head intensifies the difficulty under which the corporation is likely to labour in dealing with the provisions of the forthcoming Act.

HYDATID CYST IN THE PONS VAROLII.

ABSOLUTELY sudden death from encephalic disease is most rare, but occurred in a case recorded by Dr. Fredet, of Royat. A hydatid cyst, occupying the upper portion of the pons Varolii on the right side, ruptured, and the sufferer, a young man, aged twenty-two, who was at the time walking along the road, fell to the right, and was found to be dead. Some spasm of muscles on the right side of the face and jerking of the head to the right were noticed just before he fell. Headache and neuralgia of the right fifth nerve had been complained of for some months. A few cases only are on record in which a similar sudden termination has occurred in cerebral hydatid disease. One was recorded by Blin in which a woman of twenty-three died suddenly in consequence of a hydatid cyst in the left lobe of the cerebellum; and in another case, given by Davaine, a man died suddenly in consequence of a similar cyst in the right posterior cerebral lobe. The seat of the disease in Dr. Ferdet's case—not far from the respiratory centre—renders the instantaneous death more easily understood than in the other cases.

MEASLES IN FIJI.

A CORRESPONDENT of *The Times*, writing from Levuka, the principal village in Fiji, gives an account of the importation of measles into the island, and graphically describes the terrible fatality caused by the disease. So far from the disorder having been communicated in the first instance by English seamen, it appears that the King and his party, when on the now memorable visit to Australia, were all attacked with measles of a mild type during their stay in Sydney, and were only convalescent when they returned home. The disease soon declared itself in a most malignant form, and carried off nearly all the Fijian chiefs. In spite of the unremitting efforts of the Government medical officer and of the small body of European colonists to arrest the progress of the epidemic, it ran rapidly through the whole island, necessitating the conversion of every public building into a hospital. One locality is said to have resembled a vast charnel house. Altogether it is said that 20,000 of the natives have died, and this computation is probably very near the mark. There is reason to hope that the disease has now exhausted itself. A medical account of the epidemic, which we have no doubt will be forthcoming in due time, cannot fail to be interesting and instructive. There are many points capable of being worked out—e.g., it has been stated that the disease declared itself in different parts of the island within a week of the arrival of the royal party. Now the usual incubative period of measles in this country is fourteen days—very rarely less than twelve, although inoculated measles has an incubative period of seven days. Its rapid extension is in accordance with the experience of outbreaks of measles at home. The material prosperity of Fiji—although it has received a temporary check—after so recent an emancipation from barbarism, justifies a belief that there is a bright future before the little colony.

SUMMER DIARRHŒA IN TOWNS.

NOTWITHSTANDING the moderate, not to say low, temperature which prevailed from 10th June until the end of the month, the last Weekly Return of the Registrar-General showed a marked increase in the fatality of diarrhœa in 18 of the largest English towns. During the week ending 26th June, 140 deaths were referred to this disease in the 18 towns, against 75 and 104 in the two preceding weeks. In the corresponding week of the three years 1872–3–4 the deaths from this cause in the 18 towns were 50, 59, and 123 respectively. The 140 deaths in the 25th week of this year included 77 in London, and 63 in the 17 provincial towns; the annual rate of mortality in the week from this cause, which averaged 1·1 per 1000 in the 18 towns, was 1·2 in London, whereas in Hull it was equal to 3·1 per 1000. The 77 fatal cases in London included 56 of infants under one year of age, 15 of children and young persons aged over one year and under 20, and 6 of persons aged more than 40 years. The rate of mortality from diarrhœa in the week under notice was considerably lower in South London than in other parts of the metropolis. In the "outer ring" only one death was referred to diarrhœa, whereas in East London, with about the same population, 18 fatal cases were returned. Summer diarrhœa among infants is almost exclusively an urban complaint.

ABDOMINAL CYSTIC FIBROMA.

AN unusual variety of abdominal tumour was recently removed by Mr. Spencer Wells, and forwarded to Virchow, who described it in the last number of his *Archiv*. It was situated behind the peritoneum, the exact attachment being unknown, but both ovaries and uterus were healthy. It contained a large cyst, the size of a head, filled with pus. The walls consisted of fibrous tissue, delicate and soft, dotted with spindle-shaped and stellate cells; while in the intermediate tissue, between the fibrous bundles, were large round degenerating cells. The structure of the vessels was curious. The walls of both capillaries and small veins presented, when acted on by acetic acid, a distinct cellular structure, clear large nuclei being scattered over the whole field enclosed in elongated areas. The tumour is classed by Virchow among the varieties of fibroma molluscum which occur in the sexual apparatus, and he compares the formation of a cyst, and its subsequent inflammation, to the changes in similar subcutaneous tumours.

LIERNUR'S SYSTEM OF DRAINAGE.

WE have received information that on the 3rd of May the Emperor of Russia signed a contract for the introduction of the Liernur system of drainage into St. Petersburg. It is first to be laid in one district containing 15,000 people, and then, if successful, to be extended to the whole town, which contains 600,000 inhabitants. The report of the Russian engineers has been very favourable, and they have estimated the cost of laying down the Liernur triple system at less than that required to put down ordinary sewers on the water-flushing principle. We have often spoken favourably of Captain Liernur's method of sewage removal, and are now glad to see it has a chance of being practically tried on a large scale. If successful it will solve the problem of sewage disposal most completely, for, on theoretical grounds, there is no doubt the principle is a right one. We think it a great pity the scheme has not been tried in England. The reports of the Dutch and Russian engineers have been eminently satisfactory, as is shown by the adoption of the system in Amsterdam, Leyden, and St. Petersburg; and we think if the sanitary authorities of these countries have consented to give the scheme a fair trial, we ought to be public-spirited enough to make an effort in the same direction. If a district were selected in some large town that is difficult to drain under the present system, and the Liernur method tried experimentally, the cost involved would not be much, whilst the practical results of the working would be speedily ascertained. At all events, Government ought to give us a full and complete report as to the success attending the working of the system in the foreign towns in which it is already carried out. We have no wish to force this or any scheme on sanitary authorities, but we think more attention ought to be paid to Captain Liernur's method than has hitherto been the case, since it has been stamped with the approval of foreign sanitary engineers.

THE WORCESTER INFIRMARY.

Dr. Inglis has very properly resigned his appointment as Honorary Physician to the Worcester Infirmary, in consequence of the Executive Committee having passed what he regards as a vote of censure on him for leaving his infirmary out-patients to be seen one day by the house-surgeon. The Committee says it was his duty to have got another member of the honorary staff to do the work. The Committee must have strange ideas as to the life of a physician, and what consideration is due to honorary officers, especially those of such standing as Dr. Inglis, and of his length of service. If the Committee adheres to the position he should adhere to his resignation. But we venture to believe that the body of governors will show that they have a greater sense of propriety, not to say gratitude, than the Executive Committee. The point in dispute is one of interest to the whole staff, and Dr. Inglis should not be left to fight alone.

DISCUSSION ON PUERPERAL FEVER.

We understand that the debate at the Obstetrical Society will be closed on Wednesday next, when the last meeting of the Society before the recess will take place. Professor Fordyce Barker, of New York, is in London, and will take part in the discussion. As Dr. Barker is known to hold views opposed to those expressed by most of the gentlemen who have already spoken, and as Mr. Spencer Wells will reply to the observations made upon his paper, the meeting promises to be both interesting and spirited.

Among the specimens to be exhibited at the beginning of the meeting is, we believe, one of singular interest by Dr. Newman, of Stamford, who hopes to be able to show the uterus of a woman on whom he successfully performed Cæsarean section nine years ago.

CEREBRAL PHYSIOLOGY.

M. Lepine recently communicated to the Société de Biologie some experiments on the effect of the faradisation of the convolutions on arterial tension. The observations were made on dogs which had been placed under the influence of curara. It was found that the stimulation, by a weak current, of the pre-frontal or of the post-frontal convolution produced a considerable increase of arterial tension. The phenomenon did not occur immediately, only after a "certain time." The increase of tension was accompanied by a sensible elevation of temperature in the paw on the opposite side. The effect on the heart varied according to the strength of the current. A weak current applied to these convolutions increased the rapidity of the heart's action; a strong current rendered it much slower. M. Lepine endeavoured to ascertain whether structural continuity of the nerve-fibres was necessary for the production of the effect, but in slicing off a portion of the cortex, the mechanical excitation of the nerve-fibres, in their division, produced the same effect on the arterial tension as electrical stimulation, and thus the experiment was prevented.

THE SOLDIERS' HUTS AT WOOLWICH.

It is announced that the huts on Woolwich Common, which had obtained such an unenviable notoriety in connexion with the late outbreak of diphtheria among the families of the married soldiers quartered there, are to be altogether swept away, and their site to be occupied by six blocks of model houses on the plan of the Cambridge cottages. The disease for which the families vacated the old cottages on the Common was a long time before it disappeared, the last case of diphtheria having, we believe, only been discharged from hospital towards the end of last month.

The Manchester and Salford Sanitary Association, in a report of its operations during the past year, complains that great difficulty was experienced in obtaining reliable statistics regarding the effect of noxious vapours on human life. Steps are being taken now, however, to secure the cooperation of medical officers of health in districts most subject to such vapours, and the Association hope soon to get important results of practical value to medical men and sanitarians. The law relating to smoke nuisances would appear to be extensively infringed in Manchester. We are sorry to find that this Association is suffering from want of funds. Its usefulness is unquestionable, and we therefore hope that the appeal which the Committee are compelled to make for support will be successful, and so enable it to enlarge its sphere of work.

The annual report of the Coppice, Nottingham, of which Dr. W. B. Tate is the Medical Superintendent, has just been issued. The Commissioners in Lunacy, on the occasion of their visit to the institution, were impressed with the great cleanliness, good order, and general air of comfort prevailing. Dr. Tate again urges the necessity of extending the usefulness of the charity by enlarging the building, the accommodation at present available being occasionally found quite insufficient. As his recommendation is supported by the Commissioners, we have no doubt that an additional wing will ere long be provided. At the Coppice lunatic patients are received who, not being paupers, are unable to pay the whole expense of their care and maintenance.

We are glad to learn that by command of Her Majesty the Queen a considerable quantity of cast-off linen suited for surgical purposes has been sent from Buckingham Palace for the use of the patients of the London Hospital. We hope a few of the other hospitals may participate in such benefits, and that the example shown by Her Majesty will be followed generally by heads of families. There would be no difficulty in supplying our hospitals with ample material of a sort available for the work of the surgeons and dressers, provided a scheme could be organised by a few influential ladies.

In London 1413 deaths were registered last week, including 2 from small-pox, 25 from measles, 62 from scarlet fever, 12 from diphtheria, 62 from whooping-cough, 27 from different forms of fever, and 77 from diarrhœa. Considering the low temperature prevailing during the period the mortality from diarrhœa seems to have been excessive. Different forms of violence caused 57 deaths.

THE Medical Officer of Health for Croydon, Dr. C. W. Philpot, as the result of his investigation into the outbreak of enteric fever in the district in March last, has obtained conclusive evidence to show that the epidemic was due to the pollution of the water in the mains, and also that this pollution was caused by an intermission of the water-supply. The disease was confined to an area supplied with water from the Croydon waterworks. We gather from Dr. Philpot's report that there is need of reform in the structural and sanitary arrangements of numerous houses in Croydon.

SMALL-POX has been prevalent in Darlington for some time past. At present there are about 35 cases of the disease in the town, the greater part of the patients being convalescent. Of these 20 had been treated in the Fever Hospital, to which fact may probably be ascribed the small mortality from the disease. The town authorities have been active in enforcing measures calculated to arrest the progress of the epidemic, and to confine it within its present quarters. It is stated that small-pox was brought to Darlington in January last by a pedlar who was journeying from town to town.

THE Dutch troops in Acheen, Sumatra, have been severely tried during the last three years or so. In addition to the perils from military operations against probably the most courageous of Asiatic peoples, they found great difficulty in securing sufficient provisions, and suffered from a want of good water. Cholera broke out among them, and caused a large mortality. Now, however, according to the latest reports, cholera has almost disappeared, the soldiers are in good health, and supplied with abundance of pure water obtained from artesian wells.

A DEPUTATION, composed of delegates from the South-East of London, Northumberland and Durham, and Lancashire and Cheshire Sanitary Associations, waited upon the Duke of Richmond on the 1st inst., to urge the insertion in the Public Health Bill of clauses enabling neighbouring authorities to take action in the case of noxious trades occurring outside their own districts. The Lord President promised to give the subject his earnest consideration.

THE fine model of a statue of the late Sir J. Y. Simpson, intended to be erected in Prince's-street Gardens, Edinburgh, was accidentally destroyed on the 26th ult. The model, which was the work of Mr. W. Brodie, was being shipped at Leith for London, where it was to be produced in bronze, when it unfortunately fell, and was shattered to pieces.

AN examination of candidates for appointments in the Indian Medical Service will be held in London on the 9th August next and following days. Copies of the regulations, together with information regarding pay and retiring allowance, may be obtained on application to the Military Department, India Office.

ACCORDING to the usual custom, the specimens added to the Museum of the Royal College of Surgeons during the past twelve months are now collected and exhibited in the theatre of the College, where they will remain until Thursday, the 8th of July.

THE great increase in the number of pauper lunatics in Surrey has caused the magistrates of the county to decide on the erection of a new asylum large enough to accommodate 1000 patients.

THE latest returns of contributions to the Hospital Sunday Fund give a total sum of £25,000. It is expected that at least one thousand pounds more will be received.

REPORTS OF THE VISITORS OF EXAMINATIONS IN 1874.

(*Concluded from vol. i., page* 898.)

The First Examination for the Degree of M.B. at Oxford.—The report of the Visitors in regard to this examination is a favourable one, the only point on which they comment being the advisability of introducing dissections. To this no objection can be raised beyond the difficulty of obtaining a supply of subjects. An excellent feature of this examination is that no candidate is allowed to present himself who has not passed all the examinations requisite for the B.A. degree.

The Examination for the Degree of M.B. University of Oxford.—This also met with approval on the part of the Visitors, who state that it was full, searching, and painstaking, the range of questions comprehensive, and the general scope of inquiry well directed, especially as regards the practical bearing of the questions in all the subjects.

The Examinations for the Degree of M.B. University of Cambridge.—The three examinations for this degree, the details of which are minutely given by the Visitors, show that a considerable amount of work is required in order that a candidate should be successful; and it is stated that the standard is well calculated to sustain the reputation of the degree, and to secure that those who possess it are fitted to promote the welfare of the community. It is very satisfactory to find that the impression produced on the minds of the two sets of Visitors who report on the examinations for the M.B. degree at our two chief Universities is so favourable, and that so little room is afforded for comment or fault-finding.

The First Professional Examination of the University of Durham.—On the occasion when this was visited only two candidates presented themselves; and the Visitors consider that it was difficult to arrive at a correct judgment of the value of the examination, especially as both the candidates failed to pass. The estimate of the value of the answers they consider was too high; and they recommend the appointment of two examiners in chemistry, which would enable a more definite and weighty opinion in regard to the merits of the candidate to be arrived at. The examiners are, in this University, the teachers; and there seems to be a plan, which cannot be regarded as advantageous, of allowing a candidate who has done well in several subjects to pass in these though he may have failed in another, and he may present himself for examination in the course of a few weeks in the subject on which he has been rejected. The Visitors refer this point to the consideration of the Council; but we imagine it can only meet with deprecation.

The University of Aberdeen.—On the whole this appears to be one of the best examinations in the three kingdoms. The arrangements of the examination are good, and the order of study excellent. One point strikes us as curious and impracticable elsewhere than in the far North. "The clinical examinations are held," it is said, "at the Royal Infirmary, and are extended over a period of *some weeks*, in order that recently admitted cases may be presented, to secure, as far as possible, that they have not previously been seen by the candidates." A feature of the examination which might occasionally be introduced into those of other examining bodies is, that an examination in practical pharmacy is held, when the competence of the candidates to prepare and dispense various medicinal compounds is tested. The Visitors strongly insist on the advisability of some of the examiners being chosen from without.

The First and Second Professional Examinations of the University of Edinburgh.—The University has, it appears, this year adopted the plan of selecting special examiners in the several subjects, eleven of whom had no connexion with the University. The comments of the visitors are entirely favourable. Students, it is remarked, are not admitted to the Second Professional Examination till after the completion of their third year of study; and as there is no elementary examination on anatomy their knowledge of the whole subject must be kept up till a late period of their career.

The Medical Examinations at the University of St. Andrews.—This University has the privilege of granting its degrees, not only to those who have passed through the curriculum of education and examination prescribed by the University, but also to ten registered practitioners annually above the age of forty, whose professional position and experience are such as in the estimation of the University to entitle them to that degree, and who, on examination, satisfy the medical examiners appointed by the University of their professional knowledge. The Visitors do not give a favourable report of the examinations in this University. A regulation is in force, enjoined by the Universities Commission, that every candidate should have spent two of the four years of his study at one of the British or Irish universities or colleges, and, as a result, only one or two candidates present themselves per annum. The examination fails, in the Visitors' opinion, to come up to the requirements of a modern pass examination. In regard to the granting the M.D. annually, after about an hour and a half's examination, the Visitors think the manner in which the privilege is exercised is unsatisfactory. The practitioners desiring it send in applications accompanied by testimonials, and ten are selected. If any fail, those next in rotation are selected. The Visitors do not think that the conferring of the highest degree in medicine, in consequence of the candidates having presented testimonials and passed such an examination as they witnessed, can be fraught with any real benefit to the profession or the public, or even to those who seek and obtain the degree. The stimulus is insufficient, they think, to induce the candidates to take pains in making preparation or to maintain that higher culture which such a degree should indicate. And this, they go on to say, is the more to be regretted because a very beneficial influence might be exerted by a judicious mode of exercising this privilege, and giving to practitioners who really merit the distinction an opportunity of obtaining the doctorate of medicine which they could in no other way reach, and of connecting themselves with an institution of much antiquity and interest. This end would probably be to some extent, at any rate, effected if, instead of sending for ten practitioners only to come up, and so limiting the candidates at the examination to the number of degrees to be conferred, a larger number were admitted, and a selection made upon well-defined grounds of professional distinction, and the possession of such superior knowledge as may be indicated by an examination of a higher order.

The Examination in Medicine and Midwifery for the Licences of the King and Queen's College of Physicians, Ireland.—The report is a favourable one. The examination is stated to have been long and painstaking; and the only adverse comments made are, that in the examination for the licence in medicine only a single pathological specimen was exhibited, no other provision being made for testing the knowledge of the candidate in pathology; and that in the examination for the diploma in midwifery, considering that it was solely for the purpose of testing competency in obstetrics, no attempt was made to determine if the candidates possessed any practical knowledge in midwifery, a pessary being the only instrument shown or about which questions were asked.

The Examinations of the Apothecaries' Hall, Dublin.—These examinations are somewhat severely handled by the Visitors, and evidently admit of improvement. The knowledge of the candidates on chemistry, botany, and pharmacy appears to have been well tested in the first examination, but the anatomical and physiological parts were inadequately examined upon. The oral part of the examination was limited to osteology, and no dissections were required; and in physiology the oral examination was limited to ten minutes. Only an hour was allowed for answering the written papers on anatomy and physiology. The second part, or final examination, was similarly imperfect; the clinical examination, in particular, being limited to the recognition of disease, without any further questions in regard to symptoms, prognosis, differential diagnosis, or treatment being asked.

Final Examination for M.B. in the University of Edinburgh.—The report on this examination is entirely satisfactory, and it seems indeed to be a very searching and efficient one, the only suggestion made being that in the clinical part one or two more cases might be given to each candidate to be investigated in the presence of the examiners.

The Previous Medical Examination of the School of Physic, Trinity College, Dublin.—The Visitors' report on this examination shows it to be a thoroughly good one, though no dissection was required. The chief point worthy of notice appears to be the system of marking. If the two examiners agree, the candidate passes or is rejected, as the case may be; but if they disagree, then the other members of the Board of Examiners are appealed to and settle the question. This is clearly hardly fair to the candidate.

DEATH DURING THE ADMINISTRATION OF ETHER.

We have received the following interesting "Report of a Case of Death, with Escape of Blood into the Trachea, during the Administration of Ether" from Mr. G. H. Bailey, anæsthetist to the Cancer Hospital and to the Dental Hospital of London, with notes by Dr. Benjamin W. Richardson, F.R.S.

On the 23rd June a man was brought into the operating theatre of the Cancer Hospital to have a portion of his tongue removed. There was nothing special in his appearance. He was thin and slightly pallid, but otherwise looked healthy. He was placed in the reclining posture on the table. His pulse was full and bounding; his respiration free. I first made him partially insensible with nitrous oxide, and then administered ether, (P.B.) sp. gr. 0·735, from a cone of lint covered with oil-silk, the plan I have adopted latterly, in preference to giving chloroform, for general anæsthesia. He struggled but slightly, and was soon under the influence of ether. The pulse was now full and regular; pupils contracted; respiration unoppressed. It was in all respects a typically good case. The screw-gag was placed in his mouth for commencement of operation, and the tongue transfixed with string. Mr. Irvine then cut away from the left side, and about two-thirds back, a good inch and a half of structure. One vessel bled freely, and there was a little welling up from another; but altogether the amount of blood lost was very small, taking the average of similar cases. I should think it was about five minutes from the commencement of the operation when the face assumed a specially dusky appearance. The pulse, however, was still remarkably good, but the respiration had become shallow, attended with a slight gurgling in the throat and a little effort to expel the blood. Cessation of respiration seemed imminent, so much so that I immediately removed the gag, pulled out the tongue, and carried on artificial respiration by Silvester's method. Breathing, however, soon ceased, although the pulse kept beating for, it seemed, some minutes. At the same time we used galvanism, and kept the head well down, but all to no purpose, although we persisted for fully half an hour.

My colleagues and myself felt we had here a rather interesting and, if a death from ether, an important case physiologically and practically, so that we determined to ask Dr. Richardson to assist us at the post-mortem. With his usual zeal he came, and the inquiry was made under his supervision.

T. B——, aged fifty-one, died at 5 p.m. June 23rd.

Autopsy, forty-eight hours after death.—From the right side of the mouth a small quantity of dark-coloured blood has flowed. Suffusion on the back extending to front of neck. Rigor mortis not strongly marked, but most in lower limbs. On opening the body, the blood escaping from the veins is fluid, dark, treacly, and yields bubbles of gas; the surface is studded with bright-shining particles of oily appearance. No odour of ether, or at least doubtful. Lungs very fully inflated, of a greyish colour. Good deal of fat round heart. Pericardium contains about a drachm of fluid. Right auricle, collapsed, contains a very small quantity of fluid, frothy blood. Not a drop of blood in right ventricle; walls of both very thin; valves healthy. About an ounce of fluid blood in the pulmonary artery. The left side of the heart has very little blood, perhaps about two fluid drachms; valves healthy. Endocardium extremely red, rather more so on the left side. Aorta contains a little dark blood, its lining membrane also intensely red. Brain-substance healthy, but grey matter very pale, indeed almost white. The pia mater is extremely congested, especially at base. The whole of the arterial circle of Willis and cerebral veins intensely full of dark blood. Membranes of medulla intensely injected; substance healthy. Ganglionic portions of brain and commissures perfectly healthy, and the ventricles free of fluid. Cerebellum, like cerebrum, healthy. Kidneys greatly congested; capsule in some parts adherent. Stomach contains small quantity of grumous fluid; no blood in œsophagus. On opening the trachea a clot of blood is found extending from the glottis into the trachea; it is about four inches long by a quarter of an inch in diameter. A little fluid blood, or dark-coloured serum, probably from two to three fluid drachms in quantity, is found below the clot in the trachea and bronchial passages. The mucous membrane is intensely red.

Such are the facts of the case. They are better left without any comment from me, especially as I am favoured with the following observations.

Note by Dr. Richardson.

The case recorded by Mr. Bailey is one of extreme interest. The mode of death seems to me, from all the facts I gathered from the different observers, to have been as follows. From the deep narcotism induced by the ether, the respiration for a moment became reduced in power, as is not unfrequent under this mode of general anæsthesia. During the artificial respiration a little blood escaped into the glottis and impeded the efforts of the operators in re-establishing natural respiration. They filled the lungs with air, but did not establish a return current; so the death became pronounced by asphyxia. The heart, as is common under such circumstances (when the lungs remain inflated), continued to beat until it collapsed from deficiency of arterialised blood.

I have no doubt the man would have recovered under the artificial respiration had the trachea been free of obstruction; and the practical lesson taught by the case is, that in future, whenever the respiration fails during an operation on the mouth and throat, the artificial respiration should be made with double-acting bellows from an opening in the trachea, with the head of the patient brought very low, so as to allow fluid to gravitate from the bronchial tract.

Physiologically, the case is of interest in that it has, unfortunately, enabled us to see, for the first time in the human subject, the precise conditions induced in the organism by ether administered to complete insensibility. The appearances are identical with those I have seen in the lower animals after death by ether. The blood fluid, the arterial blood dark, the cerebral arteries and veins charged with dark blood, the mucous membranes injected, and the pia mater of the brain, medulla, and cord intensely injected, but the cerebral mass itself white and bloodless. Long ago I classified ether with alcohol, amyl nitrite, and others of the same series, as an agent which by its action on the organic nervous supply of the minute circulation reduces the arterial tension, and produces narcotism by congestion of vessels and suspension of circulation through the cerebral mass. The case before us is a case in point. The whole external vascular mechanism of the cerebrum, cerebellum, and cord, was distended with blood; the whole of the internal nervous mechanism was bloodless. The facts have a further and important bearing on the suggestive researches and ingenious theories of Dr. Cappie upon the cause of the phenomenon of sleep. But the most interesting fact of all taught by the case is, that a perfectly bloodless condition of brain-substance may coexist with intense vascular congestion of the membranous vascular network, the same as coexists with that empty and contracted state of the vascular network which is induced by chloroform and the other narcotic agents of the chloride series. This is a new truth which must not be forgotten in future research.

NERVE-STRETCHING.

To the Editor of The Lancet.

Sir,—I have just been reading with much interest Mr. Callender's lecture on "Nerve-Stretching" in last week's Lancet, and his remarks on "the temporary numbing of the nerve-trunk so as to interrupt the chain of impressions" have brought to my mind a case where I was enabled to afford relief, which I think may be of some practical use. About three years ago I was in attendance upon a lady suffering from a very large fibroid tumour of the uterus. The pressure upon the sciatic nerve caused intense and I may say almost continuous pain down the thigh and leg, for the relief of which sedative applications were ineffectual. The patient being much emaciated, it occurred to me that I might numb the nerve by ether spray, and, having procured the necessary apparatus, I applied it for about two minutes along the course of the nerve in the thigh, and was agreeably surprised to find that, not only did it give instantaneous relief, but that for ten days there was no recurrence of the pain. I have since tried this treatment in cases of sciatica, and have recommended it to some practitioners, and in all the cases that I have heard of relief has been afforded.

There may not be anything original in this simple treatment, but as I have not seen it recommended in any work, I beg to submit it to you for publication should you think fit. I am, Sir, your obedient servant,

Richard Wolseley, M.D.,
Warley, 27th June, 1875. Surgeon-Major, A.M.D.

CATHETER STAFFS.

To the Editor of The Lancet.

Sir,—In The Lancet of June 19th, p. 876, Mr. Hulke states, "Mr. Teevan is under a misapprehension respecting Fergusson's catheter staff." This, he says, "was a great improvement upon the staff employed by the late Professor Syme, but it lacked a sliding catheter. Now this is just what it does not lack." I reply—1. In Mr. Henry Smith's description of Sir W. Fergusson's catheter staff, at p. 257 of his "Stricture of the Urethra," there is no mention whatsoever of a sliding catheter. 2. The catheter staff shown me by Mr. Henry Smith neither did nor could possess any sliding catheter. 3. From a report in The Lancet, vol. ii. 1854, p. 435, of a case of external urethrotomy performed by Sir W. Fergusson, it would appear that his instrument had no sliding catheter—"The silver catheter was now withdrawn and an elastic one of large size introduced." 4. The profession, I believe, knew of no staff fitted with a sliding catheter till Mr. Marshall described one in The Lancet for March 7th, 1857. The Lancet officially noticed Mr. Marshall's instrument, and called it a "New sliding staff for perineal section," vol. i. 1857, p. 186. 5. The works of Sir W. Fergusson and Messrs. Matthews make no mention of any staff with a sliding catheter, and they offer only Syme's staff for the performance of external urethrotomy. I remain, Sir, your obedient servant,

Portman-square, June 23rd. W. F. Teevan.

Obituary.

PROFESSOR OSWALD HOME BELL.

Many of our readers who are graduates of St. Andrews will hear with regret of the premature death of Dr. Oswald Home Bell, Professor of Medicine in that University, at the early age of thirty-nine. Dr. Bell was a son of Colonel Bell, of the Madras Artillery, and, after being educated at St. Andrews, commenced the study of medicine in the University of Edinburgh, where he graduated in the year 1857. After spending one or two years in the army, being attached to the Royal Artillery, he entered into practice in St. Andrews, in partnership with the late Dr. Adamson, who, like himself, was prematurely cut off in the midst of a most honourable and useful career. Dr. Bell soon established a leading position in St. Andrews, and was widely consulted in all parts of the country. In the year 1863, the Chair of Medicine was conferred on him, on the retirement of Dr. Day, and he fully justified the selection of the Government by his assiduous attention to his duties. As there is no medical school attached to the University of St. Andrews, Dr. Bell might easily, had he thought proper, have made his office a sinecure. But, instead of doing this, he at once commenced a course of lectures on popular medical and physiological subjects, suited to a non-professional audience, and soon gathered together large classes. In spite of the distractions of an extensive practice—for after his partner's death he had much more on his hands than he could well accomplish,—he never slackened in his professorial duties, or in keeping himself abreast of the most recent advances of science. Privately he was beloved and respected by all, and his early death will be deeply lamented. His last illness, which was of a somewhat obscure character, was long and protracted, and for many weeks it was known that his chances of recovery were almost hopeless.

Medical News.

Royal College of Surgeons of England. — The following gentlemen, having passed the required examinations, received the diploma in Dental Surgery at a recent meeting of the Board of Examiners:—

Frederick Canton, Great Marlborough-street; Edward J. M. Phillips, Liverpool; James L. Robinson, Cheltenham; Joseph I. F. Corbett, Cork; John M. Lipscombe, Alresford; George H. Harding, Stafford; Jack H. Whatford, Brighton; Walter H. Fox, Gloucester; George B. Pearman, Chelsea; Herbert H. Clifford-Eskell, Dublin; Augustus Cooke, Upper Norwood; Alfred A. Hart, Newington; Francis Youngman, Thornton-heath; Alfred Foss, Stockton; Theodore Abraham Bodecker, Newark; George Arthur Williams, Cavendish-place; Charles Edward White, Belgrave-road; William G. Morris, Winchester-street; John Carteighe, Stratford-place; Thomas Gaddes, Barkham-terrace; Thomas E. King, York; James Stocken, Euston-square; Robert Hall Woodhouse, Hanover-square; William C. S. Bennett, George-street; Alfred Allworth, Lyndhurst-road; James Williams, Walsall; Thomas Rowney, Hull.

Three other candidates were examined, but were not approved.

Apothecaries' Hall. — The following gentleman passed his examination in the Science and Practice of Medicine and received a certificate to practise on June 24th:—

Martin, John Michael Harding, St. Helen's, Lancashire.

The following gentlemen passed the Primary Professional Examination on the same day:—

Dobbie, Robert John Algernon, London Hospital.
Haines, William John, St. Bartholomew's Hospital.

Association of Sanitary Inspectors.—At the last quarterly meeting, held at Rothwell, of the Association of Sanitary Inspectors of the combined sanitary authorities in the counties of Northampton, Leicester, Rutland, and Bucks, under the presidency of Mr. Haviland, the medical officer of health for the combined area, the following resolution was adopted:—"That this Association, after very carefully considering the different systems of sewage disposal, is of opinion that it is desirable to represent to the delegates of the combined area the necessity of their determining on adopting some dry portable system, such as that of the Goux Company, under the entire superintendence of the inspector of nuisances, as the simplest system of disposing of village sewage."

Medical Appointments.

Beckingsale, D. L., M.D., C.M., has been appointed House-Surgeon to the Queen Charlotte Lying-in Hospital, vice Hart, resigned.

Birt, Mr. L. F. H., has been appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital, King William-street, Strand, vice Alford, whose term of office has expired.

Butler, J., M.R.C.S.E., has been appointed Medical Officer of Health for the Long Eaton Urban Sanitary District: £25 per annum; acreage 2000; population 5000.

Collins, W. C. G., M.B., C.M., M.R.C.S.E., has been appointed Resident Medical Officer to the Swansea Hospital, vice Lloyd, resigned.

Craven, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Parish of Reay, N.B., vice W. Bruce, M.D., deceased.

Cross, F. R., M.R.C.S.E., has been appointed Resident Medical Officer to the St. Pancras and Northern Dispensary, vice Homan, resigned.

Dempsey, W. C., M.R.C.S.E., has been appointed Medical Officer to the Amalgamated Friendly Societies' Medical Association, Barrow-in-Furness.

Eaton, J., M.D., C.M., has been appointed Medical Officer of Health for the Cleator Moor Urban Sanitary District.

Edwards, R., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Assistant Medical Officer to the Toxteth-park Township Workhouse, vice Ransford, resigned.

Fairbank, F. R., M.D., M.R.C.P.Ed., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Doncaster Union Workhouse, vice Kiernan, resigned.

Gallimore, T., L.R.C.P.Ed., has been appointed House-Surgeon to the Metropolitan Free Hospital, Devonshire-square, vice Wattie, resigned, and appointed Assistant Medical Officer to the Central London Sick Asylum District Asylum, Cleveland-street.

George, Mr. W. H., has been appointed Assistant Medical Officer, Chorlton Union Workhouse, vice Davy, whose appointment has expired.

Hair, J., M.D., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for the No. 8 District of the Lexden and Winstree Union, vice Palmer, resigned.

Harvey, T., M.R.C.S.E., has been appointed Medical Officer for the West District of the Poplar Union, vice Fausset, resigned.

Hayman, H., F.R.C.S.E., has been reappointed a Medical Officer of Health for the Wycombe Rural Sanitary District.

Isaac, J. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Broadmoor Criminal Lunatic Asylum, vice Davies, appointed Senior Assistant Medical Officer to the Kent Lunatic Asylum, Barming-heath.

Jay, F. Fitz Herbert, L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Woodbury District of the St. Thomas Union, Exeter, vice Barton, resigned.

Jolly, A., L.R.C.S.I., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Drum Dispensary District of the Cootehill Union, Co. Cavan, vice Clarke, resigned.

Jones, D. R., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer to the Llandrillo Friendly Society.

Manders, H., L.S.A.L., has been appointed Assistant House-Surgeon and Dispenser to the Kent and Canterbury Hospital, vice Sampson, resigned.

Merson, J., L.D.S. R.C.S.E., has been appointed Dental House-Surgeon to the Dental Hospital of London, vice Hepburn, resigned.

Miller, Mr. F. D., has been appointed Registrar and Chloroformist to the Evelina Hospital, Southwark-bridge-road, vice Sangster, resigned.

Morrill, A. H., M.R.C.S.E., has been appointed Resident Medical Officer to the Notting-hill Provident Dispensary and Maternity, Portland-road, vice Procter.

Smith, R. B., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Burbage District of the Hinckley Union, Leicestershire, vice Ludlow, whose appointment has expired.

Tibbits, E. T., M.D., has been appointed a Physician to the Infirmary and Dispensary, Bradford, Yorkshire, vice Nicol, deceased.

Turner, E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Kingswinford No. 1 District of the Stourbridge Union, vice Freer, resigned.

Warren, T., M.R.C.S.E., has been reappointed a Medical Officer of Health for the Wycombe Rural Sanitary District.

Yeo, G. F., M.D., C.M., has been appointed Professor of Physiology at King's College, London, vice Rutherford, appointed Professor of the Institutes of Medicine in the University of Edinburgh.

Births, Marriages, and Deaths.

BIRTHS.

Berry.—On the 22nd ult., at Wimbledon-hill, the wife of O. W. Berry M.R.C.S.E., of a son.

Cooper.—On the 30th ult., at Leytonstone, the wife of Frank W. Cooper, Surgeon, of a daughter.

Gayton.—On the 28th ult., at the Homerton Small-pox Hospital, the wife of Wm. Gayton, L.R.C.P., Medical Superintendent, of a daughter.

Kingsford.—On the 27th ult., at Upper Clapton, the wife of C. D. Kingsford, M.D., of a daughter.

Parsons.—On the 26th ult., at Sunnyside, Wimbledon, the wife of T. E. Parsons, M.R.C.S.E., of a daughter.

Philpots.—On the 22nd ult., at Moorecroft, Parkstone, the wife of John R. Philpots, L.R.C.P.Ed., of a son.

MARRIAGES.

Horton—Elliott.—On the 29th of May, at St. George's Cathedral, Freetown, Sierra Leone, James Africanus Beale Horton, M.D., Surgeon-Major Army Medical Department, to Selina Beatrice, third daughter of John Bucknor Elliott, Esq., Civil Commandant of the Western District of Sierra Leone.

Paul—Jennings.—On the 29th ult., at St. Mary's, Bootle, Ernest Watson Paul, L.K.Q.C.P.I., M.R.C.S.E., L.M., of The Green, Calne, Wiltshire, Medical Officer of Health for the Town, to Kathleen, second daughter of J. W. Jennings, Esq., of Bootle, Lancashire, and cousin of Lord Vyvyan.

DEATHS.

Brennan.—On the 21st ult., at Brixton-road, Surrey, George Brennan, M.R.C.S.E., in his 46th year.

Collins.—On the 22nd ult., at Edgeware-road, Judah Collins, L.S.A.L., aged 57.

Davies.—On the 23rd ult., at Bangor, Robt. Davies, L.R.C.P.Ed., aged 30.

Hancock.—On the 2nd ult., at East Budleigh, E. Hancock, M.R.C.S.E., aged 56.

Prankerd.—On the 20th ult., at Holland-road, Kensington, Emma, the beloved wife of Orlando Reeves Prankerd, M.D., aged 31.

Wright.—On the 25th ult., at Coonoor, Madras, Wm. Evatt Wright, M.R.C.S.E., Staff Surgeon, aged 30.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Mr. Morgan: The Skull and Brain.
Watts's Dictionary of Chemistry.
Ganot's Popular Natural Philosophy.
Dr. Taylor on Poisons.
Dr. Semple: Diseases of the Heart.
Mr. Ormsby: Deformities of the Human Body.
Mr. Griffiths: Lessons on Prescriptions and Prescribing.
Mr. Tegg: Proverbs from far and near.
Mr. Keane: Handbook of the English Language.
Mr. Freshfield: Italian Alps.
Mr. Watts: Snidland, or Iceland.
Dr. Pavy: A Treatise on Food and Dietetics.
Mr. Thomas: Fractures of the Lower Jaw.
White's Ovid's Fasti.
Mr. Amos: The English Constitution.
Catherine M. Buckton: Health in the House.

Notes, Short Comments, and Answers to Correspondents.

Small-pox in Bristol.

Bristol has the reputation of having a sanitary organisation somewhat in advance of that which prevails in many other of our large towns, and this reputation would appear to be not undeserved, if its comparative immunity from epidemics of zymotic disease may be urged in its support. No town in the present day can, however, surround itself with a sanitary cordon, and so prevent the introduction of infectious diseases from without, even if perfection of sanitary condition could prevent their spontaneous generation within. Small-pox has in recent years been frequently introduced into Bristol; but the city has hitherto escaped an epidemic of the disease. During the last few weeks, however, small-pox has there shown an unusual prevalence, and since the beginning of April 26 deaths have been referred to this disease, against 5 in the first three months of the year, and corresponding with the number during the whole year 1874. When the disease was first found to be increasingly prevalent a few weeks since, the guardians, at the urgent request of the medical officer of health, appointed two additional vaccination officers to make a house-to-house visitation in that part of the city in which small-pox was prevalent, to ascertain the number of unvaccinated children. These officers reported at the end of the first week the discovery of 145 unvaccinated cases, many of which were of children under the age of six months, but in 63 of which notices of legal proceedings were served. It is matter for regret that this neglect of vaccination so frequently remains undiscovered until a spark in the shape of a case of small-pox causes an outbreak of the disease. The Vaccination Act in England is not efficiently worked, and hence we are continually subject to local epidemics of small-pox. If the responsibility for the carrying out of the Act could be shifted from the guardians to the different sanitary authorities, the influence of medical officers of health could more easily be brought to bear upon the present widespread neglect of vaccination.

Dr. Gairdner, (Glasgow.)—The communication arrived too late for insertion this week; but it shall be published in our next impression.

The Apothecaries' Society.

To the Editor of The Lancet.

Sir,—Doubtless there are some senior members of the Apothecaries' Society who would for obvious reasons suppress the good old custom of the annual herbarising dinner, which gives the opportunity of spending a few hours of social companionship—opportunities which in our profession are so rare, and which for good fellowship can scarcely be dispensed with.

Now, Sir, although I am one of the humble second-class members, I would strenuously support this so-called "intensely stupid herbarising dinner," and would very willingly contribute my portion when old Time shall place me in that position, and if necessary make due and careful provision for that so-called "great hardship," which most certainly will not creep upon me without due warning.

There is another incident to which I would venture to call attention. We are branded and scoffed at with being a trading body of professional men. I deeply regret this fact, and would wish to see the business removed from the Hall. I would suggest that the Company as a trading one retire. It has been many years found fault with by examining boards, and the time has undoubtedly come for its own dignity as a qualifying board to cease from selling drugs. If this cannot be accomplished, and we are still to keep "shop," pray let there be some young blood enter the circulation, which would be the means of making the great hardship complained of by "A Member" less felt, by increasing the dividends of many worthy practitioners, out of which profits the expenses of this dinner might come.

I am, Sir, yours obediently,
London, June 28th, 1875. Another Member.

The Potato Beetle.

Mr. W. V. Andrews, of Brooklyn, U.S., in a communication to Hardwicke's *Science Gossip*, denies that the *Doryophora* 10-*lineata*, in any stage of its existence, ever attacks the tubers of the potato plant. The eggs of the insect, he says, are laid on the leaves or stalks of the plant in early summer, the larvæ feed on the leaves exclusively, and the pupa is formed in the soil. "I see no reasonable ground of apprehension," concludes the writer, "that this beetle will ever find its way to Europe at all; but if it does, it will not be in a barrel of potatoes."

Aquarium.—We really cannot say where it may be obtained.

Californian "Oak Rash."

To the Editor of The Lancet.

Sir,—I should feel much obliged if you or any of your readers could give me any information on the following subject.

In California the people are commonly affected with a rash, which they call poison oak. In appearance it is like urticaria. Some who are affected by it get over it in about a week, and in others it lies dormant, breaking out occasionally. It commonly affects parts in which the skin is thin, as flexures of joints, inside of the thighs, face, &c., and on those parts exposed to the air. It looks much like erysipelas. Desquamation invariably follows. The itching and tingling are very severe, and there are many remedies to allay it—in one case apparently doing good, and in another having no effect. It is a popular notion that a small dwarf oak is the cause of it, which grows very plentifully in California, especially in the picnic grounds, and people become affected generally having been out to picnics and in the woods. I should be much obliged for any information on the subject. May it not be a vegetable parasite? I remain, Sir, yours truly,
London, June 22nd, 1875. F. E. T.

Chloroform in Parturition; its Effects on the Fœtus.

Dr. Sweifel, of Strasburg, submitted the placenta to analysis by distillation in a case where chloroform had been inhaled, and obtained chloroform, recognised by several accurate tests. He has also found that the urine of new-born children whose mothers had used chloroform reduces Fehling's solution, and has, moreover, observed that the expired air of such children has for several hours a well-marked odour of chloroform. Dr. Sweifel, arguing from these facts, concludes that the chloroform inhaled by the mother passes into the circulation of the fœtus.

Dr. Andrews.—The word "atrocious" used by Dr. Hardwicke in commenting on the conduct of members of the profession who have the misfortune to be concerned in inquests has now lost the charm of novelty.

The paper of *Dr. J. C. Ogilvie Will* (Aberdeen) shall appear in an early number.

Croup and Diphtheria.

To the Editor of The Lancet.

Sir,—The letters which have recently appeared in The Lancet on this most important subject cannot but prove highly interesting to the profession generally, and will, I trust, awaken a spirit of true and earnest inquiry.

I quite agree with Dr. Burney Yeo that those who are engaged in large general practice in the provinces have the best opportunities of acquiring useful practical information on the question at issue; and although the discussion has hitherto to a great extent been confined to "potent, grave, and reverend seniors" in the profession, yet I hope you will allow me space for a few remarks, as one who feels a deep interest in the subject under discussion, and who has had considerable experience in the study and treatment of croup and diphtheria.

Notwithstanding the dictum that "Fools rush in where angels fear to tread," and the probability that I shall be deemed impertinent in engaging in such an important controversy, yet, while the ant-hill represents the labours of the ants in the aggregate, we must not forget that each ant has had his share in the work, and so I think the modest but earnest endeavours of the humblest worker and observer can do something in adding to the accumulation of facts, and thus enable him to become a contributor to the progress of medical science, and to the realisation of its greatest aim—the welfare of humanity.

I really cannot imagine how anyone who has seen many cases of croup and diphtheria can look upon them as in any way identical, or even similar as diseases, and to my mind there is as great a difference between them as between an ordinary case of tonsillitis and one of scarlet fever. Our nomenclature is much at fault in denominating the varieties of so-called croup. But let us take a case of tracheitis or true croup, and contrast it with one of diphtheria. Tracheitis is, I contend, nothing but an acute, local inflammation of the mucous membrane of the windpipe, the tendency of which is to spread downwards, and characterised by the exudation of false membranes on the inflamed mucous surfaces. The incipient symptoms resemble those of simple cold, and, of course, become aggravated as the inflammatory process goes on, until the characteristic false membranes are formed, and the case of croup is established. It is needless to detail all the symptoms; but it must be borne in mind that the local inflammation may in some cases spread downwards from the glottis or larynx. Now, in this affection, which almost invariably occurs in children, we have nothing but the local sthenic inflammation, and the effects of this inflammation on the respiratory system &c.; no evidence of any *materies morbi;* no elimination of albumen in the voided urine; no very characteristic sequelæ, and nothing particular about the convalescence. The affection has been acute and local from beginning to end, and perfectly non-infectious.

On the other hand, diphtheria, whether it comes on in the child or adult, has its outset characterised by gradually increasing prostration and debility, and manifests indubitable evidences of toxæmia from the first. Then diffusive inflammation of the fauces, œsophagus, and respiratory tract usually sets in; the mucous membrane becomes covered with ash-coloured specks; lymph is exuded; false membranes formed on the tonsils and over the adjacent mucous membrane; and throughout the career of the attack the principal symptom is prostration—the prostration of a specific blood-poison. In almost every case we find albumen in the urine from the first, and the disappearance of this is, I believe, the best indication we can have of ultimate recovery. In croup, when resolution has taken place the attack is virtually over, but not so with diphtheria; too often the worst is to follow, and we may have deafness, blindness, loss of voice from paralysis of the soft palate, still worse, paraplegia, and an entire train of lesser evils. I have seen cases die from pure exhaustion long after all throat symptoms had abated, and I have seen fine young fellows lying as helpless as children from progressive paralysis very soon after an attack of diphtheria.

I quite agree with my esteemed friend, Dr. Carr, when he maintains that diphtheria is endemic and non-infectious; and I believe defective hygienic conditions, damp situations, badly-drained houses, and poor circumstances have much to do with its propagation. Brettonneau says that those who attend patients *cannot* contract diphtheria unless by actual contact, as of the diphtheritic secretion with an abraded mucous membrane, or with a part of the skin denuded of epidermis. As an evidence of its non-infectiousness (one of many I might adduce), I may first mention that I attended a family with diphtheria some months ago. This family lived some miles in the country, in a very isolated district, and occupied one of two cottages which were built together, and situated in a field. Although a father, mother, and five little children lived next door, not one of them ailed in the least; but three in the next house had diphtheria very severely. The youngest child died first, then the mother, and the son recovered after an attack of dysphagia, paraplegia, &c., which left him helpless for weeks.

As to the endemic character of diphtheria, I remember an old tumbledown row of houses from which I thought I was never going to eradicate it; but I found that all those who went away and remained got better, whilst some who came back became affected with diphtheria on their return.

I might say much on the mode of treatment &c. I have found most successful; but have trespassed too far on your valuable space already, and will reserve what I wish to say for another letter. Meanwhile, let me add, by way of conclusion, that I believe diphtheria to be endemic and non-infectious, and I maintain that diphtheria and croup are about as dissimilar as two diseases can be. I am, Sir, yours &c.,

R. A. Douglas Lithgow, L.R.C.P. Ed., &c.
North Brink, Wisbeach, June, 1875.

Boulimia followed by Polysarcia.

M. Lubelski, of Warsaw, has sent to the Academy of Medicine of Paris the description of a case of this kind. The subject is a woman, aged thirty-six, who, after two months' marriage, had nervous attacks, which were supposed to be owing to pregnancy, as she had not menstruated for some time. A craving appetite now supervened, and increased to such an extent that she ate from 14 to 16 lb. of meat per diem. No albuminuria nor diabetes. The patient now grew enormously stout, weighed about 18 stone, and could no longer walk. Around the waist, on a level with the umbilicus, she measured 44 inches. Various plans of treatment have been tried to no avail, and it was noted that the woman presented an abnormal tolerance of toxic substances. M. Lubelski thinks that the affection is of the neurotic kind, but refrains from offering a decided opinion. Messrs. Béclard, Personne, and Vulpian were appointed by the Academy to report upon the case.

Chloralum Lotion in Leucorrhœa.

To the Editor of The Lancet.

Sir,—It is with much pleasure that I can add my testimony to the use of chloralum as an injection in cases of leucorrhœa. For several years past I have used the remedy very largely in my practice, and, upon the whole, consider it one of the most useful compounds introduced to the profession. In that dreadful disease, cancer uteri, I have obtained good results in relieving pain and removing the horrid smell due to the disease; the strength of the injection employed being from one to two ounces of chloralum to one pint of water. In gonorrhœa in the male and female its action is most satisfactory, the male requiring about three drachms of chloralum solution to eight ounces of water; also fetor of the breath (cancrum oris) and spongy gums, when used as a gargle in the proportion of one to ten, the remedy is most beneficial. In the chronic diarrhœa and sweats of advanced phthisis I have given the remedy internally in half-drachm doses diluted with water, with a fair amount of success. The only drug I sometimes combine with chloralum in the form of injection or gargle is a safe quantity of extract of opium, previously dissolved in warm water.

With regard to chloralum wool, I use it constantly in cases of offensive discharges from the ear, to the comfort of the patient and those around him.

I am, Sir, yours truly,
Sunderland, June 29th, 1875. C. F. Nursey, L.R.C.P. Ed., &c.

A Licentiate.—The licentiates are invited to the *soirées* at the College, but not all of them at each *soirée.* We understand that the licentiates are so many that it is impracticable, on account of actual space alone, to issue invitations to more than a certain number to any given gathering, and the custom has been to invite them in different sections at different times.

Rumsey Testimonial Fund.

In addition to the amount already acknowledged (£573 6*s.* 6*d.*), the following subscriptions have been received:—

J. Heywood, Esq.	£5	5	0
W. Rendle, Esq., F.R.C.S. .	2	2	0
J. W. Tripe, M.D.	1	1	0
S. W. D. Williams, M.D. ...	1	1	0
John Beddoe, M.D., Clifton	1	1	0
E. L. Fox, M.D., „ ...	1	1	0
J. G. Swayne, M.D., „ ...	1	1	0
W. Martin, Esq., F.R.C.S. .	1	0	0
A. J. Beresford Hope, Esq., M.P.	10	0	0
G. Elder, Esq., M.B., C.M. Nottingham	2	2	0
G. Godwin, Esq., F.R.S. ...	3	3	0
Rev. F. T. Bayly, B.A. ...	5	0	0
Leonard Armstrong, Esq., Newton Abbott	3	3	0
J. B. Sanderson, M.D., F.R.S.	5	5	0
C. B. Skinner, Esq., Ipswich	10	10	0
H. Jephson, M.D., J.P., Leamington	20	0	0
James Wyatt, Esq.	1	1	0
W. Cadge, Esq., F.R.C.S., Norwich	£2	2	0
W. Fergus, M.D., Marlborough	2	2	0
Capt. R. P. Beamish	5	0	0
M. W. Taylor, M.D., Penrith	2	0	0
H. Bullock, Esq....	5	0	0
W. Beamish, M.D., Cork ...	2	0	0
H. Camps, Esq.	5	0	0
Prescott G. Hewett, Esq., F.R.C.S.	10	10	0
E. Ballard, M.D....	3	3	0
W. J. Harris, Esq., Worthing	2	2	0
R. B. Grantham, Esq., M. Inst. C.E.	2	2	0
Peter Eade, M.D., Norwich	1	1	0
West Sussex District, South-Eastern Branch, British Medical Association ...	2	0	0

Subscriptions may be forwarded to Dr. Buchanan, New Government Offices, Whitehall; to the Honorary Secretary; or to Messrs. Robarts, Lubbock, and Co., Bankers, 15, Lombard-street, E.C. Cheques should be made payable to the Rumsey Testimonial Fund or bearer, and crossed "Robarts, Lubbock, and Co." Post-office orders should be drawn on the Curzon-street Post-office, and forwarded to the Honorary Secretary, W. H. Corfield, M.A., M.D., 10, Bolton-row, Mayfair, W.

Staff Surgeon Mulvaney's interesting communication shall receive early attention.

Bloodless Surgery.

To the Editor of The Lancet.

Sir,—The bloodless amputation of the extremities may be performed, without having recourse to Esmarch's method, by a plan I have successfully adopted for more than eighteen years. Apply the tourniquet loose in the usual situation, elevate the whole limb so that every part of it may be above the level of the heart, and keep it elevated for about five minutes. The limb becomes almost bloodless, and if, while the limb is still raised, the tourniquet be well tightened, it will be found that when the amputation is performed not an ounce of blood will be lost.

In your volume for 1856 will be found an account of the amputation of both legs on the same day, performed by me at the Purton Workhouse, in which this method was first adopted, and with entire success. The man recovered rapidly, and was about in five weeks after the operation. Since then I have always adopted the same plan when the saving of blood was an object. In cases of amputation after injury in robust subjects, when there has been no previous hæmorrhage, I do not think the loss of blood actually in the limb any disadvantage.

I am, Sir, your obedient servant,
R. H. Bakewell, M.D., M.R.C.S.
Dunedin, New Zealand, April 12th, 1875.

Zymotic Disease in Keighley.

The *Keighley News* reports that "on account of the highly infected state of the town from small-pox and fever," the Clerk of the Peace "has excused the attendance of all the Keighley jurors who had been summoned to appear at the Bradford Sessions." Although the fatal epidemic of small-pox appears to be declining, the registrar's return for the week ending 24th June showed that of 22 deaths in the town from all causes, 4 resulted from scarlet fever, 2 from small-pox, 2 from whooping-cough, and 1 from enteric fever. No less than 41 per cent. of the deaths in the week were referred to four of the principal zymotic diseases. There appears, therefore, to be some ground for describing the state of the town as "highly infected."

Medical Preliminary Examination.

To the Editor of The Lancet.

Sir,—I should be very much obliged to you if you will allow me, through the medium of your columns, to offer (with all due respect to the honourable examiners of the College of Preceptors) a suggestion which, if carried into effect, appears to me likely to prove of the utmost importance to intending candidates. What I suggest is that a plan might be adopted in having a third examination of the College of Surgeons in the course of a year. It might be held with great benefit early in September, in which case the unsuccessful candidate at June would in all probability meet with success in September, and thus obtain his admission to one or other of the London hospitals in October. It has often occurred to me with what advantage and pleasure this new plan would be received (were it adopted) by many such candidates.

Hoping my suggestion on such an all-important subject may be deservedly brought into notice, I remain, Sir, your obedient servant,
Croydon, June 22nd, 1875. An Anxious Promoter.

West Coast.—It is always a difficult matter to give advice on such a subject. What are our correspondent's own feelings in the matter? If he likes a roving life, and has no intention of marrying, the service offers many attractions and comforts. Although it cannot be contended that the station named is a healthy one, it is certain that it has been much maligned. On the other hand, the material advantages possessed are not often relinquished for such an alternative. There are many more eligible localities open to our correspondent (with his means) than the place he now writes from.

Section Cutters.

To the Editor of The Lancet.

Sir,—A very serious objection to Dr. Fleming's machine will at once occur to anyone who has done much work with the freezing method, in that the machine must require constant attention until the tissue is frozen and the sections are cut. In a University laboratory this is all very well; but for workers who are at the same time subject to the exigencies of practice the machine will be a constant source of disappointment. In the last number of "Humphry and Turner's Journal" I describe a new section-cutter, which obviates this objection. When the tissue has once been frozen, it will keep so for at least twelve hours, and for a week if the machine be placed in a Norwegian chamber. Having the section-cutter screwed to the table has not been found by me to be a disadvantage; but, on the contrary, a very great advantage, as it leaves both hands free—a matter of the greatest importance in cutting fœtal sections, where the tissues are not continuous.

Yours &c.,
Birmingham, June, 1875. Lawson Tait.

R. S. V. P.—Aloes is generally thought or said to be contra-indicated in cases of piles; but there is nothing absolutely to prevent its use in the hands of a judicious practitioner. According to Stillé, there is a form of piles which aloes is said to cure—one connected with a relaxed state of system, and of the rectum in particular. Christison, too, says that associated with hyoscyamus it may be given even to patients with hæmorrhoids.

Mr. Lindsay and the Coroner's Court.

We must decline to insert any more letters from Dr. Hardwicke's deputy.

Laryngeal Phthisis.

To the Editor of The Lancet.

Sir,—Two sufferers under my care have derived such marked relief from belladonna that, for the sake of the poor patient about whom "General Paresis" writes, I trouble you with a line. The dose of this palliative has been ten or twelve drops of a strong tincture prepared from the fresh plant, taken on a piece of sugar, and allowed to dissolve in the mouth, say three, four, or five times in twenty-four hours. The ordinary tincture may perhaps prove effectual. If it produces the characteristic dry throat of belladonna, the dose may be diminished. Hyoscyamus and other medicines of the narcotic class have in my experience had none of the effect of belladonna; yet, alas! the patient ultimately ceases to find relief from it also.

Yours faithfully,
June 25th, 1875. W. Wilberforce Smith, M.D.

Demarquay.

In consequence of the pressure on our space this week, we are compelled to postpone the publication of an obituary notice of the late M. Demarquay.

Mr. T. Finlaison.—We see nothing unprofessional in the letter.

German Medical Literature.

To the Editor of The Lancet.

Sir,—As I am aware that many of your readers are German scholars, I desire, through the medium of your columns, to endeavour to obtain some information. I am engaged in some researches which necessitate reference to German medical and scientific works, and I am constantly arrested by words not to be found in any dictionaries that I am acquainted with. In order to consult German medical works, is it absolutely necessary first to make for oneself a dictionary of all terms used in anatomy, physiology, and medicine, or are there any works published which would save the student this task? Hoping this may catch the eye of some German scholar,

I remain, Sir, yours &c.,
June, 1875. Fatherland.

Waking the Dead.

The registrar of Keady district, Armagh Union, illustrates the pernicious effects of that barbarous custom, "waking the dead," by the following narrative:—The first fatal case from influenza occurred in a man on the 9th March. His remains were kept for two nights in a small room, greatly crowded by his friends and neighbours. Decomposition of the body set in early, the fetor from which produced a sickening and depressing effect on those present, and it became so overpowering at his burial that the clergyman could scarcely finish the reading of the service. The consequence has been that a large number of those who attended his wake have suffered from blood-poisoning with disease of the lungs; his wife died of it on May 27th, while two of his children, his brother-in-law, and sister-in-law, and many others are dangerously ill of the same disease. A better example of the evils of "waking" could scarcely be produced.

Mr. Holderness is thanked for his communication.

The Primary Examination for the Fellowship of the College of Surgeons.

To the Editor of The Lancet.

Sir,—I have been asked by several medical friends regarding the opinion I had formed of the examination recently held for the F.R.C.S.; and having had experience as an examiner in Surgery and Surgical Anatomy on behalf of the Calcutta University, and, after an absence of twenty years from this country, passed the late first and second examination for the Fellowship, I should, doubtless, be able to form a tolerably correct view as to the matter, particularly to that part of it referred to by your correspondent, "W.," of the 5th inst.

In the first place, I would beg to remark that I believe I express the opinion of all the candidates who went up for these examinations when I say that nothing could have exceeded the consideration and kindness shown by the examiners towards the candidates, and, so far as I could ascertain, the questions they put to us were, as a general rule, clear and to the point. There could be no mistaking their meaning.

I cannot agree with "W." regarding the written questions in Physiology. It is true they were unlike those usually given on the subject; but this is surely rather a merit than otherwise on the part of an examiner so long as the questions admit of a definite answer. My experience of the examination for honours in the Calcutta University leads me to believe that it is desirable in high class examinations not to give more than three questions in Physiology and the same number in Anatomy. I should, in fact, be inclined just to reverse the conclusion arrived at by "W." on this point, and think that the *lucky* man has a better chance of getting through if asked half a dozen questions than if set down to answer only two or three. It seems to me, however, very desirable that the whole of one morning, and in fact as much of the day as the candidate can reasonably require, should be allowed him for his written examination in Anatomy and Physiology, and that these papers should hardly be given on the same day, and still less in one afternoon. And this leads me to what I conceive to be the defect in the existing system of examination. There is not enough time given to it; for anyone who has had experience in these matters must feel that men differ considerably as regards their temperaments and powers of answering questions, so that it seems hardly fair to handicap them all equally as to the time in which they are expected to satisfy an examiner as to the amount of knowledge they possess. One man goes up full of confidence to an examiner; another is nervous, falters at his first question, and feels he has only a few minutes to recover his position; before he has done so the bell rings, and, with the sense of failure hanging over him, he finds himself before another set of examiners. And thus it comes to pass that sometimes the "best students in Anatomy and Physiology are referred." Nevertheless, the issue of the examination is often a most serious matter, not only to the individuals concerned, but, over and above this, the system employed in examining will directly control for good or for evil the system employed in learning and in teaching—in fact, will influence to a great extent the well-being of the profession.

The question as to improving the existing state of things seems to me to be a very simple one; for there can be no difference of opinion regarding the truth of the remark made by "W.," that "the examiners should exercise the option of examining a man until they have satisfied themselves of his possessing sufficient knowledge or otherwise." But this process necessarily often requires time, and it seems hardly possible that it can pay the examiners, as at present constituted, to devote more of their time than they now do to these examinations. It probably remains, therefore, for the candidates going up for the F.R.C.S. to pay higher fees if they would retain the present form of examiners, or else the Council of the College of Surgeons must appoint men as examiners who can devote all the necessary time to the subject; for I cannot but think that the existing system requires reform in this direction. The profession have a right to feel convinced that every candidate going up for examination shall have his knowledge fully and fairly tested. It is hardly in the nature of things to expect that the rejected candidates will feel sure that they ought to have been referred. The system of awarding marks and other matters of detail noticed by "W." would probably follow if changes were made in the direction I have indicated; but the result would, I believe, be that fewer men than at present would pass. We do not, in truth, want better examiners than those we have. I do not conceive it is possible to procure them; but we do require more of their time, more perhaps than they are willing or able to give.

Lastly, I think that the College Council should distinctly declare their intention as to whether candidates in future are to be examined or not in Comparative Anatomy. I remain, Sir, yours faithfully,

Grosvenor-street, June 22nd, 1875. C. Macnamara.

To the Editor of The Lancet.

Sir,—I cannot refrain (considering the importance of the subject, and the attention it has of late received in The Lancet from both correspondents and in your able leader) from making a few remarks on the Fellowship of the Royal College of Surgeons.

No one who highly esteems the profession of surgery would for a moment wish the standard of the examination to be reduced; but "W." is perfectly correct when he criticises the absurdly unjust and uncertain method of deciding upon a candidate's merits in the answers to the paper. What can be more ridiculous than to consider two such questions as those last given in Anatomy as a test of a man's knowledge of such an extensive subject? Again, exception may well be taken to the apparently useless nature of the questions themselves, which, while easy of solution to a student who has crammed a little anatomy, are completely devoid of interest from a surgical point of view. There is no doubt whatever that the hurried manner in which the *vivâ voce* part of the examination is carried on must lead to many an error, otherwise avoidable, and leave many examiners in doubt as to the real knowledge of the candidate. The extreme uncertainty of the College examinations is, in reality, the subject of constant remark. It is within my experience that on one occasion a gentleman wishing, after a lengthened period of professional experience, to adorn himself with the honoured title of "Fellow," refreshed his memory with special reading and three months' dissection. He was referred on the primary examination, and had the pleasure of seeing young students, professional novices, pass the half-way house to that distinction which Sir Benjamin Brodie first instituted as an incentive to *superior surgical attainments*, and an instrument whereby to improve the position of the profession.

Let us now see how far our College of Surgeons is at present elevating the profession. An examination of the rules for admission to the Fellowship shows that there are three ways in which that diploma may be obtained. Firstly, as a junior at the age of twenty-five; secondly, as a member of eight years' standing (formerly twelve); and thirdly, by election as a member of the year 1843. Now, the last of these conditions implies that a man has had a long and honourable experience of his profession, attested, of course, by credible authorities. The other two conditions apply to individuals who take the Fellowship by examination only. The first of these includes men who have only just completed their studies, and entered perhaps upon the practice of their profession, or, in other words, commenced what is looked upon by the greatest authorities as the only true experience, matured observation. These are the men elected by the College of Surgeons upon whom to confer the greatest honour the Corporation can bestow, which, upon their passing successfully what is termed a *stiff* examination, they duly receive. The disgust of the seniors in the profession is no secret at the elevation to the Fellowship of those who have but recently emerged from the state of pupilage, and whose experience as surgeons must closely assimilate to the military experience of Artemus Ward when created a Brigadier-General. I need not say that all who think the standard of the Fellowship should be maintained deprecate the course taken by the College, and sincerely regret the admission to the grade of Fellow of those of such an early age. Of course the eight years' period gives an undoubted opportunity to members intending to seek the higher position to ripen their knowledge and extend greatly the experience of student life; but the reduction of the term for twelve years was certainly a step in the wrong direction.

Your correspondent, "F.R.C.S.," speaks justly of the degradation of the knowledge of anatomy amongst surgeons caused by the present system, and in so doing shows how a senior must be placed at a disadvantage compared to the student fresh from the dissecting-room, in the present primary examination, at which the one set of candidates appear clad in the knowledge which repeated and confirmed experience has taught them to consider anatomically necessary for the practice of the profession; the other armed with all the tips of the dissecting-room and other artificial aids to memory, so commonly practised, with the last favourite theory of this or that examiner, all too surely to become a chaos before the advent of the pass examination.

Let us hope that the Visitors from the General Medical Council will recommend and be able to carry a system of improved and more justly arranged examinations, that the item of experience shall have its due weight, and that in future there may be more certainty of passing a really good man, and of not unjustly referring one who is under present arrangements simply unlucky. If the General Medical Council cannot obtain for the profession the proper ordering of its examinations, then it is surely time that State interference should secure to the public that surgical experience and ability which now seem likely to be on the wane, to be replaced by a youthful false confidence and self-asserting importance, the obtrusive nature of which is only equalled by its utter incapacity to meet the serious demands which will be made upon it. Your obedient servant,

June, 1875. Chirurgeon.

To the Editor of The Lancet.

Sir,—Your correspondent, "F.R.C.S.," who objects that the Fellowship is now made an examination for students, instead of for practitioners, seems to me in his remarks as if he had not a clear enough ideal of what a superior diploma should be. It may be either a test of larger acquirements, in which case the more severe the ordeal the more valuable success; or it may be a mark of social and professional standing, pointing out merely that its owner has undertaken to practise in a particular way, has enjoyed certain advantages to fit him for such practice, and is not below the average in the way he has used them. If the Fellowship is to belong to the former class, the examinations should be made as stringent as can be, and men should be allowed to face them at the time they are best able to do so. If the latter kind, then let the standard be lowered to suit the memories of those whose knowledge has rusted in absence from the centres of scientific progress; but hedge it round with restrictions such as those which accompany the higher diplomas of the College of Physicians.

I am, Sir, yours &c.,

June 21st, 1875. Another F.R.C.S.

Metropolitan Mortality in Childbirth.

During the last two weeks of June no less than 30 deaths occurred in childbirth within the metropolis, 15 of which were referred to puerpera fever; whereas the corrected average weekly number from this disease in the corresponding period of the last ten years is but seven. Puerpera fever has been fatally prevalent in South London, especially in Newington where scarlet fever has also been epidemic.

Tablespoons and Teaspoons.

To the Editor of The Lancet.

Sir,—In the days of our great-grandfathers a tablespoon held exactly half an ounce. A modern tablespoon holds nearly twice as much. Yet the modern physician constantly prescribes a tablespoonful when he means half an ounce, and the measuring glasses sold by the modern chemist are graduated in the ancient way. In like manner a teaspoonful often means a drachm, though the modern teaspoon holds nearly two drachms. I have known serious consequences result from prescribing doses by spoonfuls. Those medicine glasses ought to be interdicted.

I am, Sir, yours faithfully,

St. James's-square, June, 1875. J. C. Whishaw, Surgeon-Major.

An Opening for Medical Women.

If the time should ever come when the portals of the profession will be thrown open to women, a good field for those who succeed in obtaining qualifications will be found in Constantinople in the medical supervision of the numerous harems existing there. It is stated that Madame Bres, the first lady to obtain a medical degree at the College of the Sorbonne, Paris, has declined an offer of 40,000 francs a year as physician to the Sultan's harem, on condition of never going outside the building. She will attend the harem, but will practise in Constantinople like other doctors.

Davey Defence Fund.

Dr. Davey begs to tender his most earnest thanks to those members of the medical profession and other friends who have responded to the appeal from his Committee, not only for their liberality, but also for their kind expressions of sympathy, which have been a source of great gratification to him in his trouble and anxiety.

Dr. Davey most gratefully thanks the Chairman, H. Davies, Esq., M.D., all the members of the Committee, and F. J. Reilly, Esq. (Hon. Secretary and Treasurer), for their great kindness and untiring energy on his behalf, which he can never forget or in any way repay; and also the Editor of The Lancet for so kindly inserting the appeal and lists of subscribers in his valuable journal, and receiving subscriptions.

Florence Villa, June 29th, 1875.

Boracic Ointment.

To the Editor of The Lancet.

Sir,—I have had a boracic ointment prepared as prescribed by Professor Lister in The Lancet of June 5th, but found it so hard that spreading it was impossible. The chemist with whom I deal suggested the addition of two drachms of glycerine, which is a decided improvement to the prescription in every way.

I am &c.,

Liverpool, June 15th, 1875. W. Macfie Campbell.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Prof. Turner; Dr. Corfield, London; Dr. Gairdner, Glasgow; Staff Surgeon Mulvaney, Southsea; Dr. B. W. Richardson, London; Dr. Taplin, Birmingham; Mr. Liston, Oldham; Dr. Cox, Reading; Mr. Nursey, Sunderland; Dr. Wiltshire, London; Mr. Henderson, London; Dr. Andrews, London; Mr. Maunder, London; Dr. John Williams, London; Dr. Faber, London; Dr. Denton, London; Dr. Parsons; Dr. Pavy, London; Dr. Wolseley, Warley; Dr. Gill, London; Surgeon-Major Yeates Hunter; Dr. Hulme, Dunedin, New Zealand; Mr. Powell, Limogne, France; Dr. Anderson, Kingston, Jamaica; Dr. Scott, Brindisi; Messrs. Griffin & Co.; Mr. Rouse, Canterbury, New Zealand; Mr. Godrich; Dr. Eddison, Leeds; Mr. Mann, London; Mr. Finlayson, London; Mr. R. Heath, London; Mr. Lupton; Mr. Goodall, London; Dr. Smith, Uxbridge; Dr. Denton, Bridlington; Dr. Balbirnie, Sheffield; Dr. Kitchener, Etwell; Mr. Jones, Dowlais; Mr. Henderson, St. Andrews; Dr. Hassall, Ventnor; Dr. W. W. Smith, London; Dr. Inglis, Worcester; Surgeon-Major Whishaw, London; Mr. Sankey, London; Dr. Craven, Thurso; Dr. Wilkins, Des Moenes; Dr. Coales, London; Mr. Davies, Llanybyther; Dr. Lavy, Groombridge; Dr. Philpot, Croydon; Dr. Krans, Vienna; Miss Billing, Nottingham; Mrs. Carr, Stafford; Mr. Jait, Knowle; Mr. Bennett, Worksop; Dr. Hall, Swadlincote; Mr. Holmes, Maidstone; Mr. Gover, London; Mr. Thomas, London; Dr. Beveridge, Aberdeen; Mr. Brietzche, London; Mr. Moore, London; Mr. Phillips, Southend; Mr. Cornish, Manchester; Mr. Beal, Brighton; Dr. Drummond, Royton; Mr. Blount, Chelsea; Mr. Chesshire, Birmingham; Mr. Skinner, Worksop; Mr. Fox, Bristol; Mr. Jenner, Baldock; Mr. Birt, London; Dr. Blytham, Swinton; Dr. O. Will, Aberdeen; Mr. Steel, Walker-on-Tyne; Dr. Dougall, Glasgow; Dr. Neale, St. John's-wood; Royal Institution; C. M.; An Army Surgeon, India; A Grange Visitor; Medicus; Another Member; Non Placet; Aquarium; Fatherland; A Warm Supporter of the Children's Hospital; M.R.C.S.; A Licentiate; &c. &c.

Letters, *each with enclosure,* are also acknowledged from — Mr. Jones, Aberdare; Mr. Hawkes, Birmingham; Mr. Morgan, Bristol; Mr. Carter, South Lambeth; Mr. Richardson, Oundle; Mr. Lidbetter, Islington; Mr. Gardner, Edinburgh; Dr. Mitchell, New Cross; Dr. Coleman, Scarborough; Dr. Cremer, Charleville; Mr. Piggott, Grange-over-Sands; Mr. Thompson, Todmorden; Mr. Clark, Farnham; Dr. Moreton, Liverpool; Mr. Curran, Lew Down; Dr. Munro, Nettlebed; Mr. Shekleton, Blaenavon; Messrs. Porteous and Co., Glasgow; Mr Farrar, Bradford; Mr. Milner, Aldborough; Mr. Doyle, Padiham; Mr. Lloyd, Carmarthen; Mr. Gill, Torquay; Mr. Lloyd, Cheswardine; Mr. Macdonnell, Plymouth; Dr. Paul, Chester; Mr. Box, Chirk; Mr. Tomlinson, Maldon; Mr. Aird, Woolton; Mr. Daniell, Derby; Dr. Thomson, Ringwood; Dr. Aspinall, Over Darwen; Mr. Reilly, Camberwell; Dr. Anderson, Edinburgh; Mr. Evans, Glasgow; Mr. Hargrave, London; Dr. Whitehouse, Stratford; Mr. Stuckey, London; Mr. Lang, Groombridge; Mr. Tetby, Glasgow; Dr. Hargreaves, Sheffield; Mr. Tattersall, Woolton; Mr. Hutchinson, Grantsfield; Mr. Stannard, Croydon; Mr. Allard, Glasgow; Mr. White, Kensington; Mr. Magnus, London; P. M. O. H. O.; G., Sheffield; P. M., Great Yarmouth; G. R. H., London; M. S. K., London.

Local Government Chronicle, Medical Enquirer, Newcastle Daily Chronicle, Welshman, Cork Constitution, Western Morning News, European Review, Metropolitan, Huddersfield Daily Chronicle, Isle of Man Times, Manchester Guardian, Kirkcudbrightshire Advertiser, Liverpool Daily Post, Surrey Advertiser, Druggist, Brighton Daily Mail, Devizes Gazette, and *Yorkshire Post* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

The Lancet Office, July 1st, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
June 25	30·10	W.	56	59	109	77	56	...	Overcast
„ 26	29·93	W.	56	60	105	73	56	...	Overcast
„ 27	30·03	S.	55	63	109	73	52	...	Fine
„ 28	29·83	S.S.E.	56	58	79	67	55	0·07	Raining
„ 29	29·84	W.	58	59	106	73	57	0·22	Overcast
„ 30	29·86	W.	56	61	102	67	57	...	Cloudy
July 1	29·74	S.	61	62	...	...	60	0·36	Raining

Medical Diary for the ensuing Week.

Monday, July 5.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Royal Institution.—2 p.m. General Monthly Meeting.

Tuesday, July 6.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Wednesday, July 7.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1¼ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Obstetrical Society of London.—8 p.m. Adjourned Discussion on Puerperal Fever.—Some interesting Specimens will be exhibited at the beginning of the meeting.—The Discussion on Puerperal Fever will then be resumed.

Thursday, July 8.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, July 9.

St. George's Hospital.—Ophthalmic Operations, 1¼ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Saturday, July 10.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

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Lettsomian Lectures
ON THE
SURGERY OF THE ARTERIES.

(ILLUSTRATED BY TWENTY-SEVEN OPERATIONS OF
LIGATURE BY THE AUTHOR, AND OTHER
CASES OF DISEASE AND INJURY.)

Delivered before the Medical Society of London, Jan. 1875,

By C. F. MAUNDER, F.R.C.S.,
SURGEON TO THE LONDON HOSPITAL.

LECTURE III.—Part II.

ON LIGATURE OF A MAIN ARTERY TO ARREST ACUTE TRAUMATIC INFLAMMATION.

However pathologists and physiologists may explain inflammation, however complex may be the process, whatever share in its production may be ascribed to the vascular system, to the nervous system, and to the tissues themselves the seat of it, I presume all will admit that an excess of blood is brought to the part. The experience of practitioners in the healing art had from time immemorial taught the value of the withdrawal of blood as a remedy for certain inflammations. Thus we have arteriotomy, venesection, the use of leeches, &c. But all these methods have this disadvantage in common—they *remove* blood from the system. Obstruction of the main channel, on the other hand, only *withholds* it from the inflamed part, and may be likened to dry cupping, by which the blood is diverted into other channels *temporarily*, and thus the inflammation is, as it were, starved. Lawrence says: "Blood is the material by which the increased action of the part is maintained. In the figurative language, which the obviously increased heat has suggested, one may say that it is the fuel by which the fire is kept up. If one could completely command the supply of blood, the increased action might be effectually controlled or arrested."

In considering the propriety of placing a ligature upon a main artery with a view to arrest acute traumatic inflammation in the part beyond, various questions must be entertained. First, the *possible* and *probable* result, if the case be treated on general principles hitherto accepted; secondly, the effects of the ligature (upon arteries such as the femoral and brachial) *immediate, intermediate,* and *remote.* On the other hand, in contemplating, in not a few instances, the effect of acute inflammation, of the knee-joint for example, subsequent to a wound of the same, the prospect is not at all cheering; and I know of no case in surgical practice of injury to a limb, not requiring immediate amputation, which excites more anxiety in the mind of the surgeon for the welfare of his patient than traumatic inflammation of this joint. Its effects, both local and general, are quickly manifested. Swelling, redness, and pain, precursors of suppuration, attack the joint and the limb both above and below, while traumatic fever runs high. After the lapse of a few days pus is formed in and about the joint, and for weeks, while the articulation is being destroyed, suppuration spreads and burrows up and down the extremity. During this period the patient's powers, both nervous and vascular, are becoming exhausted by pain and loss of sleep and appetite, consequent on the progressive destruction of the joint structures, as well as by the more or less profuse suppurative discharges. All this time, too, he has been exposed to the risk of erysipelas and pyæmia; and at length, to escape death from hectic, he submits to amputation, with a poor chance of recovery.

W. D——, twenty-eight years of age (Case 17, Table of Arteries*), became the subject of acute suppuration and sloughing of the soft parts of the hand and forearm, and disorganisation of the wrist-joint, associated with recurring hæmorrhage. To prevent further bleeding, and to remove structures damaged beyond useful repair, I advised amputation; but the patient declined, and I was obliged to be content with ligature of the brachial artery. He died of pyæmia on the eleventh day. No sooner had the operation been performed than inflammatory symptoms abated: swelling disappeared; suppuration, which had been profuse, was reduced to a minimum; sloughing ceased, and granulations quickly arose. I must say I was somewhat surprised at this beneficial result of the ligature, for the parts were so damaged by the previous inflammatory action, added to the injury, that I thought it likely gangrene rather than repair might result.

But it sometimes happens that the result of such an accident is still more disastrous, the patient dying after weeks of suffering in possession of the damaged limb, because no opportunity for amputation, with the hope of a successful result, had presented itself.

H. P—— (Case 9), a man aged forty-seven, was admitted on March 9th, 1867. He had sustained a severe squeeze of the knee. Suppuration up and down the limb and disorganisation of the joint followed; but the man was too ill to be submitted to amputation, and he ultimately died of hæmorrhage.

On the other hand, and under the most favourable circumstances that can be anticipated, the prospect is gloomy. A patient may recover with his joint more or less anchylosed and distorted, and the limb more or less useless in proportion to the degree in which its various component parts have been involved in the inflammatory process.

Peter J——, aged twenty, was admitted on November 6th, 1873, having received an injury to his left knee ten days before. In about a fortnight after the accident the knee-joint was laid open, and a large quantity of pus came from it. He was in the hospital six months, during which period very many incisions were made here and there to let out the matter, and drainage-tubes were used from time to time. For many weeks from three-quarters to a pint of pus was discharged twice daily. He ultimately recovered, with anchylosis. You will presently see this patient, but I fear will be able to form a very inadequate idea of his former condition judging from his present shapely and useful limb. This happy result is due to the great care and attention bestowed for weeks and months upon the case by my house-surgeons (Messrs. Mitcheson and Kershaw) and dressers (Messrs. Jones, Treeves, Needham, Snell, and Harvey).

It would be out of place to discuss here the treatment of disorganised joints with a view to prevent displacement of bones and consequent inutility. Suffice it to say that, in the instance of the knee (a joint especially liable to luxation) that you will see to-night such unpleasant accident has been prevented, and, anchylosis being necessary, the proper angle (a most essential point for the patient's comfort in progression) has been attained.

John P——, aged twenty-seven, was in the hospital at the same time as the former patient. Incisions about the joint were made, and a drainage-tube was used once. The inflammatory action of a comparatively mild character was more restricted to the neighbourhood of the joint than in the former case. From time to time a fresh attack of inflammation occurred, and these kept him in the hospital almost as long as the above patient who suffered so severely. Even now, twelve months since he left the hospital (March 18th, 1873), the limb has not recovered itself, while that of his fellow-sufferer is most useful. In this case an excess of synovia was the chief secretion from within the joint, associated with a little suppuration outside the capsule. You will see that the man has a firmly fibrous anchylosed joint; and he is an example of the injurious influence of a constitution spoiled by intemperance, upon local injury.

In rare instances—so rare, indeed, that they can scarcely be allowed to influence our prognosis—the patient escapes with a comparatively sound joint. A. B——, about eighteen years of age, sustained a blow upon the knee, followed by suppuration within the joint. This was evacuated by an incision on the outer side, and the patient was quickly well. The girl has perfect use of the articulation.

I especially invite your attention to these three patients to-night, because they were all under care at the same time, under the same roof, under the same surgeon, under the same atmospheric and hygienic conditions; but differed in one grand and all-important feature—in constitution. Each illustrates a stage of the disease which it is important to recognise during its progress, with a view to prognosis.

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* The Lancet, Jan. 9th, p. 39.

The young woman has recovered, probably without a trace of the result of the injury existing to-day; the young man (of intemperate habits), while showing comparatively slight signs of local mischief, suffered severely in his general health, and even now repair is not complete; but the patient whose limb it seemed, to most who saw it, impossible to save, and which was twice condemned by my experienced medical friend, Mr. Stilwell, of Epsom, survives. It will be difficult even for those who saw him at his worst, and almost impossible for any who never saw him, to credit the transformation. The reasons of my withholding operative interference—either ligature of the femoral or amputation—were, his cheerful and hopeful disposition, a clean tongue, good nights, and never-failing appetite. But, above all, although the cartilages were destroyed early in the progress of the case, and the articular ends of the bones were exposed, these latter never became involved in the inflammatory process, and he was always free from "starting" pains. This symptom is evidence of disease which very often leads to operative interference, occasionally to death. On the other hand, we had to combat a most profuse discharge coming from all parts of the limb, and a disorganised knee-joint. (It will be out of place to discuss here, in connexion with profuse suppuration, how far a large supply of aliment favours this; but I think it worthy of consideration whether or not we overfeed some patients.)

The picture I have drawn, I believe truthfully, of the probable consequences of traumatic suppurative inflammation of the knee-joint is very discouraging. Can we hope for better things from ligature of the main artery. I think I have proved it.

I will now consider the possible effects—immediate, intermediate, and remote—of ligature of the vessel.

The *possible immediate effect* is gangrene of more or less of the limb, varying from the shriveling of a toe to death of the whole leg as high as the ligature. But this is scarcely likely to happen, because, an excess of blood having been now sent to the part, the collateral circulation may be regarded as already in some measure established. Case 21–22 in the Table of Arteries, a female aged forty-nine, in a very depraved state of health, and the subject of diffuse cellulitis with extensive sloughing about one foot and ankle, was submitted to ligature of the anterior and posterior tibial arteries of the same side, to arrest recurring hæmorrhage, she at the time being too weak for amputation. The acute symptoms subsided at once, and hæmorrhage did not recur. She soon died, and the whole foot and ankle seemed to have lost their vitality; but whether any part of this was due to the ligature it is impossible to say, sloughing having already commenced previous to the operation.

The *possible remote effect* is a permanent weakening of the limb, rendering it less valuable as an organ of progression, and, by lowering its vitality, making it less able to bear changes of temperature or to resist and repair injury and disease. I must repeat, as worthy of special notice, that in the case of the child already mentioned, within a week of the operation a slough formed on the heel from direct pressure. Knowing how slowly such accidental wounds often heal, I feared that in this instance it would be slower still. I was agreeably surprised to find that my anticipations were not realised: the sore closed quickly.

The *possible intermediate effect* is hæmorrhage at the seat of ligature, from either the proximal or the distal side. (The former complication requires a reopening of the wound, and search to be made, under difficult pathological conditions, for the bleeding orifice, that a ligature may be reapplied; or, if this cannot be accomplished, the trunk of the vessel must be exposed as near as practicable to the bleeding point, and a thread be passed around it. The latter accident will probably be combated by a well-applied graduated compress and bandage.) This subject was fully discussed and illustrated by cases in my former lecture.

Besides the above-mentioned possible consequences of ligature of the superficial femoral, we must not neglect to inquire into the influence of the operation upon the process of repair necessary to the restitution of the injured limb to health.

In the Paris revolution of 1830 Jobert tied the femoral artery[*] (I presume the common femoral is meant), with a view to cut off the supply of blood from this region brought by the profunda, for hæmorrhage in a case of gunshot fracture at the neck of the femur. Jobert remarks that the operation acted as a powerful antiphlogistic agent, and that the resulting inflammation and suppuration were much less than generally follow these injuries. The patient recovered.

Granted that a given supply of arterial blood is necessary to health, and that to repair an injury more than the usual quantity is requisite, one would expect either that repair would be slower after ligature than without it, or that the disease would degenerate from the acute to the chronic, or perhaps even to the ulcerative or gangrenous. And I am inclined to think that, in the case which was the origin of my operation and these remarks, the wound which opened the joint, as well as a small incision made subsequently over the inner side of the knee to give exit to supposed pus present there, healed more slowly than they would have done had not the vascular supply of the limb been interfered with. If I am correct in this opinion, questions arising out of it are, At what age and state of the constitution, and at what stage of the disease, is this method of treatment admissible? At present I am rather of opinion that the age and state of health of a patient (with special reference to his heart and arteries) who would have the barest prospect of recovery from an uncontrolled suppurative inflammation of the knee-joint would weigh with me against the use of the ligature, and I should try compression, either digital or instrumental. In all probability the injury would be fatal under any circumstances.

The stage of the disease at which ligature of the main vessel (femoral, for example) would be contra-indicated would appear to be, judging from very limited experience, the suppurative, but of long standing. This observation is supported by the progress of Mr. Reeves's case. The good effect of the ligature was very transient—a circumstance probably due to the high vascular condition of the part consequent on prolonged inflammation in it. On the other hand, judging from equally limited experience in the child, profuse suppuration of a more recent date may be arrested by the ligature. In the upper extremity, in which arterial anastomosis is more free and repair more readily effected, the brachial artery might be ligatured, at a more advanced stage of suppuration, with every prospect of success. In Cases 12, 15, and 17, instances of inflamed hand associated with extensive suppuration and some sloughing, a favourable change occurred directly after the application of the ligature to the brachial artery. The *precise* moment and *indication* for the application of the ligature in the lower extremity is when suppuration is only suspected to have occurred, or has only just set in.

When enumerating the risks inherent to the ligature, the possible ill-performance of the operation—a segment or whole of the vein being included in the ligature—ought not to be omitted.[*]

Time does not allow me to compare further the results of acute suppurative inflammation treated on the *ordinary* principles of surgery with the *extraordinary*, or ligature of the main artery. As I have said elsewhere, I believe the sudden obstruction of a main artery to be very much less dangerous than is generally supposed. We have been apt to draw our conclusions from instances of known diseased vessels, as in cases of aneurism. I was once present when a friend accidentally wounded the superficial femoral artery while opening an abscess in the thigh. We at once placed a ligature above and below the wound in the vessel, and no ill consequences whatever arose.

On Sept. 7th, 1867 (Case 10, Table of Arteries), I placed a double ligature upon the superficial femoral artery of a young man within an hour of its being wounded. He quickly recovered without the least sign of want of circulation in the foot. Again, in 1871 (Case 11), I ligatured the superficial femoral for a contused lacerated wound of the vessel. The man was of intemperate habits. Gangrene attacked the wound, and the man died ten days subsequently; but there was never the least evidence of insufficient supply of arterial blood to the foot.

These cases suffice to show how rapidly the collateral circulation is established, and the part does not perish. Wardrop,[†] also, says: "The enlargement of the anastomosing vessels to a certain extent takes place almost instantly after the trunk has been tied. I observed this in a child in whom I had secured the carotid artery. I could see the branches of the temporal and occipital underneath the delicate integument enlarging, and thus actively acquiring great additional vigour immediately after the operation."

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[*] Plaies d'Armes à Feu, Paris, 1830; p. 262.

[*] Maunder's Operative Surgery, 1873, p. 87: "I have repeatedly seen the vein wounded by gentlemen attending my 'course of operations' in Paris."

[†] Wardrop on Aneurism, p. 12.

There is thus accumulated a fair amount of experience to show that the principle of *withholding* blood from an inflamed structure, under certain conditions, is immediately beneficial. As to the means to this end, let them be as innocent as may be consistent with success. I would not for a moment insist on the application of a ligature in all cases where the principle is to be tried, provided that a simpler method will suffice, whether by compression with a tourniquet, by acupressure needle, or by hand. But it must not be forgotten that it is one thing to suggest a mode of treatment and another thing to carry it out efficiently. The ligature once applied, all anxiety as regards the passage of blood ceases; but less decided measures above mentioned require such care and attention to details as can rarely be given. Having witnessed the value of the principle, I do not hesitate to urge upon the profession a trial of it when practicable. It may appear strange that I have not tied an artery oftener for inflammation; but I did not wish to ride my hobby to death, nor to bring the principle into discredit.

Facts and Conclusions.

That ligature of the superficial femoral artery has arrested acute inflammation consequent on wound of the knee-joint.

That ligature of a main artery will quickly diminish profuse suppuration, and prevent death by exhaustion.

That, while it arrests profuse suppuration, it will, by allowing the patient to gain strength, afford an opportunity for amputation at a future time.

That gangrene and secondary hæmorrhage, as the result of ligature, should not be anticipated in the healthy subject.

That the dread of these has arisen from our knowledge of the consequences of the ligature in instances of known diseased vessels—aneurism, for example.

That a slough on the heel, caused by the pressure of a splint, was quickly detached, and the wound soon closed, although the superficial femoral had been tied a few days previously.

That symptoms of inflamed bone "starting pains") quickly disappeared.

That the arterial tension of the rest of the body will be increased beneficially by the ligature.

Such, Mr. President, are the conclusions at which I have arrived from a review of the above subject; but seeing that this operation was originated in America long before I was born, while I thought it had been first suggested by me in 1866, I may well say "there is nothing new under the sun."

I have now come to the end of my Lettsomian Lectures, and, in doing so, beg once more to thank the Council of the Medical Society of London for having nominated me to the honourable office, and my audience for having listened patiently to my discourses.

ON THE CURE OF LEUKHÆMIA SPLENICA BY MEANS OF PHOSPHORUS.

By WILSON FOX, M.D., F.R.S.,
HOLME PROFESSOR OF CLINICAL MEDICINE, UNIV. COLL. LOND.

I desire to take an early opportunity of corroborating an observation by Dr. Broadbent* on the influence of phosphorus in this disease, and I hope that the experience of others may be found as favourable as his and my own have proved to be.

The patient, E. C. U——, a male, aged thirty-seven, was admitted into University College Hospital Dec. 30th, 1874. Born in Devonshire, he has resided for the last twelve years in London. By trade a baker; for eight years he worked in the bakehouse, for the past four he has been in the shop. He has never even stayed in a known malarial climate. His father lived to an advanced age; cause of death unknown. His mother before her death (age unknown) was very pallid, and suffered from severe pain in the "body" and shortness of breath. One sister living, aged forty, suffers from pain in the body and limbs, and from shortness of breath. Patient has been married nine years. Lost the only child born alive soon after its birth. His wife has had one miscarriage; no subsequent pregnancy.

Previous illnesses.—Has had scarlatina and measles, the latter severely; neither rheumatism nor syphilis. Some years ago, soon after joining the baking trade, he became very weak and ill, but recovered completely. Six years ago he became very blanched, owing to bleeding piles. He recovered completely from this, and though he states that he has occasionally observed himself looking yellow, yet up to his present illness he was a very strong, vigorous man, weighing 12 st. 6 lb., and able to lift and carry a sack of flour. Height, 5 ft. 6 in. His present illness commenced in January, 1873 (nearly two years before admission). First suffered from severe pain in his right side after lifting a heavy weight. He kept his bed a fortnight, and remained well for three months. He then began to feel a "dull, heavy" pain in his left side, which varied in intensity, but did not become severe until 1874. During this period, however, he noticed some enlargement of the abdomen. In 1874 he suffered from at least twelve attacks of very severe pain in the left side. They were preceded by feelings of chilliness, and were attended by night perspirations and by urine loaded with lithates. In October, 1874, he had an excessively severe attack of this nature, attended by violent vomiting. The pain extended to the hip and groin to such an extent as to give rise to the diagnosis of a renal calculus. The pain gradually diminished, but returned on the 21st of December, extending to the hip and knee. At this time he passed half an ounce of dark blood by the rectum. He had no other hæmorrhage. His breath had become short since October.

On admission he was intensely pallid, with extremely marked anæmia of the mucous surfaces and of the nails; markedly emaciated; no eruption of skin; very feeble, hardly able to stand without assistance; no œdema. He had frequent slight rigors; was pyrexial, and sweated profusely. The urine was high-coloured, sp. gr. varied from 1010 to 1025; it deposited lithates, but contained neither albumen nor sugar. The lungs were healthy. The heart's apex (displaced by the abdominal tumour) was in the fourth interspace; there was a faint basic systolic murmur with its maximum at the second left cartilage; venous hum was heard in the neck, and arterial murmurs were present.

His appetite was bad, his bowels were costive, though previously diarrhœa had alternated with the constipation; the stools presented no special abnormal appearance. He suffered much from flatulence. He had constant thirst; mouth dry, tongue broad, flabby, and covered with a thin white fur. The sight was unimpaired. He occasionally suffered from severe headache. Anæsthesia existed over the outer part of the left thigh. Some hyperæsthesia was also observed in the course of the last dorsal nerve.

The abdomen was distended chiefly in the left flank in the splenic region, where there was felt a hard resistant mass pushing outwards the cartilages of the tenth and eleventh ribs, and reaching backwards nearly to the spine, though the intestinal note could be elicited posteriorly between its posterior border and the spine. It was smooth, without any nodulation; movable from behind forwards, and movable on deep respiration. The anterior border was distinct, slightly rounded, and in its middle the splenic notch could be distinguished on deep pressure. The whole mass was absolutely dull on percussion, and without fluctuation. The dulness superiorly extended to the sixth rib in the axilla, between the eighth and ninth ribs in the back. By palpation and percussion the tumour was traced extending across the abdomen to within 1½ in. to 2 in. to the left of the umbilicus; thence it extended transversely backwards until it touched Poupart's ligament, about 1 in. anterior to the crest of the ilium, below which bone it passed posteriorly. The tumour was intensely painful on deep pressure. Between it and the diaphragm friction could be heard. The patient was unable to lie on his right side owing to the aggravation which this caused of the pain felt in the thigh and knee, and to pain in the left scapular region.

No enlarged veins were seen on the surface of the abdomen. There was no ascites. The liver was not enlarged. There was no enlargement of any of the superficial lymphatics, nor could any be felt in the abdomen, with the exception of a few slightly in excess of the normal size in the inguinal regions.

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* Practitioner, Jan. 1875.

The blood[*] drawn by pricking the finger looked much paler than natural. The corpuscles were nearly twenty times their usual number, from thirty to forty-five being seen in the field. This proportion remained constant during the greater part if not the whole of the period before he began to take the phosphorus. The white corpuscles were of two kinds, large and small, the former about twice the natural size; some were binucleated; most were granular. There was, in addition, a large number of molecules, which were aggregated into irregular masses. There was no alteration in the shape or appearance of the red corpuscles.

Until Jan. 20th, when the treatment by phosphorus was commenced, his state varied but little. He had more or less continuous severe pain in the tumour, which at times was aggravated by sharp paroxysmal attacks, relieved occasionally by blisterings and endermic application of morphia, or by the hypodermic injection of morphia.

Until Jan. 20th he was almost constantly pyrexial, and slight febrile movements, not exceeding 99·9°, also occasionally persisted until Feb. 8th (nineteen days after the treatment by phosphorus had been commenced). On a few days the evening temperature was not taken. On three occasions only within the first twenty-one days the temperature during twenty-four hours did not exceed 98·5°. The pyrexia, prior to Jan. 20th, was irregular in its diurnal manifestations. The maximum observed was 101·2°, and it tended to a post-meridial exacerbation, the morning temperatures being normal, but never subnormal. This regular course was, however, only maintained on six out of twenty days, and many variations occurred; thus, in some instances, ante-meridial pyrexia was observed, sometimes equalling, in others less than that of the evening. On other days the evening temperature being high, continued so through the early part of the night. The temperature was also observed to be high in the morning, to fall towards midday, and rise again in the evening. After Jan. 11th and before the phosphorus was given, the temperature did not exceed 99·9°.

The pulse up to Jan. 20th varied from 96 to 132, only once falling to 88; the respiration varied from 16 to 22.

Before the date at which the phosphorus was first given the treatment consisted of the administration of iodide of iron. Sulpho-carbolate of soda was also given with some relief for the flatulence. Full diet, wine, and lemons were also given.

Until this date no material improvement had taken place in the general condition of the patient. He was still febrile, though slightly less so than on admission; his blood was in about the same state, and the attacks of pain in the region of the splenic tumour were severe. Having just met with Dr. Broadbent's paper, I determined to try the effect of phosphorus, and ordered one-fiftieth of a grain three times a day, which on Feb. 23rd was increased to one-thirtieth of a grain three times a day. All other treatment beyond rest and nourishing food was discontinued. No ill effects were observed from the phosphorus throughout. At first but little appreciable influence was noticed on his general condition, except that the pulse had diminished in frequency, varying up to Feb. 8th from 88 to 96, after which it gradually fell, rarely ever reaching 90, and varying from 76 to 62. The pyrexia also, as before stated, subsided, and after Feb. 8th it only reached 99° on two occasions (Feb. 25th and March 5th). Subnormal temperatures, occurring almost exclusively in the morning, but not falling below 97°, were occasional throughout the months of February and March, but almost ceased, though not entirely, during the month of April. On the 25th March he contracted a bronchial catarrh without any pyrexia, which only lasted a few days, and was not treated except by a few doses of chloral hydrate at night, to allay cough.

By the 8th Feb. there was a marked improvement in the appetite, which continued, and the bowels became regular.

By the early part of March the aspect of the patient had begun to improve, and on March 2nd examination of the blood with the microscope showed only about eight white corpuscles in the field of a quarter of an inch, still being divisible into those of large and small-sized, besides a number of molecules.

By March 14th he could walk with help.

By April 6th he was much better; the anæmic look had disappeared, and there was some diminution in the size of the spleen, which no longer passed below the crest of the ilium, while the dulness superiorly reached to the eighth interspace in the axilla.

April 9th.—Five to nine white corpuscles were seen in the field of the microscope.

20th.—They had diminished to five or seven.

May 5th.—There was no apparent excess whatever of the white corpuscles. The patient was able to walk a mile without fatigue. The anterior border of the spleen, instead of reaching nearly to the umbilicus, was five inches to the left of the middle line, and about two fingers' breadth from the crest of the ilium, while the dulness superiorly only reached the seventh rib in the axilla. It was no longer painful.

On the 7th he was discharged for Eastbourne, discontinuing medicine; and in June he returned, looking the picture of health, but without any further appreciable diminution of the size of the spleen. His blood, tested against that of a healthy man, showed no increase of the white corpuscles, but these were nearly double the natural size.[*]

I subjoin his weighings during the latter part of his treatment by phosphorus. I very much regret that these were not ascertained during the first part of his stay in the hospital:—Weight two years ago in perfect health,[†] 159 and 174 lb.; March 12th, 124 lb.; 22nd, 127 lb.; 30th, 130 lb.; April 6th, 132 lb.; 16th, 133½ lb.; 23rd, 135 lb.; 29th, 140 lb.; May 6th, 142 lb.; middle of June, having returned from Eastbourne, 147 lb.

Remarks.—It hardly appears necessary to comment on the diagnosis of this case as being one of genuine leukhæmia. The change in the blood was certainly not so far advanced as is sometimes observed, when the white corpuscles may be to the red as 2 : 3. This condition is, however, only noticed as a rule in the final stages of the disease, and even in these the proportion of white to red may by no means be excessive, and, as I have myself observed, they may even diminish from the amount seen in the earlier periods. It appears, also, from Mosler's[‡] observations, that splenic enlargement may exist during a considerable period before any marked increase of the white corpuscles is perceptible, during which time other characteristic symptoms of the disease may nevertheless be present, and also that as many as sixteen corpuscles counted in the field may, together with splenic enlargement and slight pyrexia, be sufficient to characterise the disease. Dr. Broadbent doubted whether the case observed by him was an absolutely characteristic one of leukhæmia, on account of the want of correspondence between the degree of anæmia observed and the number of white corpuscles found. I am disposed, however, to believe from observations on other cases, that this want of correspondence is not unfrequent in true leukhæmia, and that the red corpuscles suffer in their nutrition in this disease as well as in the anæmia splenica or lymphatica of Hodgkin,[§] from which a moderate excess of white corpuscles in the blood is sufficient to distinguish it. In this case, however, the increase in their number was sufficiently great fully to characterise the disease. The absence of the severer hæmorrhagic symptoms was certainly a point in the patient's favour; but in other respects, as regards his emaciation and great loss of strength, his prospects were most unfavourable; and before the good effects of the phosphorus were observed I only anticipated for him the melancholy and painful termination which is almost constantly, if not invariably, observed in this disease. I say almost constantly because Mosler anticipates for quinine, if used in the earlier stages, a somewhat hopeful influence on the cure of leukhæmia, and has quoted four cases of cure by this agent; I must, however, confess that even in very large doses, of ten to twenty grains daily, continued during a long period, quinine has always failed in my hands to exercise the slightest influence, either on the fatal progress of the disease or on the pyrexia. Iron also has appeared to me to be equally inefficacious, and the experience of the majority of observers seems to have been as unfavourable as my own.*

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[*] The report on the blood is the result of my own observations, collated with those made within the first three weeks after admission by Messrs. Rogers and Voelcker, Fellowes clinical prize essayists. I am also indebted to the latter gentleman for a few addenda to the general history.

[*] Observation by my clinical assistant, Mr. Pepper.

[†] Differently stated by patient.

[‡] Pathologie et Therapie du Leukhæmie. Berlin, 1872.

[§] See Dr. Wilks, Guy's Hospital Reports, 1856.

It may be noticed that neither in Dr. Broadbent's case nor in mine did the spleen return to its natural size, though in mine there has been a not inconsiderable diminution of its dimensions. Dr. Broadbent is indeed under some fears, owing to not hearing again from his patient, that some unfavourable change may have taken place in his state. It is impossible as yet to speculate what effect the still enlarged spleen may have on the general health, but the hope that this may be slight or *nil* does not appear to me to be ill-founded. In the cases of cure reported by Mosler under the influence of quinine, the spleen is stated to have returned to its normal dimensions; but one of these, by Dr. Hewson, of Pennsylvania, was distinctly a case of malarial origin, in which paroxysms of intermittent fever still persisted, and in which the administration of the quinine appeared to exert a beneficial effect, while in the others the splenic enlargement was less than in the present instance.

As far as is yet known, no case of spontaneous cure of leukhæmia has been reported, or of recovery under indifferent treatment.† The fact that some amelioration had from time to time taken place in this patient's state during the earlier period of his illness affords no ground for the belief that this explanation is valid for the rapid improvement observed after he had commenced to take the phosphorus. Such alternations of improvement and exacerbation are common during the early periods; but when once the splenic tumour has attained a considerable size and the increase of the white corpuscles in the blood is marked, any change for the better, except slight and transient modifications of the pyrexia, are rarely observed.

I believe, therefore, that in this case, as well as in Dr. Broadbent's, the cure is exclusively attributable to the use of the phosphorus, and he is warmly to be congratulated on the successful verification of an induction, and on the discovery of a cure for at least some cases of a disease so painful, distressing, and hopeless as this almost invariably proves to be. It may be found to be more beneficial in the earlier rather than in the later stages of the disease. What its influence may be when the vast excess of white corpuscles sometimes observed has been attained, can only be verified by further observation, but I trust that it will soon receive a more extended trial in all phases of the disorder, and that it may be shown that one more disease has been thus rescued from the category of the almost hopelessly irremediable.

In conclusion, I would allude to the observations by Prof. Botkin, of St. Petersburg,‡ on the reduction capable of being effected in the size of the spleen and lymphatic glands, and also of the proportion of the white corpuscles in the blood, by the application of the induced current to the enlarged spleen and glands. These are very distinct and remarkable, and may yet prove to be an important adjuvant to treatment. In this case I was, however, desirous to give the phosphorus an uncomplicated trial, and did not, therefore, adopt Prof. Botkin's method.

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* A remarkable case is reported by Dr. Lloyd Roberts (Brit. Med. Jour., 1869, ii., 585), where, in a case of great anæmia, the white corpuscles were increased in the proportion of one to two of the red, without any enlargement of the spleen or of the lymphatic glands, and where in the course of fifteen days the excess of white corpuscles had almost entirely disappeared. This case, as far as I know, is quite unique, and cannot be considered one of true leukhæmia.

† One is alluded to by Dr. Willoughby Wade (Brit. Med. Journ., 1869, ii., 644), in an infant fifteen months old, where a splenic tumour disappeared within fifteen months; but no other details are given respecting the state of the blood or the treatment adopted.

‡ Die Contraktilität der Miltz. Berlin, 1874.

DR. PETER, of St. Antoine Hospital, mentions having seen the use of a bath produce most mischievous effects in pelvi-peritonitis. He explains the fact in the following way:—On entering the bath, and in order to stride over the edge of it, the woman makes a violent movement, which destroys some of the adhesions established around the internal genital organs, and this rupture becomes the starting-point of a new onset of peritonitis.

HEALING OF WOUNDS BY BLOOD-TISSUE.

BY JOHN CHIENE,
ASSISTANT-SURGEON, EDINBURGH ROYAL INFIRMARY.

> "The blood being alive, this uniting medium becomes immediately a part of ourselves, and the parts not being offended by it, no irritation is produced."—JOHN HUNTER (chapter on Union by the First Intention).

THE organisation of an accidental blood-clot in open antiseptic wounds in Mr. Lister's practice and in cases under my own care, first suggested to my mind the propriety of trying to heal a recent open wound by filling, at the time of the operation, the cavity with blood, which would coagulate, become organised, and which in time would become covered with epithelium. The expectation was that less contraction would follow if the wound healed by blood-tissue than if it was allowed to granulate and heal by cicatrisation.

A young man suffering from a horn on the point of the heel was admitted into the surgical clinical wards in the Edinburgh Royal Infirmary in April last. The case appeared a suitable one for the experiment, because the situation and nature of the wound which would require to be made in order to remove the horny projection was such that union by the first intention was unattainable, and if the wound was allowed to granulate and heal by cicatrisation and contraction, like an ulcer, the result would be drawing up of the heel and deformity and lameness in walking. The horn had been removed twice previously, but had again grown. At one of these operations the healing of the wound was assisted by the organisation of an accidental blood-clot. The horn now projected from the surface to the extent of the third of an inch, consisting of layers of horny epithelium, and had a circular base nearly the size of a shilling.

On the 18th of April, 1875, a tourniquet was applied, and the horn removed; the resulting wound was triangular in shape, each side of the triangle being an inch and a quarter in length. The soft tissues down to the bone were removed, and the surface of the os calcis scraped with a periosteum scraper. The cavity was half an inch in depth. No vessels were tied. A piece of protective was placed over the opening in order to close it, and the usual antiseptic dressing applied. The tourniquet was then removed. The expectation was that blood pouring from the sides and floor would fill the cavity. The operation was performed under a spray of carbolic acid. On the following day the wound was dressed, and it was found that, with the exception of a shallow depression at one corner, the entire cavity was filled with dark clot. This was not disturbed, and the dressing carefully reapplied. On the sixth day the clot was of jelly-like consistence, and still of a dark colour. On the twelfth day the clot was of firmer consistence, and of a dark-brown colour. The clot did not bleed when scratched. On the sixteenth day the superficial portion of the clot, which corresponded to the depth of the thickened horny epithelium of the heel, liquefied, and came away in the discharges. The surface of the clot was now on a level with the deepest layer of horny epithelium. It bled when scratched at its centre, and the escaping blood filled a slight groove on the surface of the original clot. On the twenty-sixth day the original clot was distinctly vascular, and on its surface the secondary clot (the result of the scratching of the original clot on the sixteenth day) was observed of a dark colour, and adherent to the original clot. This secondary clot passed through the same changes as the original clot; the changes were, however, more rapid, in consequence, I presume, of its smaller size. On the thirtieth day the sharp-defined edges of the original wound in the horny epithelium had disappeared, and an epidermic formation was observed on the surface of the clot at its edges. On the thirty-fourth day the wound was healed, the blood-clot being entirely covered with epithelium. The triangular wound was still distinctly marked, and no contraction had taken place. No attempt was made by bandaging or splints to prevent contraction during the cure.

The patient was shown at the June meeting of the Medico-Chirurgical Society of this city. It has yet to be seen whether contraction will take place. The practical value of this method of healing wounds by blood-tissue has yet to be tested by further experiment. The case is, however, worthy of record: first, because, as far as I am aware, it is the first in which a systematic attempt has been made to utilise blood as a tissue for the filling up of an open wound. At present it seems to verify the quotation from John Hunter with which this short paper is headed. Secondly, because it is a practical lesson, teaching the slight amount of irritation in wounds treated antiseptically; it is a visible picture of the unseen changes which take place in a subcutaneous blood-clot as in a simple fracture.

Edinburgh.

NOTE ON

DR. HARVEY'S COMMUNICATION "ON THE PHYSICAL CAUSE OF THE PRESYSTOLIC MURMUR."

By W. T. GAIRDNER, M.D.

Had the recent paper of Dr. Harvey,* under the title given above, been less pointedly directed to the refutation of what I have published on the subject to which it refers, I should probably have waited until my own engagements and the less crowded state of the columns of The Lancet allowed of a reply more at length, and less controversial in form, than the present. But, with every possible respect for the high character and just reputation of my friend's many and valuable contributions to physiology and pathology, I must be allowed to say that I think the answer (so far as immediately required) to his present questioning lies in a nutshell, and I will therefore ask for so much space as will admit of this brief rejoinder.

In the first place, it appears that Dr. Harvey's doubts (as expressed in the second paragraph) extend considerably beyond the question raised by the title of his paper; for, not content with a statement of difficulties as to the *physical cause* of the presystolic murmur, he frankly confesses that he has never been able to hear the murmur itself, even in cases in which others have heard it. Not being able, therefore, either personally to verify the facts as stated by me, or to accept the explanation given, Dr. Harvey has, not unnaturally, been led to discredit the murmur altogether. It would certainly be vain to attempt to satisfy him as to the physical cause of a phenomenon of whose very existence he remains, after many years of investigation, still a little more than doubtful. I am almost astonished that he did not, under the circumstances, dismiss the inquiry into the cause of the presystolic murmur as irrelevant, and confine the scope of his paper to the discussion of the fact. For by raising hypothetical difficulties about the theoretical interpretation of the facts stated by me he certainly makes it appear as though the very existence of the murmur were as hypothetical and as much in dispute as the interpretation of it.

Now, in everything that I have written upon the subject of what I have called the *auricular-systolic* murmur, I have at least intended that it should appear clearly as a matter not of belief nor of theory, but of most positive and direct observation, that a murmur *distinctively preceding and running sharply up to the first sound of the heart* may, in certain cases, be easily verified, and distinguished from all other endocardial murmurs. Further, that the murmur of which the above is the most characteristic expression is often associated with murmur, of more or less intensity, *extending from the second sound through the pause*, but still subordinate in its importance to the auricular-systolic murmur as above described. Further, that all the murmurs now indicated, and especially the auricular-systolic, which gives the character and significance to the others, have been, by steady continuous observation over a long series of years, shown to be present—then and then only—when there are organic changes in the endocardium appreciably obstructing the flow of blood through the auriculo-ventricular orifices.†

I would earnestly beg my friend Dr. Harvey, and with him all others who may be disposed to write about these murmurs in the way of controverting or impugning what I have written, to do me the favour to discuss these points, in the first instance at least, as questions of fact, and not of hypothesis. If the statements above briefly given are not statements of fact and of direct clinical observation, we need not be at the trouble to find a theory or a *rationale* of them; we may simply say, *cadit quæstio*. But if these statements, considered simply from the point of view of experience, are true; if they are real and accurate expressions of what has been actually observed,—then it is vain to attempt to overthrow or to discredit them by reasonings such as those which constitute the bulk of Dr. Harvey's paper.

Now, I contend that these statements are, every one of them, and all of them together, the simple and absolutely unqualified expression of facts observed by myself and others, not in one or two, but in scores, or perhaps hundreds, of cases, many of them tested and completed by post-mortem examination.

When I have said thus much I by no means wish to deny that the observation of the murmur in question derives great additional interest from the reasonings that naturally arise as to its causation; but I do most earnestly protest against these reasonings being placed in advance of the determination of the objective facts—which, apart from any reasonings at all, are to me as nearly as possible absolutely certain; being the result of multiplied observations, secured in every possible way against fallacy. Dr. Harvey has in his paper endeavoured to raise a presumption against my statements, on the ground that, from his point of view, these statements *ought* not to be true; my answer is that these statements *are* true, and that in any reasoning on the subject we must first have determined by observation whether they are so or not. I cannot allow the auricular-systolic murmur, which I regard as a clearly ascertained and demonstrated clinical fact, to be caught up in a mere sidewind of doubtful doctrine as to the assumed power, or want of power, of the auricular contractions to produce such a murmur. I believe, indeed, that Dr. Harvey greatly undervalues the importance, and also the completeness and force, of the auricular contractions; but it is to be observed that, in calling this murmur auricular-systolic, I have not even affirmed that it is *due* to the auricular systole, but only that it *concurs in point of time with it*; just as the ventricular-diastolic murmur is so named from its coinciding with the ventricular diastole, although its actual cause is usually the recoil of the blood in the aorta upon the incompetent sigmoid valves. That the murmur is, in rhythm and in fact, auricular-systolic, is admitted by all, or almost all, those who have recognised it as presystolic—by such observers, for example, as Dr. Peacock (who at first had difficulties in recognising the murmur, but now affirms in every point the facts as above stated), Dr. Walshe, Dr. Hilton Fagge, and Dr. George Balfour.

Such being the state of the question of fact, is it too much to infer that Dr. Harvey, in putting together his reasonings and assumptions as to the degree of force and effectiveness of the auricular contraction, ought to have given increased attention to the established and well-known characters of the murmur, instead of making his preconceived notions on this subject a ground for discrediting the existence of the murmur? Such, I am persuaded, will be the opinion of most of those who have personally ascertained and studied for themselves the murmur in question. What we have to deal with, in any theoretical inquiry into the subject, is *a murmur of variable intensity and prolongation, which occurs while the ventricle is filling, and is characteristically rough and loud just before the ventricular systole*—i. e., during the period that physiology assigns to the contraction of the auricles. Whether the auricular systole is forcible or feeble, complete or incomplete, expelling a few drops only or a considerable current of blood, are questions fairly to be entertained, and of no small physiological interest; but, from the clinical point of view, I have to urge that these questions must in any case be so entertained as not to set aside or to discredit the facts above mentioned, but rather to include and comprehend them. And at this point I leave the discussion for the present, to resume it ere long, I trust, in a less controversial attitude. I would, in the meantime, recommend to Dr. Harvey's serious attention the admirable article by Dr. Galabin, in the recently published number of Guy's Hospital Reports. Indeed, I am satisfied that the more this curious murmur is studied, the more will it throw light upon some of the obscurest points in cardiac physiology and pathology.

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* The Lancet, June 12th and 19th, 1875.

† Clinical Medicine, 1862; pp. 574-75 and 597-99.

Glasgow.

INTERESTING CASE OF INJURY OF THE SACRO-ILIAC JOINT OCCURRING IN A CHILD FOUR YEARS OLD.*

By JOHN FAGAN, F.R.C.S.I.,
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Eleanor D——, aged four years, was admitted, under my care, into the Children's Hospital, on February 4th, 1875. She presented a most wretched, wan, and pinched appearance; her countenance wore the characteristic expression seen in a child that is exhausted with intense suffering. On examination, I found the left gluteal and sacral regions enormously swollen and of a dark purple colour, the integument tense and glistening, and large tortuous veins ramifying through it. There was well-marked fluctuation in it, and at one place the skin seemed on the point of breaking.

The history I got from the mother was as follows. About three weeks previous to her admission the child was in perfect health, till one day, standing on a stool placed on top of a box, the lid being old, it gave way, and she fell through with the stool into the box, sustaining an injury somewhere about the hip. The medical man who was treating the case thought it to be one of hip disease, and, seeing it assume the very serious character it did, recommended the mother to take it to the hospital.

The treatment I employed in this case was as follows. After giving the child some wine, I introduced the needle of the aspirator into the abscess where the skin was soundest, and drew off about fourteen ounces of thin unhealthy pus; this relieved the tension very much, and I should say removed about half the quantity of fluid from the sac. The child was then put to bed, and got for nourishment six ounces of wine, an ounce of brandy, two eggs, and milk *ad libitum* in the twenty-four hours. The next day I again used the aspirator, and removed nearly as much pus of the same character as the day before. The nurse drew my attention at this stage to a small lump in the groin, which looked and felt somewhat like an enlarged gland. In a few days this got much larger, and conveyed a distinct sense of fluctuation. The use of the aspirator on two occasions, taking away about three ounces of pus the first time and an ounce and a half the next, completely removed the swelling. On the 24th of February, just twenty days after her admission, I required to use the aspirator for the last time. For several days previous to this the swelling in the groin had disappeared, and that over the sacrum was getting less. In all I used the aspirator nine times, and removed about sixty ounces of pus. After emptying the abscess on the three or four last occasions, the walls of the sac collapsed, leaving a deep sulcus between the prominent spinous processes of the sacrum and posterior border of the ilium. This I padded with cotton-wool, and used slight pressure by means of strips of adhesive plaster and a bandage round the pelvis. On the 8th of March the child was sent home quite plump and fat, and able to trot about without the slightest indication of lameness.

This case I consider interesting from a threefold point of view: its diagnosis, prognosis, and treatment. Acute inflammation of the sacro-iliac joint is, I believe, a very rare affection, probably due to the fact that its position in the body renders it less liable to be exposed to the many causes that give rise to inflammation in other joints, as also to the fact that it is the nearest approach to an immovable joint. That it is more likely to occur in childhood is owing no doubt to this joint possessing a delicate synovial membrane during that period, and consequently apt to take on inflammatory action when subjected to any undue violence. That the suppuration about the joint was the result of the injury sustained by the child when she fell through the box there can be no doubt, but the exact nature of the affection was a very puzzling point to make sure about, at least when first I saw the child. As I pointed out to some students who were present when the child was admitted, there were symptoms about the case that would warrant one in diagnosing it as a case where the hip-joint or sacro-iliac joint was engaged, or a severe contusion of the muscular structure about these parts, or a combination of all three. Although the case was treated by a medical man as one of hip-joint disease (according to the mother's statement) there were but very few symptoms pointing to that condition, and those of a character that might arise from other causes. The thigh was flexed on the pelvis and adducted, and there was great pain on attempting to rotate the limb—symptoms likely to be present in disease of either of the joints; while the position of the abscess, the rapid course of the affection, and most particularly the absence of pain when the great trochanter was pressed upon, gave the strongest presumptive evidence that the hip-joint was not the seat of lesion in this case.

The opinion I expressed at the time was, that it was a large abscess resulting from a severe contusion of the muscular structure, and as the child suffered great pain when the sacrum or ilium was pressed upon, that probably there was some inflammation of the sacro-iliac joint. A few days afterwards the appearance of the swelling in the groin confirmed my diagnosis. The matter made its way from the joint under the iliac fascia, and, following the course of the iliacus muscle, made its appearance at the site usually occupied by a psoas abscess.

As regards prognosis, I was at first disposed to give a most unfavourable one, and would look on the case as hopeless but that I had great faith in the recuperative powers of children when placed under favourable conditions. The rapidity and completeness of the cure in this instance would dispose me to give a favourable prognosis in cases of an acute character, with some reservation, however, as all such might not be expected to terminate in so satisfactory a manner as the one under consideration. I have met with cases of disease of this joint occurring in ill-conditioned strumous children, some of which I have under my observation at present, and hope to give the history of them at some future time. The prognosis in their case must naturally be of the most gloomy character.

The treatment I employed was rest, stimulants, light nutritious food, and the use of the aspirator. Of the latter instrument I cannot speak too highly. In cases such as the one I have just described it is invaluable. I have now been in the habit of using it constantly for the past three years, and can safely say that it has never done any harm; that it may occasionally disappoint one, but that in the majority of suitable cases it is the only instrument a surgeon should use who studies the well-being of his patient, as well as his own comfort.

CASE OF PULMONARY COLLAPSE CAUSED BY HÆMOPTYSIS; DIFFICULTY OF DIAGNOSIS.

By MARK LONG, M.D.

Feb. 17th, 1875.—Late last night, my partner, Dr. Gibbings, saw for me Miss G——, who had expectorated a large quantity of florid blood. She is twenty years of age, well nourished, robust-looking, and of rather florid complexion. She has had no cough or other illness, nor has she lost flesh recently. Indeed she has not needed medical advice since she first came under my care about two years ago. She was then suffering from debility and shortness of breath, which I found to be due to valvular cardiac disease. Her last illness before this was about three years previously, when she had a severe attack of typhoid fever. There is no trace of consumption on either her father's or mother's side. I found her to-day looking anxious and depressed, and still bringing up small quantities of bright blood, with a slight but frequent cough. She is taking a mixture containing liquid extract of ergot and gallic acid, ice, and cold fluid nourishment. The old loud presystolic murmur is audible over the greater part of the left side of the chest, and large crepitation is heard in both lungs anteriorly.

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* Read before the Ulster Medical Society.

March 2nd. — The hæmorrhage gradually subsided, and had for some time quite disappeared, until last night, when, after a violent fit of coughing, she brought up about eight ounces of blood.

3rd.—Small quantities of florid blood are expectorated each time she coughs. Pulse 100. Heart's action rather tumultuous. Ordered a belladonna plaster.

4th.—The blood now brought up is rather darker, but still bright. Pulse 96. Heart's action rather quieter. On inspecting the chest, a distinct sinking is apparent under the left clavicle; all the upper part of the left lung is absolutely dull on percussion, and is nearly motionless on the fullest inspiration, in marked contrast to the right side, which is quite resonant and expands freely. No respiratory murmur can be heard in the supra- or infra-clavicular region on the left side, but loud bronchial breathing is audible in one spot to the left of the sternum in the infra-clavicular region. Dr. Munk saw the case with me to-day in consultation, and fully confirmed the presence of the above symptoms. He suggested the administration of five minims of tincture of digitalis and ten minims of the liquid extract of ergot, three times a day.

5th.—No alteration in the physical signs. Pulse 100; temperature 99·8°.

6th.—Brought up some very dark blood this morning. Dulness unaltered; no vesicular murmur; slight expansion on inspiration.

7th.—Dulness not so absolute; slight respiratory murmur; expectorated more dark blood.

8th.—Vesicular murmur rapidly increasing, and dulness diminishing; more dark blood brought up.

19th.—Since last date the patient has steadily improved, and there is now no infra-clavicular sinking, and no difference can be detected between the right and left apices with regard to percussion note, vesicular murmur, or expansion during inspiration.

Remarks.—This case was a most interesting one from a diagnostic point of view, and also with regard to prognosis, as the patient's friends were most anxious for a positive opinion as to the presence of lung disease, and Dr. Munk and myself could not venture to give more than a guarded one. All the local physical signs of phthisical consolidation were present, and, upon any other supposition, it was difficult to account for them all, especially the infra-clavicular sinking, which was very marked; but considering the very good family history of the patient, and her condition for some time previous to the attack, I formed the opinion that there must be some other explanation. Pneumonia would have accounted for all the other signs, but not for the infra-clavicular depression; the same may be said of "pulmonary apoplexy." I was therefore led to the conclusion that most probably collapse of the upper part of the lung had been caused by the frequent expirations of a violent fit of coughing nearly emptying the pulmonary air-vesicles, and by a sudden inspiration then sucking a quantity of blood or perhaps a clot into the main bronchus, and thus shutting off the air from the vesicles beyond it. Such an occurrence would account not only for all the signs due to consolidation, but also for the sinking of the thoracic wall, which was of course more evident from its proximity to the unyielding clavicle. I think the progress of the case proves the correctness of this opinion, as the abnormal physical signs gradually disappeared according as clots of dark blood were expectorated.

The above case seems to me to be worth publishing, first on account of its diagnostic interest, and, secondly, because I have not found hæmoptysis mentioned as even a possible cause of pulmonary collapse in any of the books I have at hand, and I have consulted Aitken, Tanner, Watson, Walshe, and Niemeyer.

Amhurst-road, Hackney.

Vivisection.—The Royal Commission on Vivisection held a preliminary meeting in one of the Committee-rooms of the House of Lords on Wednesday. There were present:—Viscount Cardwell (chairman), Lord Winmarleigh, Mr. W. E. Forster, Sir John Karslake, Mr. J. E. Erichsen, Mr. R. H. Hutton, and the secretary, Mr. N. Baker.

A Mirror
of
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF SLOUGHING OF ARTERIES.

(Under the care of Mr. Heath.)

Though the two following cases—for the notes of which we are indebted to Mr. J. R. Godlee, surgical registrar—both terminated fatally, they have one point in common which is of some rarity and interest, and worthy to be placed on record. In both instances considerable sloughing of the principal artery of the limb took place, leading to secondary hæmorrhage; but in neither case was the bleeding so great as to be the immediate cause of death, and in the first case the hæmorrhage occurred only once, sixteen days before death.

J. B——, a woman aged twenty-eight, was admitted on Feb. 3rd, 1875, with a small cystic tumour on the outer side of the leg, three inches below the knee-joint. It was first noticed a year before, and had on one occasion been emptied by an aspirator, when a transparent sticky fluid escaped. The cyst was removed by Mr. Heath on Feb. 24th, when it was found to have a very thin wall, and to contain a glairy, clear fluid, closely resembling that which forms the contents of an ordinary ganglion. No difficulty was experienced in the operation, the connexion between the walls of the cyst and the surrounding tissues being at no part at all firm. Silver sutures were placed in the wound and a dry dressing applied, but in three days (Feb. 27th), after a slight rigor, the temperature had risen to 103·4°, and an angry blush, accompanied by great œdema, occupied the leg, while the glands in the groin became enlarged and painful. The pain was most severe around the knee-joint, especially on the inner side and in the popliteal space; but though a considerable amount of fluid occupied the joint at one time, none could be discovered in the first few days. By the 18th of March the sense of fluctuation in the knee-joint itself was no longer perceptible; but it became clear, as indeed had been suspected for some time, that there was a collection of matter at the inner part of the thigh. About two ounces of pus were removed with the aspirator, and on the 20th of March a free incision on the outer side of the limb gave vent to about four ounces of dark pus, and showed that there was an extensive abscess beneath the muscles surrounding the bone. The temperature had up to this time kept at about 101°, and the patient was already much exhausted. After the opening of the abscess the discharge became very profuse, and the weakness of the patient increased proportionately; she assumed a sallow and careworn appearance, was unable to take her food, and emaciated rapidly. The temperature varied from 98° to 103°, but was often high. On the 26th of April death occurred; but before this three important facts had been observed. On the 25th of March it was noticed that on holding up the limb by the heel great distortion occurred at the knee, and that the leg could in fact be bent at a very considerable angle with the thigh either forwards or laterally; on April 10th very copious hæmorrhage took place from the incision, which appeared to be arterial, and was stopped by a solution of perchloride of iron; and lastly, on April 20th, it was noticed that several of the toes were becoming gangrenous, and that no pulse could be felt either in the anterior or posterior tibial artery.

At the post-mortem examination the knee-joint was found to be completely disorganised, and to communicate by several openings with the large abscess in the thigh, which burrowed beneath the muscles in all directions, and joined the incision made in the removal of the tumour. The tibio-fibular articulation, though much inflamed, did not appear to be opened. The popliteal artery lay exposed in the abscess behind the knee, and, owing to the deformity of the joint, it lay over the most prominent part of the internal condyle. At this point its anterior wall had been completely eroded for a full inch. The deficiency extended up to within one-eighth of an inch of a large branch on the inner side, and this one-eighth of an inch of the main vessel was plugged by a minute clot, which was all that for 16 days had prevented hæmorrhage from occurring from this vessel. Below the erosion the lining membrane of the artery was much thickened, and the vessel was occupied by a very soft, breaking-down clot, nearly an inch long. The examination revealed no other points of interest beyond pneumonia and pleurisy on the right side.

The second case is that of an engine-driver, above the middle height, and of remarkably healthy appearance and good muscular development, who had suffered from a very chronic disease of the elbow-joint, with sinuses, which had apparently resulted from a blow received in following his occupation. The history of the illness may be thus briefly summed up:—Pain and swelling for eight months, with applications of iodine externally *secundum artem*; manipulation of the joint by a bone-setter without any improvement; continuation of his occupation for nearly two years, at the end of which time abscesses formed; then followed a period of eight months during which he suffered twice from erysipelas and was unable to work at all. At the end of this time, when he was admitted into the hospital, March 11, 1875, there was almost complete anchylosis, the movements of flexion and extension being only possible through an angle of 2° or 3°, and pronation and supination being altogether lost. The movements, as far as they were possible, caused no pain, and when completed a dead lock seemed to be arrived at. The joint was enlarged but free from heat, and there was much wasting of the limb.

On March 17th Mr. Heath forcibly flexed and extended the elbow, with the result of breaking down many adhesions and restoring a considerable amount of mobility. The immediate result, however, was the lighting up of a very sharp attack of inflammation in the limb, with great swelling and redness, possibly of an erysipelatous character, which resulted in the formation of several abscesses round the joint, requiring incision. The limb in the meantime was kept upon a hinged splint, and passive motion was practised at intervals. The result, however, was not satisfactory, and accordingly, on April 21st, Mr. Heath excised the joint. The operation was an exceedingly difficult one, partly on account of the rigidity of the soft parts outside the joint, but chiefly from the irregular enlargement of the ends of the bones from osteophytic growths. After removal, the bones were found to be covered with a thin layer of feeble granulations; the caries was quite superficial, but the articular ends were extremely dense. The wound was washed with a solution of chloride of zinc and stuffed with cotton wool, and the limb was placed upon a "Mason's" splint.

During the manipulations at the time of the excision a small rent had occurred in the skin over the front of the joint, and on April 26th, or 50 days afterwards, secondary hæmorrhage, considerable in amount, came from this opening, a little appearing at the same time from the excision wound. This recurred three times on April 28th, and, as it seemed probable that it was coming from the brachial, Mr. Heath enlarged the wound in the front of the joint, and tied the vessel, as was thought, above and below the point from which hæmorrhage was occurring. On April 30th, however, the bleeding recurred, and accordingly Mr. Heath enlarged the wound again, and tied the brachial artery just below the middle of the arm; but though the bleeding stopped for the time it again recurred on May 2nd, and on this occasion Mr. Heath amputated the arm in the middle third; the patient, however, who had been much reduced by the loss of blood, never rallied, but sank in the course of a few hours.

Some days before death pleurisy on the left side was diagnosed.

At the post-mortem examination the condition of the brachial artery was remarkable. The body was very anæmic. The vessels in the amputated limb were first examined, and were found to be normal in position and size. Of the two ligatures first applied, the lower surrounded the artery, but the upper enclosed a mass of sloughy connective tissue on the anterior surface of the vessel, and so had drawn considerably nearer the lower ligature than it had been previously. At two points—one immediately above the lower ligature and one a little above the upper—the front of the artery was grey and sloughy, but no actual hole in it could be discovered; no large branch came off in the immediate vicinity of these ligatures. Just below the lower ligature the anterior wall of the artery had completely disappeared by sloughing for about an inch, at the lower part of which space the vessel bifurcated, so that the mouths of the radial and ulnar arteries practically opened into a sinus which led up to the wound by the side of the artery. The interosseous and the smaller arteries about the joint came off quite naturally. There were no clots in the brachial vein, which was healthy. The third ligature was fairly round the artery, and immediately below it the anastomotic branch came off. The inferior profunda paired with the ulnar nerve as usual. The vessel which looked like a second brachial during the amputation was a contracted but large vein. The wound in the front of the arm communicated by a narrow sinus with the excision wound.

The following explanation of the events described in the notes is suggested:—1. The bleeding probably always came from below the point of the lowest ligature, but was directed up to a point opposite the interval between the first two ligatures by the comparatively small sinus into which the ruptured vessel opened. 2. After the first ligature was applied, recurrent circulation would be supplied by all the anastomoses round the elbow not interfered with by the operation of excision; and, after the third ligature, by the superior profunda with the radial recurrent, and the inferior profunda with the posterior ulnar recurrent (the anastomotic being now cut off). 3. It is not easy to explain the arrest of the hæmorrhage by the second ligature, which did not embrace the artery; but it is probable that a very slight movement of the arm (unstable as it is after excision) may have caused the end of one bone to compress the vessel from which the bleeding was taking place.

The other post-mortem appearances of interest consisted in distinct pyæmic abscesses in the lungs, liver, and one kidney, with localised empyema on the right side as the result of the bursting of one of the abscesses.

LONDON HOSPITAL.

NOTES OF CASES OF DISEASE OF THE NERVOUS SYSTEM.

(Under the care of Dr. HUGHLINGS JACKSON.)

Migraine, Chorea, and Rheumatism.—Dr. Hughlings Jackson has been struck by the intimate relation there seems to be between chorea, migraine, and rheumatism — a relation which he believes was pointed out by the late Dr. Anstie. It is seen in several ways. Patients who have chorea are found to be subject to severe paroxysmal headache, not often, however, preceded by ocular spectra. In several recent cases of unusually severe migraine, Dr. Hughlings Jackson has found that the families of the sufferers have been subject to rheumatic fever. In patients recently admitted into the London Hospital for rheumatic fever a fair proportion have been subject to headache, but the facts gathered from the few patients as yet interrogated are vague and inconclusive.

During a period of rather more than a year Mr. G. E. Herman worked with Dr. Hughlings Jackson on the clinical history of chorea. Notes of seventy-six cases were taken. As regards headache, it appears that fifty-three of the patients suffered from paroxysmal headaches. In four information about headache could not be, or was not, obtained. Out of the fifty-three headaches, thirty-one were constantly attended with nausea or vomiting. In fourteen there were ocular phenomena—temporary amblyopia or spectra. In eleven there was giddiness.

On Recovery from Double Optic Neuritis; no Amaurosis.—It is well known, or ought to be, that optic neuritis may exist in a patient who can read the smallest type. There are two patients in the hospital now who have severe neuritis, great swelling with effusions of blood, whose sight, so far as they know, and so far as reading goes, is quite good. Such cases are very common in physicians' practice, and Dr. Hughlings Jackson never tires of insisting on the great clinical importance of the facts they show. It is not even an exaggeration to say that neuritis is in physicians' practice far commoner with good or only slightly impaired sight than is absolute amaurosis from any cause.

It is to be observed, also, that optic neuritis may *pass away leaving sight good.* The following is a case of recovery from optic neuritis. It is not a case of recovery from amaurosis, for there was no defect of sight at any time, except, of course, the confusion of vision due to the palsies of the sixth nerve. A man twenty-eight years of age attended as an out-patient Dec. 4th, 1871, for complete deafness of the left ear, slight deafness of the right ear, almost complete palsy of the left sixth nerve, paresis of the right sixth, very trifling weakness of the superficial muscles of the left side of the face, and irregularly distributed numbness of both sides of the face. There was no paralysis of the limbs. These symptoms were probably owing to intracranial syphilis; they rapidly passed off under the use of iodide of potassium in large doses. For this reason the case is one of practical interest. Such a *medley* of symptoms is very significant of intracranial syphilis. But there is one matter of still greater importance. The patient had acute and severe double optic neuritis, and yet had no defect of sight. The neuritis was passing off when the patient ceased to attend, but being written to he presented himself in October, 1872. He was quite well. He could then, as before, read No. 1½ Snellen easily. To indirect examination no abnormality was discoverable in his discs; to direct examination the changes were trifling, only such as are frequently seen in patients who have no cerebral symptoms.

It may be objected that in this case the neuritis itself was syphilitic; but it differed in no obvious way from neuritis the consequence of glioma. Dr. Hughlings Jackson always gives large doses of iodide of potassium in cases of acute and recent optic neuritis; but for the very reason that he *always* gives this drug he is unable to declare whether the recovery is really due to medicament. His impression is that it is due to the drug, and therefore he does not feel justified in omitting it in any case. He believes there would be less blindness than there is if neuritis were discovered earlier and treated vigorously.

NEWCASTLE-ON-TYNE INFIRMARY.

NOTES ON A CASE OF CANCER OF THE STOMACH.

(Under the care of Dr. Byrom Bramwell.)

John H——, aged twenty-nine, was admitted on the 29th October, 1874, complaining of difficulty in swallowing, shortness of breath on exertion, emaciation, and debility. The patient stated that for some years he served in the army, that lately he had been working as a miner (after his death it was ascertained from his friends that he had been for some time engaged as a prize-fighter, and that he had on one occasion received a severe blow beneath the belt). Until his present illness commenced he enjoyed excellent health. Thirteen weeks ago he got cold while working in a damp pit, shivered, became feverish, and began to cough. These symptoms were soon followed by a pain in the abdomen and a catch in the breath. At the end of a week he experienced some difficulty in swallowing. He had been gradually getting worse and had rapidly lost flesh.

On admission he was sallow and emaciated; the left pupil was slightly larger than the right. He complained of pain and tenderness on pressure in the epigastric region. No tumour could be felt. It was difficult to make a satisfactory examination, as the abdominal walls were very hard and tense. On inspection the abdomen looked natural. On percussion there was dulness in the epigastric and left hypochondriac regions. Patient complained of difficulty in swallowing; the food, he said, seemed to stick at a point corresponding to the lower end of the sternum. The obstruction was not constant; sometimes he swallowed a piece of meat quite well, at other times water choked him. When the bolus of food or mouthful of water did go down it caused him to take a sudden gasp. After eating he felt a weight and fulness in the epigastrium. He never vomited. The appetite was good, tongue clean, bowels regular. A faint systolic murmur was heard in the pit of the epigastrium, intensified on pressure. Liver dulness measured 3½ inches. He complained of cough and shortness of breath. No physical signs of disease in the circulatory or respiratory organs. Radial pulse 80; respirations 20; temperature normal; urine, sp. gr. 1010, acid, light-coloured, slight mucous deposit, containing a little pus, trace of albumen. He was ordered a tonic mixture, and the ordinary diet of the house.

Nov. 3rd.—Difficulty in swallowing gone. He thinks he is a little better.

8th.—Swallowing worse than ever. Feels uneasy after eating; is much troubled with wind. To have a mixture containing bismuth, aromatic spirits of ammonia, spirits of cinnamon, and infusion of calumba. Urine normal.

16th.—Shortness of breath on exertion worse. The respiratory murmur is faintly heard over the left base, and there is here some dulness on percussion. A few sibilant râles are heard over the rest of the chest.

18th.—Complains of great pain and tenderness in the left hypochondrium and in the epigastric region. The abdomen is distended, tympanitic on percussion, except over the painful part. The bowels have been freely opened. To have two grains of opium three times a day until the pain is relieved.

19th.—No better. Complains to-day of tenderness on pressure in the left lumbar region. Urine: sp. gr. 1030, no albumen, a trace of sugar, a few pus-cells and oxalates.

23rd.—Feels and looks worse; the slightest pressure over the upper part of the abdomen causes intense pain.

27th.—At 10 P.M. last night was attacked with severe pain in the upper part of the abdomen; the pain was relieved by a large opiate. Bowels have been three times opened; he passed some lumps of matter which looked like fat. Hepatic dulness now measures five inches. Is very thirsty; tongue dry and furred; the dulness over the base of the left lung is more marked; vocal resonance and the respiratory murmur are very faintly heard over the dull area.

Dec. 3rd.—No better. The feet and ankles are slightly swollen. Urine contains a decided trace of sugar; no albumen.

6th.—Severely purged; the matter passed was liquid, of a dark colour and very offensive smell.

11th.—Vomited a quantity of very offensive-smelling dark liquid, which under the microscope was seen to consist of blood, pus, and much granular and molecular débris.

12th.—The vomiting and purging still continue, in spite of all treatment. The matters passed are of the same dark colour and offensive odour. The patient died at 8 P.M.

Autopsy, forty-two hours after death.—The body was much emaciated. The peritoneal cavity contained a considerable quantity of offensive pus; the peritoneum was coated with recent lymph; the intestines were bound together by recent adhesions. The stomach was firmly attached by its sides and posterior wall to adjacent structures. On opening the organ, a ragged, black, fungoid-looking mass, the size of a child's head, was seen projecting into and almost filling the cavity; the fungoid growth sprang from the posterior surface of the organ; the base or attached margin was hard and indurated, fully the size of the palm of the hand; the coats of the organ were thickened for a considerable distance round the tumour. At the point where the organ was adherent to the liver the coats were very much thinned, and it was here apparently that the peritonitis had commenced. The œsophageal opening was situated beneath the tumour, in direct contact on its right side with the indurated mass forming the base of the tumour. There was no narrowing of the orifice, but the projecting fungoid mass completely overlapped the opening, and closed it in a valvular manner; in contact with the posterior surface of the organ was a mass of enlarged glands; a chain of enlarged glands surrounded the aorta. The pancreas was enlarged and indurated; the spleen was large; the liver was pale and fatty; the other organs were healthy.

On microscopical examination the fungoid mass was found to be composed of fibrous tissue, bloodvessels, and cells of various forms—round, oval, pear-shaped, cylindrical—containing generally a single large nucleus and one or more nucleoli. The cells were for the most part rather less than the cells of healthy hepatic tissue. The bloodvessels and fibrous tissue formed villous-like projections; the surface of these projections was thickly covered by the cells. The same form of cells was found in great abundance in the enlarged glands in the pancreas.

Remarks.—The interesting features of this case are:—1. The age of the patient, twenty-nine. It is exceedingly rare to meet with cancer of the stomach in persons under thirty years of age. 2. The great extent of the disease in the stomach itself, and in surrounding structures. 3. The almost total absence of stomach symptoms—vomiting, &c. 4. The peculiar manner in which the projecting mass of tumour blocked up the œsophageal orifice, explaining the dysphagia and preventing vomiting. 5. The nature of the tumour. It had apparently been a solid cancer, which had undergone extensive softening and ulceration at its free margin, and was not a true villous growth. 6. The extensive peritonitis. 7. The close relation which the temperature bore to the pulse, the slightest variation in the one being accompanied by a corresponding variation in the other, as seen in the following table:—

Table of Temperature and Pulse.

Date.	Time of Day.	Temperature.	Pulse.
Nov. 28th	Morning	99·4°	83
	Evening	100·9	94
„ 29th	Morning	100·6	89
	Evening	100·2	84
„ 30th	Morning	100·3	94
	Evening	100·8	103
Dec. 1st	Morning	100·2	99
	Evening	99·2	91
„ 2nd	Morning	99·2	79
	Evening	100·2	88
„ 3rd	Morning	99·2	89
	Evening	98·8	82
„ 4th	Morning	98·7	82
	Evening	99·2	88
„ 5th	Morning	101	100
	Evening	99·8	90
„ 6th	Morning	100·2	97
	Evening	102·7	126
„ 7th	Morning	99·6	117
	Evening	102·7	126
„ 8th	Morning	101·2	116
	Evening	100·6	118
„ 9th	Morning	99·6	108
	Evening	100·5	107
„ 10th	Morning	99·2	98
	Evening	100·6	100
„ 11th	Morning	100·6	100
	Evening	100·1	98

Reviews and Notices of Books.

Clinical Lectures and Essays. By Sir JAMES PAGET, Bart., F.R.S., D.C.L. Oxon., LL.D. Cantab., &c. Edited by HOWARD MARSH, F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital and to the Hospital for Sick Children. London: Longmans, Green, and Co. 1875.

IT is too true that medical and surgical works of the practical but philosophical type are becoming with us more and more rare every year. With a few happy and notable exceptions, the crude theories and ignorant speculations of untrained observers and unskilful writers seem to have permanently taken the place of the learned but practical writings of the Coopers and the Bells, of Lawrence and Brodie, and of many others eminent in the various departments of surgery; and of Sydenham and Graves, of Bright and Addison, and others famous in the annals of English medicine. Book-writing has latterly almost degenerated into a mere trade; and to such a degree has the evil practice grown that a book (the smaller and the more ambiguous the better) has become in the eyes of the public almost as essential as the credentials of a legal qualification to practice and the brass-plate on the door. Persons worldly-wise do not scruple to advise a young man to write a book on something—it matters little on what—to catch the public and the professional eyes; nay, they even insist that, under the present conditions of competitive life, it is impossible to gain anything like rapid success without doing so. Hence the press literally teems with medical works, many of which are not worth the ink with which they are printed. But these effusions, doubtless, answer the great purpose for which they are really intended—namely, to act as a respectable mode of advertising and to entrap the credulous. The practice is not, therefore, likely to grow less spontaneously.

How different is the work now before us. Written by one who for long has been the acknowledged chief of English pathologists, and distinguished as a careful, well-educated, and painstaking surgeon, who has enjoyed one of the largest experiences of modern times, this book is of real worth. It is, indeed, difficult to decide whether to admire most the modesty and the simplicity of the author, the quiet and unassuming tone of the lectures, or the truth and accuracy of the clinical records, illustrated and illuminated as they are by a scientific and philosophical observation. Such a work by such a man is altogether beyond the pale of criticism. It is an authority we must at all times respect, even though we may not in every instance acquiesce in its judgments. We shall therefore briefly review some of the chief points of the book, which, it must be understood, consists for the most part of lectures that have already appeared in our columns or in those of other medical journals, and in the St. Bartholomew's Hospital Reports. Many of them are, doubtless, already well known to our readers. To these lectures, therefore, we need not refer beyond urging those who have not already read them to obtain them at once and study them carefully—for, clear and concise as they are, they require to be read carefully if we would enjoy them to the full,—and recommending those who have already read them to read them again.

The articles on "Nervous Mimicry," and on "Dissection Wounds," which appeared some time ago in our columns, will prove entertaining, even though every word be known by heart. At present, however, we would call attention more particularly to the article on "The Calamities of Surgery," and the suggestive "Notes for the Study of some Constitutional Diseases." In the former article Sir James Paget deeply but delicately probes the "surgical conscience," and points out many of the sins of commission and of omission into which surgeons, himself amongst the number, have fallen, and into which we are all liable to fall unless the greatest care be exercised. Of how small a matter may militate against the success of an operation, aye, even cause the death of a patient, Sir James furnishes several illustrations from his own practice, and from that of others. Every function of the body must be examined, all the details of the operation and of the dressings must be carefully and unremittingly attended to, and the closest attention must be paid to the personal hygiene of the patient. There is one subject on which Sir James touches which has more importance than is usually attached to it. It is that the surgeon should not operate in his own house. How many patients have died from the chill caught on their way home, and in how many instances has life been jeopardised by carelessness on the part of the patient after leaving the surgeon's house. More than this, we may add that there are prudential reasons personal to the surgeon that should deter him from operating in his own house. The patient may die from chloroform, or from fright, or from some other cause. Such a catastrophe has occurred more than once within the last few years.

The "Notes for the Study of some Constitutional Diseases" would be spoiled by being summarised. They must be read in their entirety to be properly understood and fully appreciated. Accepting the evolution theory, Sir James argues in favour of the modifications of diseases in hereditary transmission. He states, for instance, "that in members of cancerous families, not only recurrent tumours and rodent ulcers are much more frequent than in other families, but fatty tumours and harmless warts and nodular growths of skin may be explained on a theory of evolution of disease." With his usual caution he then "hazards a guess," "that the evolution of cancer in many generations may be studied in the whole group of hereditary diseases." Beginning in monstrosities by excess, differentiations from the normal type may show themselves in the form of simple overgrowths, or as innocent tumours, "thence to recurrent tumours composed of the same structures in embryonic forms, till genuine cancer is arrived at." But if there be *evolution* of cancer there may also be a process of *involution*, and some cases of recurrent and simple tumours met with in families in which cancer occurs, may perhaps be gradual reversions to the healthy type of shape and structure. Processes of evolution and of involution are probably always going on, so that those manifestations of cancer, gout, or tuberculosis which appear to be primary, may in reality be inherited. In fact, Sir James does not believe that any of these conditions can arise from any external conditions whatever, and independent of inheritance. We must confess that to our mind this statement requires considerable qualification. Passing by the considerations of evidence of inheritance, mutations of local and constitutional diseases, and the lesser signs of constitutional diseases, we come to an entertaining and instructive section on the discovery of constitutions by injury and disease. We should like to dwell on the thoughtful remarks concerning time in constitutional diseases, successions of constitutional diseases, and the coexistence and combinations of constitutional diseases, if it were not that they will not bear being summarised, but must be closely studied, and cannot be repeated except in the author's words.

The part performed by Mr. Marsh has been well done. The notes appended to the work are written by this gentleman, and enhance the value of the text if they cannot exactly be said, in the words of Sir James, to "amend the chief of my defects."

We need scarcely say that we heartily commend this excellent work to our readers.

The Pathological Anatomy of the Nerve-Centres. By E. LONG FOX, M.D., F.R.C.P. London: Smith, Elder, and Co.

THE labour which has been expended on pathological anatomy during the last twenty years has increased much our acquaintance with the minute processes which underlie disease, but in no department has it resulted in such substantial additions to our knowledge as in that of the nervous system. The microscopic research in other branches has added many new facts to those which were known before, but has left the chief landmarks of the science very much where they were. In the nervous system it has been different. Improved methods of microscopic investigation have added new regions to the field of study. We now know the pathological anatomy of many diseases of which twenty years ago nothing was known. Locomotor ataxy, the various forms of sclerosis, and we may add progressive muscular atrophy and infantile paralysis, are instances of sufficient point.

The field is a very wide one, and a conspectus by a competent hand of what has been done in it is a contribution to the busy worker not to be lightly valued. We welcome a work such as that which Dr. Fox has given us, which fulfils this object to some extent. It consists of lectures given either as part of the course on pathological anatomy at the Bristol Medical School, or as clinical lectures, and it is intended to bring together, the preface tells us, "in a convenient and readable form for the use of students and practitioners, much that is now scattered in publications of many kinds, as well as some of the pathological experience that has come in the author's way in the course of seventeen years of hospital work." The first part contains lectures on general pathological processes, while the second part gives an account of the mode in which these pathological results are grouped in certain conditions which symptomatically have received special names, and in it are included chapters on various individual diseases of the nervous system. The author has evidently studied carefully by practical observation and wide reading, and his account of each disease gives what is on the whole a fair account of the present state of our knowledge on the subject. The account, indeed, is in many instances almost too "fair," and little attempt is made to digest the detailed statistics and quotations which make up no small part of the work. The book, however, is readable enough, and will be very useful to those for whom it is immediately intended, but to the special student of the pathological anatomy of the nerve-centres it is somewhat disappointing. As a result of its origin, and contrary to what its title suggests, it is made up as much of clinical as of pathological description. The style of the book is in some places careful, but in others it hardly possesses that precision which is desirable in a scientific treatise, and frequently bears marks of hasty writing. We doubt whether the author would, on deliberate reflection, adhere to the general statement that "successive attacks of paralysis, quickly recovered from, afford almost certain proof of the existence in the brain of miliary aneurisms"; and it is hardly admissible, with our present terminology, to state that "convulsions depending upon epilepsy may be produced by tumours growing from the bone."

The first lecture is devoted to the various congenital abnormalities of the nervous system, and in the second abnormalities of the vascular system are described—cerebral aneurisms, embolisms, hæmorrhage, and congestion. Inflammations of brain and cord constitute the subject of the third lecture, including meningitis, simple and tubercular, and encephalitis. The account of these conditions is, on the whole, a good one, but the morbid appearances in simple spinal meningitis are undescribed, and so also are the various changes in the membranes which are consecutive to spinal caries, and which have of late been carefully investigated in Paris. Encephalitis is treated vaguely, and sufficient distinction is not made between the cases of true encephalitis and the numerous cases of supposed encephalitis which are really due to vascular disease.

Much of the information for which such a treatise as this will be especially consulted is that which relates to the various forms of degeneration of the nerve-centres, which underlie so many diseases, and constitute the subject of the fourth lecture. The essential differences which exist between the different degenerations of the spinal cord and brain are still, to a very large extent, undetermined. The author describes in separate sections "grey degeneration" and "sclerosis," but fails to find any essential distinction between them, and considers that both must be regarded as inflammatory in nature. Their microscopic characters are the same. In each there is disappearance of the white substance of the nerve-fibres, and sooner or later of the axis-cylinders, and with the destruction of the white substance the white tint of the cord disappears also. In each the connective tissue, which normally occupies so small a space between the nerve-fibres, increases, so as to come to occupy nearly the whole area of the diseased portion. The author does not corroborate the distinction between the two forms which has been based upon the minute microscopic differences of texture, number of nuclei, amount of fibrillation of tissue, &c., and apparently agrees with those who hold that in each form the connective-tissue change is the primary one, the destruction of the nerve-fibres being the result of their compression by the newly-formed connective tissue. It is probable that the real distinction between the different forms will have to be sought in other than histological characters. One remarkable feature is the distribution of some changes according to functional continuity rather than local contiguity—a difference which suggests an essential difference in the two processes of more fundamental importance than minute variations in structure.

The two succeeding lectures are devoted respectively to tumours of the brain and to delirium. It is apparently a consequence of the origin of the book in independent lectures that these two subjects obtain an equal space and the pathological anatomy of tumours of the brain receives somewhat scanty treatment. Glioma, a tumour almost confined to the nerve-centres, and of great pathological interest, is dismissed in a few lines of most imperfect description. Delirium, on the other hand, is treated with fulness, and the little that is known and the much that has been imagined of its pathological anatomy and of its pathology are fairly described. All forms of delirium are referred to changes in the vessels or blood as their cause, the idea of primary alteration in the nerve-centres being excluded. In the succeeding lecture, on Insanity, which contains a large number of statistics and facts gathered from various sources, a similar explanation is given for the various forms of mental derangement.

The chapters on Aphasia, Glosso-laryngeal Paralysis, Facial Paralysis, Locomotor Ataxy, and other special diseases, contain a good *résumé* of the results of modern research, but no original matter beyond a few illustrative cases. The author inclines to a limited belief in the embolic theory of chorea, but holds that it cannot explain all the phenomena of the disease, and especially its relation to an emotional cause. He thinks that some other condition must be invoked to explain its occurrence, and believes that such a condition will be found in vaso-motor spasm.

The few and insignificant changes which have been found in the nerve-centres in tetanus are quite inadequate to afford an explanation of that remarkable and terrible disease. The resemblance between the tetanic state and that produced by strychnine suggests the probability that the former, like the latter, is due to a blood state. Dr. Fox hints that the defective absorption of oxygen which has been found to be a character of the blood in strychnine-poisoning may exist also in tetanus, and the result may be that vaso-motor spasm easily occurs and produces the tonic spasms. A similar defective oxygenation of the blood is the author's explanation of many of the phenomena of the epileptic paroxysm. He doubts, however, whether it is simply the effect of defective respiratory movement in the earlier stages of the fit, and thinks it rather a primary blood state in which the malady really consists, and to this he does not appear to regard the phenomena of heredity as offering any substantial difficulty.

The work terminates with an account of the lesions that have been found in the spinal cord in some cases of small-pox and diabetes, and with an outline of the results obtained by ophthalmoscopy in diseases of the nervous system.

From Vineyard to Decanter. A Book about Sherry. By Don PEDRO VERDAD. London: Stanford. 1875.

THIS little book is what it professes to be—an account of the process through which the grape-juice passes on its way from the vineyard to the decanter. After pointing out the absurdity of a gentleman who wishes to augment a moderate income by entering the wine trade, thinking he can be a good judge of that which it requires years of experience besides a natural aptitude and delicacy of taste to appreciate properly, the author observes that during the first year or two extraordinary changes that have not hitherto been accounted for occur in wines, even when made from grapes of the same vineyard, and in all apparent respects treated alike. Hence they are divided into the fino, oloroso, and basto. These are then used for making the soleras or butts forming the foundation of any given class of wine, the finer kinds resembling a liqueur. The soleras are *natural* wines. The contents of the soleras are blended to form the ordinary pale, golden, or brown sherries, and Don Pedro gives the proportion of each commonly used. He strongly recommends the use of the natural wines, observing only that it should be drunk in coloured glasses, since it is not and cannot be always bright. A sensibly written little book.

Pocket Temperature Charts proposed for the Practitioner's "Visiting List." Suggested by Dr. FOSTER, Physician to the General Hospital, Birmingham. Salt and Son, Bull-street, Birmingham.

THIS book consists of a number of leaves bound up together, and punctured with a lineal series of holes at the attached margin to admit of their being detached separately. Each leaf has on one side the name, age, and disease of the patient, with columns for recording the morning and evening temperature, the pulse and respiration, and the amount and specific gravity of the urine; and on the opposite side are spaces for a brief record of the signs and symptoms, daily progress, and treatment of the case. Altogether it strikes us as an excellent suggestion, very ingeniously worked out, and very suitable for practitioners and others for whom it is intended.

THE
GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1875.

FRIDAY, JUNE 25TH.

THE letters of Miss Jex Blake and Mr. Arthur Norton on the medical education of women were ordered to be acknowledged, with a statement that they had been considered by the Council.

With reference to a letter from Mr. Shuttleworth respecting the registration of foreign degrees, the following resolution, which was moved by Dr. Sharpey and seconded by Dr. Rolleston, was unanimously adopted: "That it is desirable that the Council should take into consideration, at a future meeting, whether, with a view of furthering the desire of extended accomplishment in medicine and science among the members of the medical profession, it may be advantageous to make it lawful for the Council to insert in the Medical Register, after the name of a person registered on qualifications in medicine and surgery obtained in the United Kingdom, the appropriate title indicative of a medical degree obtained, after study and examination, in a foreign or colonial university approved for this purpose by Her Majesty's Privy Council on the recommendation of the Medical Council."

It was then resolved that Mr. Shuttleworth's letter should be acknowledged, and that he be informed that the Council had reserved the consideration of the subject to which it related.

A report was read from the committee appointed to consider the proposed repeal of parts of the Medical Acts, submitted for the consideration of the Council by Mr. Rickards, the Speaker's counsel. It stated that, in the opinion of the committee, the repeals proposed were merely formal, and that the whole of Clause 46, especially referred to by Mr. Rickards, might be safely repealed.

Some objections were raised to the repeal of Clause 46, on the grounds stated at a previous sitting of the Council; and, on a motion for the adoption of the committee's report, an amendment was proposed and carried that it be adopted, with the exception of that part relating to the repeal of the clause in question.

The following members of Council were appointed on the Business Committee:—Dr. Bennett, Dr. Humphry, Dr. Andrew Wood, Dr. Aquilla Smith, Dr. Sharpey, and Dr. Quain.

Dr. PARKES then moved,—That, in reference to the communication from the University of Oxford relative to qualifications in State Medicine, the Council considers that, in the interests both of the public and of the advancement of medical science, the principle embodied in the Conjoint Examination Scheme for licences to practise medicine and surgery should be extended to any licences or certificates in State Medicine or public health."

Mr. QUAIN seconded the motion, which, after a short discussion, was agreed to.

ADMISSION OF WOMEN.

The Council then resolved itself into committee for the consideration of the amended report of the committee on Mr. Simon's letter.

Mr. TURNER moved the adoption of paragraph A, which was as follows:—"In reply to the communication addressed to them by the Lord President of the Privy Council, the Medical Council have to state that they have felt bound to consider the whole question of the admission of women to the medical profession."

The motion was seconded by Dr. QUAIN.

Dr. BENNETT.—I have an amendment to offer to this motion,—"That, instead of Paragraph A as now read to us, the following be adopted: 'Sir,—In accordance with the request of the Lord President, as conveyed in your letter of the 8th inst., I have the honour to inform you that I have brought under the consideration of the General Medical Council the Bill, which has been introduced into the House of Commons by Mr. Cowper-Temple, to amend the Medical Act, 1858, so far as relates to the registration of women who have taken the degree of Doctor of Medicine in a foreign university.'"

Mr. MACNAMARA seconded the amendment.

Dr. ROLLESTON suggested that the amendment would require an entire rearrangement of the paragraphs of the report; and some time was occupied in discussing the course that should be adopted in regard to it. Dr. BENNETT contended that something more than a matter of form and arrangement was involved, but his amendment was negatived, and the paragraph of the committee's report was adopted.

Mr. TURNER.—The next paragraph in the report is marked B. I will move its adoption. "The Medical Council are of opinion that the study and practice of medicine and surgery, instead of affording a field for exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely disregarded."

Sir WM. GULL seconded the motion.

Dr. PARKES.—I beg leave to move an amendment. I propose to leave out the words "which cannot be safely disregarded," and insert the following, "But the Council are not prepared to say that women ought to be excluded from the profession."

Dr. PYLE seconded the amendment.

Sir WM. GULL.—I see no objection to the admission of those words, and so far as I see I should vote for the amendment.

Mr. TURNER.—I cannot accept those words.

Mr. QUAIN.—I may state that words of that kind were used originally, and that it was to conciliate support that they were afterwards altered as they now stand.

Mr. TURNER.—Will you allow me to state that there is no statement in the report that women ought to be excluded from the profession? The amendment moved by Dr. Parkes does not, to my mind, add anything to the strength of the position that he takes up. There is no one statement in the report that women ought to be excluded.

Dr. PARKES.—The sentence as it stands seems to imply that. It says "special difficulties which cannot be safely disregarded." That may be taken as practically an exclusion.

Dr. SHARPEY.—I feel bound to vote for the amendment. It exactly expresses my own views on the subject. I should not recommend women to enter the medical profession. I should dissuade them from entering it, but I am not prepared to say that they ought not to do so. Persuasion is one thing, denial is another; and I am not prepared to stand in the way of women entering on a career on which they think they can safely and properly enter.

Dr. ANDREW WOOD.—I think we have now come fairly face to face with the question, and I rise to give this amendment my opposition. If the amendment is carried and put as a substantive motion, or if it is thrown out, I shall be prepared myself to propose an amendment carrying out my own views; but in the mean time I think I am in order in speaking on the question of whether women should be admitted to the medical profession or not. We have been asked to enter upon that question in its entirety. Now, from the beginning of this agitation with regard to women I have always taken up one and a consistent course, but it is an honest course. I have always held that women are not adapted to the medical profession and the medical profession is not adapted to women; and I have had to stand pretty considerable volleys of abuse from that faction which carries on the agitation for the advancement of women's rights because I have sturdily stated my opinion on the subject. I have given them and their supporters all the credit of honesty and good motives; and I do think it is a hard thing that they will not, in return, give us the same credit. If we were to judge by the noise and the dust which has been kicked up in regard to it, we might imagine that the whole country, or the large majority, was in favour of the admission of women to the profession. I am not prepared to admit that. I believe that if the population, and especially if the women, of the country were polled, it would be found that there is an immense majority against it. I believe that it is a mere section, but it is a persistent section, a noisy section, a section that makes itself heard in the public press, at meetings, on platforms, and in every way that it can, in order to induce us to force—for it is a forced agitation—to force women into a position which I honestly maintain they ought never to be placed in. Many of those who advocate the admission of women into the medical profession do not know anything about either the profession or what the practice of it involves. I do believe that many of them think that you have nothing to do but to sit at home, and take your guineas to write a prescription, and there is an end of it. They do not know what toils and dangers, what perplexities and constant anxieties there are in the profession; they do not know all the repulsiveness of the dissecting-room; they do not know the bloody scenes of the operating room; they do not know a great many of those things which are even so repulsive to men that they refrain from entering the profession. The fact is, it is not adapted to all men. In fact, it is a very peculiar race of men that can be induced to study medicine, or to enter upon the practice of it, on account of the many difficulties and unpleasantnesses which beset it. I do not know whether it is the case here or not, but in Edinburgh we have ventured in our ignorance to talk of women having a particular sphere, which I have always thought was an axiom. But when we venture to talk about that we are sneered at. "Woman's sphere!" they say; "why, woman has no sphere which is less than that of man." I say that this is utter nonsense. God never meant woman for the sphere of man, and he never meant man for the sphere of woman. If a woman is pushed into a man's occupation she is as much out of place as a man when he is pushed into the occupation of a woman. Woman has a very important sphere—the sphere of her own home. She has the bearing and suckling of children; she has the training up of the young, and she has a great many feminine occupations with which she ought to be as largely employed as possible. "But," say they, "she is now at this time of day to begin to enter upon a profession which she never entered into before." Why does she go to the medical profession? The medical profession, of all others, is the one that opposes most difficulties to a woman. Why does she not go to the law or to the church? Why does she not go to a great many other occupations that would be far more congenial to her? She will have no dissecting-room to go into there; she will have no blood to encounter there; she will not have to exercise brute strength, such as a woman very seldom has, and which is required in many very important operations. Fancy a woman called to reduce the dislocation of a hip-joint. Could a woman do that? And there are a great many other things that she might be called to do on an emergency that I really think it would be painful for her to attempt, both as regards herself and as regards her poor patients. It has been said, "You are a trade's union." They say, "You are like the silversmiths at Ephesus; you are afraid that your craft is in danger, and you cry, 'Great is Diana of the Ephesians!'" They tell us that our trade will be interfered with, and that these are our reasons. I say that I repudiate with scorn these insinuations. I have been a member of the medical profession for forty years, and I believe it to be an honourable, an unselfish profession, which lavishes its skill and its labours in a greater degree gratuitously than any other profession in England, and I say, therefore, to call us a trade's union and all that sort of thing is not the way to force us into adopting any scheme that may be laid before us. There are some who think that the medical profession is the very worst that women can take to, and they would rather, if possible, keep them out of it. But they say, "Although we think all that, it is inevitable, and we must bow before the inevitable; and since it must come, is not it far better to take measures to make it easy?" Is that consistent? I maintain that it is not. Then another set of people say, "Oh, do not make such a noise about it; it is a mere farce. It is only a few women who will enter into the profession; nobody will care much about it, and in the course of a few years it will die out. They will be miserable and uncomfortable in their new position. You had better say nothing about it." What! are you going to lead these women on the ice, in order that they may be drowned? Are you going to tempt them to their ruin? I maintain that I am the honestest friend of these women when I say to them, "Do not enter a profession which I know is not suited to you." I say that honestly, and I add to that, "I cannot give you any help in getting into it." How can I logically and consistently do so? I think we are experienced in Edinburgh a little as to the evil that happens from leading women into a wrong position. Some of our professors in the University of Edinburgh led these women upon the ice. I did not approve of it. I would appeal to my friend Mr. Turner whether his comfort was added to by what was done. I will appeal to the students, whether they were made happier. I will appeal to any who know about the case in Edinburgh, whether there was not constant turmoil. The woman's question was brought into everything. Such was the rioting that we were very thankful that a court of law walked in and put an end to it, and that the women took flight to London, where they found a more congenial atmosphere; and I congratulate the London members in having them if they like them. Then it is said, "If women like to enter the profession, why not let them do so?" My friend Dr. Sharpey does not think that they are very fit for the profession. He says that they will find out their mistake before they go much further. Why not tell them clearly that they had far better not enter? But then we are told over and over again by the faction, as I must call it, that women demand women doctors. I deny that women call for female doctors, and I believe that, standing here as I do to oppose the admission of female doctors into the profession, I am, in fact, the champion of nine-tenths of the women of this country. I can say for myself, that I have taken the opinions of a great many women in all classes of the community, and of all ages, and I will pledge my honour that, with one exception only, I was never told by a woman that she would employ a female doctor. The almost invariable reply to my question when I asked it has been, "We would not send for a female doctor; we cannot confide in them; we would not trust our lives in their hands so long as we can get an accomplished, skilful, and proper medical man." Women themselves are the most inveterate and sturdy antagonists of this movement; and are we to disregard the women? No. The age of chivalry has not gone yet. Let us stand up for the women, and keep them from having their sex discredited by women becoming doctors of medicine. Another argument is that women shrink from telling their ailments to men. Well, I have been for forty years a practitioner, and I have never found that women shrink from telling their ailments to me. I believe that there are some women who would not tell their ailments to any one, either male or female, and I have had frequent conversations with some of our most accomplished accoucheurs, and they have all told me that they never found any difficulty in getting from women a full detail of what was the matter with them. I have noticed that it is exactly the most delicate-minded women that have the least difficulty in making their complaints known to a medical man. Then it is said, "Well, perhaps women may not be up to all the different departments of medicine and surgery; but surely you will allow that the natural thing would be that they should practise in midwifery." Midwifery is just the department of practice for which they are least fitted. That may appear as an anomaly. But just look at it as it is. Ninety-nine out of a hundred midwifery cases could be managed by anybody. I think that it is some Irishman who said, "It is not difficult to get the child out, but to keep it in." In ninety-nine cases out of a hundred it might be managed by anybody, but then the hundredth case might occur the very first. I ask you, would you like to entrust your wife to a female midwife if there was a case of embryulcia? Would you like to see a woman with the crotchet in her hand, or with the long forceps, pulling with all her might, and with the sweat running down her face? Would you like to see a woman in charge of a case where blood was gushing out in torrents from the womb, and do you think that she would have the readiness and nerve which would save the patient from being lost? I say that these cases of midwifery are just the very cases which are least adapted for female doctors; and it is a very curious fact, and one that is undeniable, that whereas in the last century, and in the beginning of this century, very few women were delivered by any but women, in Edinburgh (I do not know what it is in England) even the very poorest woman in the poorest close would now infinitely prefer a man to attend her, and always does employ a man. That shows that confidence has been gained in the resources of men in this practice, and that many of the dangers that formerly encompassed the practice of midwifery have been got rid of by those who are best fitted to take charge of women. Well the next argument is an appeal of political economy. We are told that there is a great excess of females, and that there is a lack of employment for them, and that you should open up to them every field of exertion that you can. Well, I agree with it; but then you must see that you open up that which they are adapted for. There are very many things that they are far better adapted for—the teaching of young children and of grown-up girls, for example. Then we find them in the public offices, such as the post-office, and other offices where, as clerks, they can sit quietly at their desks, and not be called to encounter any of those dreadful things that they must encounter if they become doctors. They are also employed in the telegraph office. Many women write for the press, and others become compositors. Others are artists, and I do not know why more should not be. Then I will just make this *argumentum ad hominem*. I would ask any member of this Council whether he would like to see his sister or daughter embracing the practice of medicine? He would revolt at such an idea; he would not like to go into the dissecting-room, as I have gone, and see five or six ladies dissecting a body, with their hands all covered with filth, and five or six male students dissecting another body two or three yards off them. They would not like to see them on their knees covered with blood. They would not like to see them liable to be called out at all hours of the day and night. We should not like to see the toiling and moiling, and noise and discomfort and disquietude to which they would be subjected. Therefore, why should we encourage the sisters and daughters of others to enter into a profession that we would not like our own daughters and sisters to take up? If there is not anything in the arguments which I have brought forward, and if the Government come to us and say, "What do you think about it?"—if they put the question directly in this form, whether women ought to be able to look to the medical profession, or to certain branches of it, as open to them equally with men as a profession and means of livelihood, say "Aye." I do not object to that; but if you in your mind believe that women ought not to be doctors, then I say, come what may, you are bound to tell the Government so. I do not think that in this question there can be any compromise. If you send any uncertain reply to the Privy Council, and if even by inference you give the Government to understand that you think that women might be employed as female doctors, you are not speaking the sentiments of your profession. I am quite sure that your opinion and your action will meet with the disapproval of nine-tenths of our profession. I say, then, in conclusion, do not let us intrench upon the softness and delicacy of the female sex. Leave them to be what God made them and what nature intended them for. I do not wish to disparage them. I love the female sex, and it is because I love them that I wish to keep them from this "mockery, delusion, and snare." Let us regard them as women who, in the language of our immortal Scotch poet, are to us in our hours of perplexity and sickness and sorrow nothing less than "ministering angels."

Dr. Humphry.—After the remarkable and admirable speech of Dr. Wood, I think it is necessary to call the attention of the Council to the fact that the question before us is not whether women are to be encouraged to enter the profession, but whether they are to be excluded from it. I confess for my own part that I have always felt regret that that question ever came before us. I have always felt that the profession of medicine was the one, of all professions, least adapted for women; but I do not feel that they ought to be absolutely excluded from it. There is no man at this table, and perhaps no man in the whole profession, who has felt more than I have done the disagreeables and the difficulties and the annoyances of the medical profession. It was with unwillingness that I entered it, and I have never got over those feelings with which I did first enter it. There is, perhaps, no one present who can feel more strongly than I do the disadvantages that women will incur who enter the profession of medicine, and far would I be from encouraging or advising any woman to enter it. Far would it be from me to encourage any daughter or sister of mine to enter the profession; indeed, it would be with much hesitation that I should encourage a son to enter it, and, in truth, I have never done so. The disagreeables which met me were so great that I would not encourage anyone else to enter. I quite admit that there are vast counterbalancing advantages. The enormous opportunities of doing good to our fellow-men in the greatest difficulties and the most trying circumstances are advantages which ought to have compensated myself long ago to a greater extent than they have, and they are advantages which fortunately have compensated others more than they have done myself. I should be unwilling to preclude any class of society, or any sex, from the opportunity of doing great good to their fellow-men. Dr. Wood has alluded to the bloody scenes of the operating-room. I have never witnessed an important operation without a woman being present there. I have often observed them, and I have often observed, too, men, not of my own profession, present, and I have often wondered why they were there. But I confess that I have thought that none of the women who were present had so strong a feeling of dislike for the thing as I had myself. Well, if women of one class are regularly admitted into our operating rooms, I do not see that there is anything in the thing itself to preclude other women from being present there. It appears to me that their line on this occasion must be determined by the consideration whether there is anything in women distinctly to render them unfit for the practice of the medical profession. If we feel that there are mental and physical disqualifications on the part of women to prevent their entering the profession, and their being useful in it, I think our bounden duty at once is to negative the amendment of Dr. Parkes; but unless we do think that they are distinctly and physically disqualified, and unless we do feel that a distinct and serious evil to the community would be incurred, I think that we have no right to declare for the exclusion of that sex. Are they, then, physically and mentally disqualified? Is there anything in our profession for which a woman is unfitted? Dr. Wood has alluded to the reduction of dislocation. Now, Dr. Wood, an eminent surgeon himself, will admit that, in the present day, reduction is not a matter of force, but pre-eminently a matter of skill. And is not the practice of our profession peculiarly a matter of skill? Well, is there anything in woman to preclude her from exercising skill as great as that of a man? If there is, then, I admit, we ought at once to forbid it. If there is not, I do not think that it is our duty to exclude her. Is there any mental disqualification? Professor Turner has alluded to the smaller size of the woman's brain; but I am sure that Professor Turner has not forgotten the fact that relatively to the size of the man there is very little difference in that respect; and I think that we all of us have sufficient knowledge of woman to feel that her mental power is very little below our own. Doubtless, in some respects it is; and I think that the examinations which have taken place at Cambridge indicate in a remarkably clear manner the difference of woman's faculty from man's. They indicate that, perhaps, in some of the more serious and harder branches of education the woman does fall a little inferior to the man, or the girl falls a little inferior to the boy; but in many other points—in facility of attention, in tenacity of memory, in readiness of application of herself, not unfrequently in accuracy and precision of statement—the girl is considerably superior to the boy. Nay, in looking over, as I have often done, the reports of the examinations, I have found it rather difficult to avoid the conclusion that the girl is mentally rather superior to the boy, and I believe in these earlier periods of life it is so; but, at any rate the boy does overtake her, and advances somewhat in front; but I do not believe that there is really any disqualification on the part of woman. Then, looking at the question morally and socially, I think it is not easy to say that the practice of medicine by women upon men is a greater moral evil than the practice of men upon women. Indeed, I am sure that it is not altogether unattended by its great moral evils. Although Dr. Wood has said that women do not desire the assistance of women, I think, nevertheless, it is certain that some do. Dr. Wood has mentioned that we tempt women to their ruin. Indeed that is not what we do, that is not the object of this resolution. Its object is simply not to preclude women from the opportunity of entering upon a certain course which she and her friends think it advisable she should take. We tempt her not. Nothing would be farther from the view of this Council than to encourage women to enter upon the profession. The point before us is, shall they be excluded? Dr. Wood has said, would we like to see women enter upon the more severe cases of midwifery? He has alluded to embryulcia. How few men there are whom we would like to trust with one's dear ones on such an occasion as that! Happily the cases are rare; and the men who are fitted for that work are very few. I am not really prepared to say that women in great emergencies are much worse than men. The woman has a remarkable readiness; I may say that personally I have often been surprised—nay, I may say put to shame, by the readiness of resource and the courage of woman, in some of the greater emergencies and some of the more serious positions of life. I have always said, "Oh, enter not that profession, and think not of it—it is one of the most unsuited to you." Nevertheless, with all that feeling, I do say that, as a matter of public justice and forming one of this board, I come to the conclusion that we ought not, as representatives of the medical profession, to say that women should be excluded from it.

Sir D. Corrigan.—This is so very important a question that I cannot permit it to pass in silence. The question before us is, as Dr. Humphry has explained it, simply that women ought not to be excluded from the medical profession. In the Senate of the Queen's University the question was discussed until an opinion was obtained from the law officers of the Crown that we had not the power of granting degrees to women, and in this discussion I was the advocate of women's admission into the profession. It may seem very inconsistent, yet it is true, that while I stated that I would be their advocate, and would oppose the application of trades-unionism to our profession and favour the admission of woman to any position which she was able to encounter, I then as distinctly stated that, supposing women obtained their medical degrees, no consideration should induce me to meet them in practice, and discuss with them the particulars of cases that must occur in hundreds every week. And if I were asked as regards the members of my own family, were they reduced to an extremity, whether I would advise either one or the other to go into the medical profession, my answer would be that I would rather see them buried. Suppose we pass the resolution in its original words, what will be the outcry throughout the country? Women will say: "You have passed such a resolution, but what are you, or who are you? You are all men, and it is your personal motives that have induced you to pass that resolution and so exclude us from a profession for which we are fitted." In my mind there is nothing that keeps up agitation so much as permitting a grievance to continue. For that reason I would remove the grievance. I would say, "You shall have the degrees if you can earn them." I do not believe that one out of 10,000 women would look for the degrees, and I know the opinion of the women themselves is in accordance with what Dr. Wood has stated—namely, that those who are most opposed to them are the women themselves. It has been stated that there are thousands of women's lives lost in Ireland from their disinclination to employ male doctors, and it is said that in the nunneries hundreds of women sink annually on that account. Now I have a very fair share of opportunity of knowing what the opinions of the women in convents are. I have asked hundreds of them whether they would like to have women doctors, and the invariable answer has been: "We would not have one of them near us." That is the opinion of the most modest women possible in any community. Supposing there was a resolution brought forward to prevent their going into other professions. Does anyone think that if the office of trombone player or big drum player in a regiment was open to women to-morrow they would offer themselves for it? Perhaps there are some who would do so, but I am sure they would soon find their level, and discover that they were unfitted for the office. I believe if we remove this grievance the agitation will subside; but as long as we twenty-four men say we will not permit women to come forward and contest for these degrees we shall be looked on as a set of jealous obstructives. With regard to the question of midwives, I think that is not before us at all at present. The question simply before us is Dr. Parkes's amendment, whether we should express an opinion that women ought to be excluded from the profession; and as to that, I say give them a fair field, they will soon find that they are out of their place, and the agitation will disappear.

Mr. Macnamara.—I think it is exceedingly to be regretted that the question of women's rights has been thrown upon this Council for solution. If we decide here in favour of admitting ladies to the medical examinations, and to the Medical Register, we are but introducing the thin end of the wedge into the solution of a most difficult problem. If women are admitted to the medical ranks, why should they not be admitted to the franchise, and if admitted to the franchise, why not to the House of Commons? I am perfectly sure that they would discharge the duties of many of the members of the House of Commons far more efficiently than some of the members of the present day, for from their training in going to balls and so on they would be able to sit up to a very advanced hour of the morning, and follow the direction of the whip as to which lobby they should go into. But much as I regret that this subject has been introduced, still I feel coerced to vote for the amendment which has been put forward by Dr. Parkes. I have heard a good deal said upon the question of the physical disabilities of women. I hear from one gentleman something about the brain, I hear from another gentleman something about the muscle. I suppose that it is meant that physically they are not strong enough to discharge the duties required of them. Well, I think that, if necessary, I could produce 20,000 women who would try conclusions with one-half of the medical profession, and the question would be decided in favour of the women (laughter).

Sir Dominic Corrigan.—What conclusions?

Mr. Macnamara.—As to the muscular strength. I dare say, Sir Dominic, I could produce in the city 10,000 or 15,000 ladies with whom you would be very sorry to try conclusions as to physical strength. It is merely begging the question to speak of physical force. There is not much physical force required to handle the stethoscope, or to handle the urinometer or thermometer, so far as medicine is concerned; and as to surgery I do not know that in that case either very much physical force is required. I would be very sorry to allow any gentleman to pass a catheter into my bladder if he was going to exert much physical force. It is not necessary in the reduction of dislocation to use much force. It is well known that that ought to be done physiologically rather than by force. If force is required, we have arrangements in all our hospitals that would enable a very delicate woman to pull the arm out of a man. As to the mental question, I think that has been thoroughly discussed. It has been said that women have not done much in the advancement of scientific problems. Well, they answer at once, "We have not had the opportunity; our studies have not been directed to that quarter." But I would like the gentleman who has made that statement to mention how many of our profession have done much for the advancement of scientific problems. I am not sure that if I were very ill I should like to be treated by a doctor who had done much for the advancement of scientific problems. I would prefer the practical physician who devoted himself to his profession. Now as to the moral side of the question. It has been said that the study would have a lowering effect on the nature of women. The most delicate-minded women that I know of are at this moment employed as nurses in hospitals. I refer to the Sisters of Charity in the City of Dublin. It would be a calumny to say that the finer feelings of these ladies have been blunted because they have attended in the most serious and critical surgical cases. There is not a more fine-minded, more tenderly-nurtured, or more admirable class of ladies than these Sisters of Charity. They are found discharging their duties well, and ably, and modestly. The Government have applied to us, and have asked us a most important question—first, whether women ought to be able to look to medical practice. We are asked now to state that there are special difficulties which cannot be safely disregarded. Of course the inference is that women ought not to look to general practice. Then we are asked as to their fitness for certain branches of it. Well, I do think that there are certain branches as to which there could not be a word of cavil, in which women might be well employed, and as to which we find great difficulty at the present moment. I think that pharmaceutically they might be well employed; they might earn an honourable income in dispensing and compounding medicines or physicians' prescriptions. It is well known that there are about ten or twelve thousand women in this division of the kingdom employed in attending women in their confinements. Well, what we would propose would be to improve their education —to make them safer in those hours of difficulty that have been so well alluded to by Dr. Wood. That is one question to which we might apply ourselves. Let them be well educated on that point. But in this report it is said the Council are of opinion that sufficient provision would be made to enable women to obtain a "legal status" as medical practitioners in this country, if an Act of Parliament were passed which should enable the Medical Council to recognise such examination or examinations as the Medical Council may from time to time deem sufficient for the purpose of granting admission of women to the Medical Register under the title of "licensed practitioners of medicine." Well, then, on one side the report goes absolutely to assist in doing it, and on the other side it goes to say that there are special difficulties to be encountered. I feel that I am bound to support Dr. Parkes's amendment, and I do think that it will relieve us of a very great difficulty indeed.

Dr. Stokes.—Sir, I wish merely to remind the Council that we are asked to advise the Government upon this matter. The question is one of extreme difficulty. There is a question raised as to the physical powers of women, and another as to the moral view of the case. Is the unsexing of women, which certainly would be threatened by a large surgical or medical education, a desirable thing? That is the question which the Government, in any future communication with us, will in all probability put. Then, to go back to the question of the physical incapability of women to perform every operation in surgery. I remember the case of a lady who was attacked with peritonitis, she before having suffered from a large abdominal tumour. She recovered from the peritonitis; and, in the course of a year after, she was seized again with the disease with great severity. She came to London, where a large ovarian tumour was diagnosed, and an operation was performed by one of the most eminent operators in such cases. That gentleman told me that, owing to the two attacks of peritonitis, strong adhesions had formed. (The disease was double; it was found that both ovaries were affected.) The adhesions were so strong that it took the entire force of the operator's body to tear them out; and so much force had to be used that after the operation he was obliged to sit down and remain in a panting condition for some time. That patient recovered, and for years was a very beautiful woman. Well, I doubt very much whether we can anticipate that women will be able to meet such an emergency as that. In obstetrics there are conditions in which the full force of the most muscular man is absolutely necessary. Then comes the moral question, Is it not very much better that a certain number of women should not make the profession of medicine and surgery a source of employment to them, or that the moral condition of the female should more or less be damaged by having to attend to matters which are in fact antagonistic to the delicacy of a woman?—is it not contrary to nature that such things should be? The feelings of women are opposed altogether to this innovation. I think in my humble way that I can confirm in every respect what Dr. Wood has said upon that point. I have made it my business ever since the agitation began, which is now several years, to inquire of every intellectual woman with whom I happened to come in contact what were her views upon the subject, and they have uniformly treated the attempt to transfer any portion of operative surgery or medicine to women as a grand mistake. Well, Sir, I do not presume to advise the Council as to the course to adopt; but I think that, as we have been consulted by the Government, it might be well that we should lay before the Government the difficulties of the subject in the first instance.

Dr. Bennett.—I think that it would ill become me to go into the broad question so eloquently opened up by my distinguished friend Dr. Wood. But I think that it is desirable that I should say why I cannot accept Dr. Parkes's amendment. My first objection is, that it is not really sufficiently cognate with what precedes in the same paragraph. The paragraph consists mainly of a statement that medicine and surgery would afford a field most unfitted for women, and then it properly ends by saying that there are special difficulties which cannot be safely disregarded. Dr. Parkes would introduce a specific statement having no absolute and necessary connexion with either of these, and would affirm that women ought not to be debarred from entering the medical profession. I object to that, therefore, as not properly coming in connexion with the paragraph. Secondly, I object to it because it goes a step further in giving our views to the Government in favour of breaking down the barrier that at present exists, and favouring the introduction of women to the medical profession. I think we should bear in mind that we have not excluded women from the practice of medicine; we have not established the corporations and universities which, by their regulations, exclude them. They are excluded as matters now stand, and the question is, whether those barriers should be thrown down, and whether we and others should give them assistance in entering on a legal status in the profession. Now, after what I have heard on this subject, and after all the attention that I have been able to give to it, I am not myself prepared to say that it is our duty, as a profession or as a council of medical men sitting here, to assist in breaking down those barriers and permitting the entrance of women upon a legal position into the medical profession. I think, quite apart from the physical and mental incapacity of women, about which much has been said, and with which I do most heartily agree, I think there are other serious objections to justify us in coming to a conclusion that their admission is undesirable in the interests of the community at large, and in the interests of women themselves. We are going considerably beyond what we are called upon to state if we specifically set before Government modes by means of which these barriers should be broken down. I think it would be sufficient for us to confine ourselves to a statement of the actual condition of things for the information of the Government, and set forth many of the conditions and objections which stand in the way.

Mr. Turner.—I should be very glad if I could see my way to accept Dr. Parkes's amendment so as not to have divided the Council upon the matter, but I really do not see my way because he cuts out certain words which I think it is important that we should put before the Lord President, and then he adds certain other words which I think are unnecessary.

Dr. Quain.—I wish to say a very few words in pointing out the gravity of the question that we are called upon to decide. We are asked to pronounce upon the admission of women to the medical profession, and we are asked because we are supposed to know the constitution and fitness of women for great mental and physical labour, and also because we know the amount of physical and mental labour required for the medical profession. We are very properly asked our opinion on these things, and we come forward to say that we believe that the medical profession is one of the most arduous to acquire a knowledge of, and one of the most difficult to follow; and if we state that a woman, by her mental constitution and physical power, is fit to enter upon this profession, the women who lead the present agitation will turn round and say, "Is there any position in social or professional life that we should be excluded from?" and that may lead to the withdrawal of a large number of women from the position in which they have been placed since creation. It is not necessary for me to state in this Council what that position is—it is the comfort of the household, the education and the bearing of children. This is a question which bears on the relation of the sexes; it is a wide and important question, and I think it would be a wiser thing for the Legislature to seek to determine it, and then if they resolve that women shall enter the medical profession, this Council can be asked how best they shall be adapted to the change.

Dr. Andrew Wood moved the adjournment of the debate.

The motion was seconded by Dr. Bennett, and carried.

It was then resolved that the Council resume for other business.

The report of the Pharmacopœia Committee was presented.

On the motion of Dr. Quain, seconded by Dr. Rolleston, the report was adopted, and the Pharmacopœia Committee was re-appointed.

The Report of the Committee on the Visitations of Examinations in 1873 and 1874 was presented.

On the motion of Dr. Parkes, seconded by Dr. Humphry, it was resolved that the report on visitations be entered on the Minutes.

The Council then adjourned.

Saturday, June 26th.

The Council met at twelve o'clock, and continued the adjourned debate on Mr. Simon's letter.

Dr. Rolleston.—I should have been glad to have voted yesterday on this question, for there was, as it seemed to me, very little to be said after the speeches of Dr. Wood and Dr. Humphry. I think that every member of the Council must have thoroughly possessed himself of the bearings of this question, for it has been before us since 1858. With regard to the speech of Dr. Andrew Wood, there was no need for him to vindicate his honesty or defend himself against public opinion. We here have no suspicions of his honesty; there is no faction here which casts any imputation on it. But if there was no need for Dr. Wood to vindicate his honesty, there is some need for me to vindicate the credit of anatomy. Why should anatomy be repulsive? Why should the dissecting-room be repulsive? It need not be so. If the thing is done properly, it need not be repulsive or loathsome. If students dissect so as to cover themselves with blood, the more is the shame for them. Dissections, like all operations in surgery, can be done badly. Even such a thing as the administration of an enema can be done in a vulgar, disgusting way, or in a way quite the reverse. If students dissect in an untidy fashion, it reacts on all their work from beginning to end. Then there is the *argumentum ad hominem* which I would apply in another way. Dr. Wood is too good a scholar not to know that the sentiment "*Homo sum, nihil humanum a me alienum puto*" applies to women as well as to men, *homo* being a word common to both men and women. Now, what are the arguments in the matter? The first great argument, against which all opposition seems to me to count for nothing, is that a large number of persons do wish for this thing. Some women wish to be doctors, others wish to have women doctors. Now, if you have a large number of the community in London, in Edinburgh, in Glasgow, in Dublin, and in the great towns of England, who desire this, I say that is in itself a reason. This feeling of people who wish to be doctors, and of people who wish to have doctors of their own sex to attend them, is a growing one, and has been growing from those savage times when woman was treated as a mere instrument of lust or a beast of burden. We have long emancipated ourselves from that stage. It is said that the very refined and delicate people are really quite content with men. My experience of women is decidedly the reverse of what many speakers have stated. I know many most refined women, the aspect of whose refinement has taken first the form of a desire to give the largest and freest scope to the energies of all, and secondly a feeling of sensitiveness, which in the course of ages has developed itself as to the two sexes being kept apart in those matters which are peculiar to women, such as midwifery. The women of greatest cultivation — women of at least as great cultivation as many of the cultivated men around this table—with whom it has been my good fortune to be brought into contact, have had just that positive feeling in favour of this enactment. As it happens I am not in relation with any female doctor—I do not know one personally; but a great number of highly refined women are strongly in favour of this great movement. I believe that of the few women who will attempt this, if you throw open the gates, many will succeed. It will not be as in many other professions, the many will attempt and few succeed, but of the few who attempt it many will succeed. There is one point which has not been touched upon at all. We in this United Kingdom of Great Britain and Ireland are responsible for the good government of a very large part of the world; and the great want of India, for example, is to have female doctors, who may bring civilisation into the zenanas and other places of that sort where men are not admitted. The demand for female doctors is greatly felt by the Indian Government. Would it not then be better that such women should be thoroughly educated, and have a trade mark put upon them, so that the Indian Government can trust them, than to have them going about without examination? I beg to state that we are responsible not only for the women who are crying out for it here in England, but for those who would be allowed to avail themselves of the well-instructed doctors of their own sex throughout that great empire of India. Then comes the question, "Are women equal to these things?" Just see what women you know of have done. Look at Queen Christina of Sweden, who used to watch Descartes' experiments, physiological and otherwise. Or look at women of our own time—Mary Somerville, Harriet Martineau, and Garrett Anderson. Those are persons who possess intelligence which I should be glad to have a small fraction of. I do not mention other distinguished women, such as our present Queen or Queen Elizabeth, but such as in our own age have been fitted for this particular work. We should not be "the first to have new things tried," but on the other hand I hope we shall not be the last "to lay the old aside." Let me close what I have to say with a sort of parable or apologue, which has often been used by people who have had, as I have now, to oppose an argument of this kind. It was used about the removal of the Jewish disabilities and the disabilities of Dissenters. A man was taken by his enemies, by a great number of honest, upright men, such as Dr. Andrew Wood. He was blindfolded, a rope was put into his hands, and then he was swung into the air and told to hang on to the rope because there was a precipice beneath him, and if he did not hold on down he would go, and there would be revolution, smash, and utter destruction of him, of public morality, and public order. So he held on for many hours, till his muscles got cramped and his ligaments were all stretched; in one word, he tasted the bitterness of death. Then they removed the bandage; he opened his eyes, and found his feet within two inches of the ground.

Dr. THOMSON.—Allow me as a teacher, as well as a member of this Council, to express my opinion in regard to this matter. It is an opinion which, as will be felt by all, I have been required to consider for a long time. I would speak first upon the wider question which we have to deal with. I think it is obvious that among the points suggested by the letter sent to us are first of all the suitability of women for the medical profession; next, whether they are more suited to one branch of the profession than another; and in the third place, the more formal question, what are the circumstances connected with examination-rules and so forth, which prevent those who wish it from accomplishing that wish. On the suitability of women to the profession, and what should be the answer referring to that point, I must say that I agree entirely with the observations which first of all fell from Dr. Sharpey. In conceding, as I do most fully, the right of women to enter the medical profession, and in saying at the same time that I do not think them altogether suited for it, I do not shut my eyes to the difficulties that present themselves in connection with it, nor even to the objections that may be made to it. I am not influenced in this by any consideration of what has been called the question of the rights of women, or by any of the moral considerations that have been put before us; but simply by a sense of justice, of what is right and proper under the circumstances. It seems to be incontrovertible that attendance on females by females is upon the whole more decent and appropriate than attendance of men upon women, and I am quite sure that I am right in following Dr. Rolleston's assertion with mine, that there are a great number of refined and delicate and cultivated women in this country who would prefer to be attended by women rather than by men. But when I say this I must recall to the attention of the Council that they have scarcely ever had hitherto the opportunity of being so in this country. The time has not come when women will be so educated that all others will be able to derive benefit from their services; but when it does come I am quite sure it will be found that the most superior women in this country, the most delicate and refined and best informed, will be most glad to avail themselves of the services of those females who enter the profession. I do not in the least share in the somewhat exaggerated fears expressed by Dr. Wood. I do not, any more than Dr. Rolleston, think that a large number of females will rush into the profession after entrance is conceded to them; and I have still less fear that those who do so will attend principally upon men. My belief is that they will devote themselves more especially to childbirth and attendance on women and children; and can any one doubt that with their knowledge of the expressions and the habits of infants and children, with all their care and gentleness, if they are properly educated they will be better attendants upon children in illness than men can be? At the same time, I think it is quite right that we should face the difficulties that undoubtedly exist, and of course it is with these that I as a teacher would have principally to contend; but I apprehend that they are not so much of a moral or general as of an administrative kind. I may say that I have no special liking for this measure; I, like others, have no desire to see any of those connected with myself entering the medical profession; but I do not see why we should deny the right to any person who may feel it to be her mission, and that she has it in her power to carry it out. With reference to teaching I may say, that such is my feeling that I would object very strongly to teaching males and females together in my subject of anatomy, so strongly indeed that I would entirely protest against it in the educational institution with which I am connected; but, on the other hand, if the Legislature should pass the measure that is suggested, and if the body to which I belong should after full consideration think right to confer their licence upon females, I should regard it as my duty to make the best of it, and to take measures to instruct those females in the manner that might be best for their advantage and for that of the public. I believe I should have no difficulty in instructing females in the whole subject that belongs to my department, provided sufficient precautions were taken, and supposing I am not called upon to instruct them along with males. If the general question is conceded, I think it is quite obvious that females may practise in any branch of the profession, but it will be very readily admitted that there is one branch which is more immediately suitable for them, as I have already said—the care of childbirth and the diseases of women and children. We have already considered what has taken place in regard to nursing in recent times. Is there anything connected with the profession that nurses do not do for men; and has impropriety arisen from that, or any difficulty? I say certainly not. With regard to the improvement of nursing we know what we owe to Miss Nightingale in the way of advancement of our knowledge and views upon the subject; and every one who has come into contact with these skilled nurses who have been trained according to her suggestions, knows what a prodigious advantage it is in a hospital, or in practice of any kind, to have to do with cultivated gentlewomen who have been properly trained to their duties as nurses. If that be true of nurses, is it not still more strongly true with regard to women who choose to enter the profession? Can any one doubt that if delicate, well-informed, well-educated, and accomplished women shall also acquire under proper regulations that skill and knowledge which is necessary for the practice of the profession, their entrance into it will not only be a great benefit in the individual instances in which they have been employed, but will be a means of introducing more delicacy into the medical profession and their relations to the public than oftens belongs to it. As to the third question of the examination rules or other conditions at present preventing women from entering the profession, I think it is scarcely necessary to offer any observation, because I dare say the Council will see the propriety of the suggestion made by the committee, that, supposing the general suitability of women to enter the profession is conceded, or measures are taken to make it possible for them to be entered upon the Register, there should be a full reservation of the rights of all universities and licensing bodies with respect to their powers to grant such licences. About the special question also which is contained in the letter, as to foreign degrees, I presume we are all at one, and there will be no difficulty there. I am still of opinion that the form presented in the report is not that in which the answer should be returned. While I consider the whole of this discussion as most useful, in fact necessary to the formation of the opinions of the Council, I do hope that the President will, according to the ordinary rules of official business, be allowed to write this answer to the letter which he has received, embodying in any way which may be proper the opinions which have been expressed.

Sir W. GULL.—I am exceedingly glad to find that the question is raised beyond the circle of corporations and universities. I think we have also raised the question, at least I hope we shall be able to raise it, out of the sex relation, which seems to me to have already occupied too much consideration. My friend Dr. Andrew Wood's admirable address had reference chiefly, I think, to the difficulties and inconveniences and doubts and disgusts which beset this question as a sex question. I do not think that is a matter for us to consider. We are not recommending to Government a conscription of women; Dr. Andrew Wood will bear that in mind; I think the whole of his argument went against the conscription of women for the medical profession. They are not to be taken *nolens volens* and made to enter it. I think if that be considered, it is entirely for the persons whom we are talking about to consider themselves whether they are fit to do it, or whether they have a mind to do it. That is a personal question that one has nothing to do with. I think, therefore, we might leave the sexual part out of consideration, except so far as our excellent friend Professor Humphry put it, for he has all the tenderness of women and yet has all the distinction of a most admirable surgeon, and I think he answers the question in his own person as far as that goes. It seems to me if we wanted an answer at all, there is an answer. But I think women must determine that for themselves. Let us consider that we are not now passing a vote, or any opinion as to whether women shall enter the profession. If so I must confess I should go dead against it, and I think I express the opinion of every man at this Board when I say that we rather think it undesirable—that if they could occupy themselves in some other way we could occupy the field equally well. Still I do not think that is a full answer, for I consider there are some parts of the medical profession that a highly trained woman could do better than a man. There are certain sex relations which might be avoided in that way with great advantage to the public. I need not say that there is a quiet scandal in certain parts of the profession about women's diseases, which probably will be got rid of by introducing high-minded, well-trained women into the practice of medicine. That is rather an important point, and the question then becomes narrowed to a very simple issue, whether we shall advise the Government that permission may be given; but I think we must give that permissive opinion with a slight *caveat*, that the entrance of women is rather dangerous. If you will look over the history of this woman's question in London, where things spring up and produce their fruits very quickly, you will see that considerable social evil has sprung up from women of a low tone of mind entering the profession. I remember there was a letter in THE LANCET about six years ago giving the social history of about 150 or 160 women who have entered the profession, and I must say I think it was anything but a creditable history. It is right to state that there are physical as well as social dangers besetting the question. I therefore do hope that we may vote for the first clause as it now stands. I do not think there is much in Dr. Parkes's addition, for it is not an amendment but an addition.

Mr. QUAIN.—The words, "That women should not be debarred from the study and practice of medicine and surgery" were in the draft of the report we agreed to; but we found that others differed so much from us that we thought it better to omit them, and though I agree with Dr. Parkes's addition, I think it would not be judicious, and I cannot vote for it. I think it is better to consult in some degree the variations of opinion in the Council, and not to include those words, for their introduction certainly created very great opposition in the committee. I myself would not advise any female member of my family to enter the medical profession, but I confess also I agree entirely with Professor Humphry in what he said about men. I would dissuade any male of my family from entering the profession by every means that I could. Yet I would not hinder a male from entering, nor would I hinder a female from entering; but when they had once made up their minds to do it, I would assist them by every means in my power.

Mr. TURNER said he felt very strongly indeed that it would not be right for him to consent to the deletion of the words relating to the special difficulties surrounding the question; while the addition of the words, "But the Council are not prepared to say that women ought to be excluded from the profession" would be interpreted by the outside public as meaning that the Council were prepared to say that women ought to be allowed to enter the profession. He therefore objected to the insertion of these additional words.

Dr. PARKES said as the clause at present stood it gave a direct negative to women entering the profession, but the object of the amendment was to state that the Council would not oppose the admission of women under proper regulations. It was of the very greatest importance that the Council should raise itself above all party and petty considerations, and judge the question on the broad principles of right and justice. If they did this the members would not do otherwise than support the amendment.

By the permission of the Council the words "which cannot be safely disregarded" were prefixed to the amendment, to read after the word "difficulties," and in this form the amendment was carried by 14 votes to 7.

On the amendment being put as a substantive motion,

Dr. ANDREW WOOD proposed that Paragraph B run thus—"One of the questions submitted to the Medical Council by Mr. Simon is, 'Whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men, as a profession and means of livelihood?' With regard to this question of the admission of women to the medical profession, the Council, after mature deliberation, have to express their opinion that, considering the nature of the studies requisite to be gone through in order to attain the knowledge of the various branches of medicine and surgery necessary to constitute a safe and efficient practitioner; and considering that the practice of the medical profession infers, even in men, peculiar moral and physical qualities, as bodily strength, nerve, and endurance, to face much toil, anxiety, responsibility, perplexity, and danger, and that by nature women have not been so constituted as to fit them for such a profession, it is inexpedient to encourage and give facilities to women for entering the medical profession. The Medical Council, therefore, do not recommend legislation with the view of removing the difficulties in the way of women entering the medical profession." The Council, he said, was now called upon to affirm that while the profession of medicine was not fitted for women, yet they should be admitted, and that the Council was not prepared to exclude them, or, in other words, was prepared to admit them. Such would be the interpretation given to it by the women doctors. On behalf of those who like himself thought that women were unfitted for the medical profession, and that no encouragement should be given them to enter it, he desired an opportunity of having their votes recorded, and therefore he proposed his amendment.

Dr. QUAIN seconded the amendment. He considered that better and stronger reasons for not allowing women to enter the profession had never been heard than those offered by some of the members of the Council, and appearing in the Report of the Committee which Dr. Parkes had most cleverly got rescinded. When he voted in favour of Dr. Parkes's proposal it was with the hope that something much stronger would be inserted, and he believed that that was the opinion of all those who voted the same way. He should be sorry if something like Dr. Wood's amendment or the admirable letter prepared by Dr. Bennett were not substituted in the place of the paragraph which had been rescinded.

On being put to the meeting, Dr. Wood's amendment was lost, 4 voting in its favour and 12 against it.

Dr. Parkes's motion was then put and carried, the numbers being—for, 14; against, 7.

Mr. TURNER proposed the adoption of Paragraphs C and D:—"With regard to Mr. Cowper-Temple's Bill, considered by itself, and apart from its bearings on the 'general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men, as a profession and means of livelihood,' the Council have found no difficulty in forming an opinion. By the Medical Act, 1858, the Council are precluded from registering foreign degrees, and consequently have been compelled repeatedly to refuse to register foreign degrees held by men. (*d*) The reason for this is obvious—viz., that the Council have no means of exercising that supervision and control over the education and examination required for foreign degrees, to which the licensing bodies of this country, whether universities or corporations are, by the Act of 1858, subjected. But this privilege, which the Medical Act refuses (and the Council believe, very properly refuses) to men, Mr. Cowper-Temple's Bill proposes to grant to women. Against such a proposal the Council feel bound to offer a protest, as being subversive of the main principle of the Medical Act."

The motion was seconded by Mr. QUAIN, and carried *nem. con.*

Mr. TURNER then proposed the adoption of the first clause of Paragraph E:—"If it should appear to the Government and the Legislature expedient that women, who desire to obtain the legal status as medical practitioners in this country, should not be debarred from obtaining that status, the Council are of opinion that it should be under some such conditions as the following."

Mr. QUAIN seconded the motion.

Dr. BENNETT moved the omission of the paragraph, as he strongly objected to laying down regulations for what might never take place.

Sir D. CORRIGAN seconded Dr. Bennett's proposal, which, after a short discussion, was negatived, and the motion for the adoption of the paragraph was carried.

Mr. TURNER moved the adoption of the following paragraph:—"That in the interests of public order, the education and examinations of female students of medicine should be conducted entirely apart from those of male students."

Mr. QUAIN seconded the motion.

An amendment, proposed by Sir D. Corrigan, to omit the words "in the interests of public order," was negatived, and the motion was adopted.

On the motion of Mr. TURNER, seconded by Mr. QUAIN, Clauses 2 and 4 as one were adopted:—"That with reference to the examination rules or other conditions which prevent women from accomplishing their wish, the Medical Council have to state that under the provisions of the Medical Act, those persons only can be placed upon the Medical Register who have been admitted to medical degrees in the universities, or who have been admitted fellows, members, or licentiates of one of the medical corporations of the United Kingdom. Should the universities and corporations be unable or unwilling to admit women to their degrees, or to admit them as licentiates or members of the respective corporations, the Council are of opinion that sufficient provision would be made to enable women to obtain a legal status as medical practitioners in this country, if an Act of Parliament were passed which should enable the Medical Council to recognize such examination or examinations as the Medical Council may from time to time deem sufficient, for the purpose of granting admission of women to the Medical Register, under the title of licensed practitioners of medicine. The education and examinations for these licences should be under the supervision of the Medical Council in the same way as is required for the other licences of this country. The Council are of opinion that any course of legislation which would interfere with the free action of the universities and corporations mentioned in Schedule A, in respect of the medical education, examination, and licensing of women, is undesirable."

The remaining paragraphs were adopted after some little discussion, with the exception of the last, which it was agreed to omit.

The Council then resumed, and adopted the report, as settled in committee. The report was ordered to be forwarded to the Lord President of the Privy Council, together with the printed minutes of the proceedings, and a copy of Dr. Bennett's proposed letter.

VISITATIONS OF EXAMINATIONS.

Dr. PARKES proposed and Dr. BEGBIE seconded the following resolution, which was adopted:—"That the Report of the Committee on the Visitations of Examinations, and on the remarks on such visitations, be considered next session, in connexion with the reports which have now been sent down for the consideration of the licensing bodies."

CONJOINT SCHEMES.

Dr. BENNETT now proposed:—"That the President be asked to inform the Council whether he is able to state in what position the joint scheme for England now is, and whether there is reason to believe that there is any foundation for the report that the Royal College of Surgeons of England have virtually seceded from the conjoint scheme agreed on by the English licensing bodies, as reported to this Council, inasmuch as it is currently reported that certain resolutions have been come to by the Council of that College respecting the appointment of examiners under the conjoint scheme in question, which resolutions are in direct contravention of certain principles of the scheme as approved by this Council."

This having been agreed to,

The PRESIDENT said: In answer to Dr. Bennett's question I must observe that no full information can be officially given, without communication with the Committee of Reference, of which Sir James Paget is Chairman, and with the bodies who have sent representatives to that committee. The scheme cannot be completed till Sir John Lubbock's Bill is law. As to the College of Surgeons having withdrawn from the scheme, that is a report as to the truth of which I have no evidence, nor have I any reason for believing it. There seems to be no ground for supposing that the College of Surgeons, which has taken much pains with a Bill that has already passed the third reading in the House of Commons, will do other than act in the same spirit as that which induced them to obtain the Bill. The College of Surgeons had, I believe, always maintained or implied their right to secure the nomination of a certain proportion of the examiners in surgery and anatomy. If this right be now insisted on, the consent of the cooperating bodies and of the Medical Council to the arrangements proposed by the College of Surgeons is obviously necessary. These circumstances show that the negotiation is one which, in its very nature, requires time, but they do not indicate that the scheme will come to an end.

On the motion of Dr. APJOHN, it was agreed "That the President be requested to ask the representative of the Royal College of Surgeons in Ireland, whether the Council of the Royal College still adheres to the scheme of the Conjoint Examiners as adopted by the King and Queen's College of Physicians, and agreed to by the other licensing bodies in Ireland, with the exception of the Queen's University, and sanctioned by the Medical Council (March 31st, 1873)."

Mr. MACNAMARA in reply said: The Council of the Royal College of Surgeons of Ireland have not withdrawn from the conjoint scheme of examination for Ireland. The Fellows, the year before last, by a large majority, decided that they could not approve of the scheme then submitted for their consideration, but did not express themselves as being hostile to the principle of a conjoint examination. The Council, nevertheless, remained pledged to the scheme approved of by this Council, but during the past year the question has fallen into abeyance. The present feeling in Ireland would seem to be that we should be very much influenced by the steps which may be taken in England and Scotland in this direction.

A letter from certain lecturers on materia medica and therapeutics in the medical schools of London, calling attention to the system adopted in the instruction in pharmacy and therapeutics, was ordered to be entered on the Minutes.

A memorial from certain practitioners in Durham was next read, calling attention to a case in which the magistrates had refused to convict an unqualified practitioner.

The memorialists were ordered to be informed that the Council had no power to interfere.

Votes of thanks were tendered to Dr. Wood, as Chairman of the Business Committee, and to the President; and the session then terminated.

THE LANCET.

LONDON: SATURDAY, JULY 10, 1875.

Whatever view may be taken generally of the correspondence which has just been published between the Lord Chancellor and the Coroner for Central Middlesex, one point will remain memorable in connexion with it, and will, perhaps, lead to most important issues. For the first time in the history of the Coroner's Court the Lord Chancellor, who holds, or rather is supposed to hold, supreme control over the coroners of England, has ventured an authoritative opinion on the duties of the coroner. In entering upon this novel course, moreover, Lord Cairns has given instructions which are altogether subversive of past rule and precedent, which will, if they be obeyed, change the whole order of the court, and establish between coroners everywhere in England and the representatives of the profession of medicine a connexion, for good or for evil, upon which will be founded a new development of coroner's law. In discussing the course which the Coroner for Central Middlesex should have taken in the case of the late Sir Charles Lyell, the Lord Chancellor says that the information-paper which was laid before the coroner by a sworn constable, and on which an inquest was demanded, was insufficient. A further preliminary inquiry, he argues, was necessary; and he adds that, in this instance, the coroner should himself have sought for such further information before proceeding to issue his warrant; that he, the coroner, as coroner, should have made a personal inquiry, or an inquiry by letter of the medical attendant (Dr. Andrew Clark) who had charge of Sir Charles Lyell up to the time of his death. It is the ruling, in short, of the Lord High Chancellor that the coroners of England possess, and ought to exercise, a discretionary power, before proceeding to their inquisition by jury, of consulting the medical attendants of persons who are reported to them by their sworn officers as having died a violent death.

It is unnecessary for us to inform medical readers of the fundamental change which, by this advice, the highest legal officer of the Crown suggests and recommends. Acted upon decisively, it will reduce the number of inquests in the most remarkable degree, and will at the same time place on the shoulders of the medical body a responsibility it has never yet had to bear, and of which it can form no adequate conception. The Chancellor, we assume, wishes the suggestion he has offered to be exceptional only in its application. But the mischief is that such a rule, once applied, can never remain exceptional. It is far too facile and convenient to remain inactive except in peculiar instances, while no possible discretion can apply to it. If the Coroner for Central Middlesex may claim the discretion, every coroner may do the same. If the medical attendant on a renowned patient like Sir Charles Lyell may be applied to, personally or by letter, by a coroner, the medical attendant of every other person, however obscure, may be equally, and with equal justice, applied to. So in the end, and in a very short time, let the precedent once be set, the coroner and the doctor will by private *tête-à-tête*, or by confidential letter, settle all inquiries preceding inquisition. The doctor will be asked first to explain, informally and privately, to the coroner the necessities or the objections to an inquest; and if the coroner thinks an inquest necessary, the said doctor will have to repeat to the coroner "on oath" and publicly that which he has stated in the privacy of the preliminary and friendly inquiry.

The question arises—How will this system, even in the most exceptional cases, work? We confess that it comes upon us with so much of the force of novelty that we can as yet wonder at it only. Up to this time we should have thought a coroner as little likely to ask a preliminary question, pending inquisition, of us medical witnesses as we should have expected the Lord Chief Justice of England to call upon us or write to us respecting a patient who was about to bring an action before him in a railway case. We should think, or at least we should have thought before the Lord Chancellor's advice was in our hands, that a coroner who wrote to us or called upon us, as suggested, was either losing his senses or was lending himself improperly to some partisan feeling or misdirection. In all our experience, indeed, we never heard of such an interference on the part of any coroner, legal or medical. The late Mr. Wakley, as is well known, was so severely impartial in respect of every medical witness that previous to such a witness being on oath in his court he would not speak to him, though he were his best friend, on the subject of the evidence; and that spirit, we believe, is as common to all coroners as it is to the judges of the higher courts of justice. With every respect to the Lord Chancellor, we think this rule works well, is the only safe rule, and is open to no discretion for its abandonment, even for an occasional purpose.

We are forced to a further conclusion. It is our duty, from a medico-legal point of view, and from a knowledge of what is best for the public safety, to insist that the recommendation of the Lord Chancellor may, in practice, prove a very dangerous one. The wisest medical men are liable to be deceived by designing and able criminals, and while designing and able criminals abound as they do it is unjust to let such an exceptional rule exist as shall give the coroner discretionary power to make, at the instance of anyone whatever, an appeal to a medical authority on the subject of an inquiry in which the same authority is a witnessing authority. Better by far that any amount of feeling should be expressed against official inquiry than that crime should be concealed under the mask of sentiment, or a pretentious exception in a mere formal instance be made admissible as a pretext for prevention of inquiry when something more than formality is demanded.

We make these observations on the Lord Chancellor's new instructions to coroners in no captious spirit. With all our admiration for his legal learning and perfect justice, we cannot fail to detect from the form and manner of his letters that the Lord Chancellor is not practically informed of the usages, precedents, and we may say necessities, of the Coroner's Court. But for that positive reason we feel assured that so just a man as he is will not maintain an error for the mere sake of upholding his authority. We trust sincerely that he will at once retract the suggestion—which, coming from him, is all but law—that a coroner, from motives of feeling, real or assumed, may take secret evidence, and allow the judgment of a witness, however eminent, to suppress the open verdict of a jury.

Before we take leave of the subject of the annual session of the General Medical Council we must try to estimate the effect and value of its proceedings as a whole. We are often asked by correspondents—What is the good of the General Medical Council, and what do we receive in return for the somewhat heavy impost which is the condition of our registration? We ourselves have not hesitated to point out with frankness the faults of the Medical Council as an administrative body, and the ways in which it fails to command the sympathy of the profession. At the same time, we have always been ready to admit the merits of the Council and the excellence of much of the work it has done. Even a hasty glance at the proceedings of the late meeting will show what a power and possibility of good resides in the Council, and that not only in a state of latency, but having its illustration in accomplished facts and in useful work. Those of our readers who are most sceptical of the good accomplished by the Medical Council will admit the force of a few facts which it is only fair to point out.

First, the Council is in more or less constant communication with the Government and with the various departments on medical questions affecting the State. In the Minutes of the late meeting will be found communications of interest, or answers to such communications, from the Lord President of the Privy Council, from the Under Secretary of State for the Home Department, from the Registrar-General, from the President of the Local Government Board, from the Counsel to the Speaker writing under direction of the Statute Law Revision Committee, from the Director-General of the Army Medical Department, &c. It is clear that the Council here is the link of communication between the State and the profession, and occupies a most important and responsible position. We must admit, too, that in *personnel* it is a highly creditable representation of all that is honourable to the profession. It would be difficult to see at one board a group of men more honourably distinguished in their several ways than is to be seen round the board of the General Medical Council. The academic culture of ACLAND; the mature scientific wisdom of SHARPEY; the younger and more impulsive, but not less scientific, justice of ROLLESTON; the dignified speech of STOKES; the quiet earnestness of BEGBIE; the emphasis of HUMPHRY; the geniality and common sense of ANDREW WOOD and Dr. FLEMING; the fine Irish mixture of the practical and the unpractical in Sir DOMINIC CORRIGAN; the knowledge of medicine and of the public of Sir WM. GULL; the knowledge of special subjects and of students possessed by teachers like Prof. ALLEN THOMSON and Prof. TURNER; the familiarity with all branches of medicine suggested by the name of PARKES, — these are qualities in the members of the Medical Council which must give its decisions more influence than attaches even to the acts of representatives of old corporations and older universities. It is true that the Council does not always make the most of its communications with the various departments. One illustration occurs to us as we write. An important letter was received in October last from the Registrar-General in reference to the Act for civil registration of births and deaths, and inviting suggestions from the Council on the new form of certificate. An answer with many admirable suggestions was made by Dr. ACLAND. But not one word was said by the President as to the great evil, we fear sanctioned by local registrars in some large districts, of receiving certificates from unqualified practitioners. Surely the opportunity was most appropriate for a word on this sore evil from the official representative of legal practitioners; but the word was not spoken. Still it is evident that a body composed as the Medical Council is must have great influence, if it likes to use it. One happy example occurs in the Minutes of the late meeting. Until lately the Consolidated Orders of the Poor-law Board have required a Poor-law medical officer before amputating to procure the advice and consent of a member of the Royal College of Surgeons of England, or some fellow or licentiate of the Royal College of Physicians of London. This order seemed to imply that there was something specially virtuous in the advice of members of two London corporations, and was clearly at variance with the spirit of equality of the Act of 1858, which put the members of all similar Colleges of the United Kingdom on the same footing, and gave them imperial privileges. This inconsistency was ably pointed out by the President of the Council to the President of the Local Government Board, and has been removed by the rescinding of the above requirement and the substitution of a new provision on the subject, placing all legally-qualified surgeons in the same category for this purpose.

Not only has the Council considerable influence with Government and the various departments, but it has still more influence on the various examining bodies of the country. This is shown by the spirit in which the various recommendations of the Council on the question of examinations and the reports of the Visitors of Examinations have been received almost universally. It would be unjust not to give the Council credit for the greater efficiency and strictness of examinations now as compared with ten or fifteen years ago, and with a design to make them still more practical and real tests. Not only so, it was suggested at the late meeting by one or more speakers, and in a report of the committee for examining the remarks of the licensing bodies on the reports of the Visitors of Examinations, that the Council should vindicate its title to be considered a Council of Medical Education by an inquiry into the modes of teaching as serious as that which it has carried out, with such good effect, into the modes of examination. This is a most important suggestion, though it yet remains to be seen whether the Council is equal to giving it due trial and effect. The rejection of large numbers of students every year indicates a tremendous failure somewhere in the work of education, and it has probably been too easily taken for granted that only students are to blame for this failure. Here we must leave the Medical Council. We do not consider it perfect, either in constitution or action; but, considering its imperfections, it has done good work, and demands the respect of the profession.

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The deputation which last week waited on the Home Secretary, to urge on him the importance of legislative provision for the treatment of habitual drunkards, had the support, in name or presence, of members of our profession who were fairly representative of its most influential portion. We are glad to perceive that the matter is not to be allowed to sleep. The importance of the subject is not easily exaggerated, and so much has been done in awakening public attention to its urgency, that it would be sad if the labours of its late advocate were allowed to remain without result. No more strenuous efforts have been made in the cause of social reform than those which Mr. Dalrymple devoted to the cause which he had so much at heart, and to which he gave up the best years of his life. His efforts commanded the entire sympathy of our profession, and to a large extent their approbation also. The evil which he sought to remedy presses itself on their attention with constant and peculiar force, and it is well that the initiative in the attack upon it should be taken by them.

The task which the deputation had before them was threefold. They had to point out the urgent need for fresh legislation on the subject, to show that legislative interference would have a reasonable prospect of success, and to endeavour to prove that such interference would be wise and practicable.

The first part of their duty was an easy one. The evil is only too obvious. Drunkenness confronts the social reformer as the first and mightiest obstacle in his path, productive of many other obstacles. The extent, the degree, the gravity of habitual intoxication are admitted by all. The evil can at present be dealt with only in one manner—by an attempt to obtain voluntary abstinence from intoxicating drinks on the part of those who are unable to resist the temptation to excess which habitual indulgence produces. It is here that some other mechanism is required. There are many who are unable even to attempt the path of voluntary reform; there are still more who fail in every effort to maintain a footing there which has been once secured. The problem that presents itself is this:—These cases cannot be reached by means at present available. The probability of their extinction, or material reduction in numbers, by a process of radical cure by education and refinement is very slight. If successful it can only be after many generations have passed, during the long years of which the evil is to go on, unchecked by direct interference. Either, then, it must be left alone, or some fresh means must be devised and employed to make a direct impression upon it.

Absolute forced deprivation of alcohol would appear to be the only means of lessening the tendency to its excessive habitual consumption. And then the second question comes: Are we justified in anticipating that such forced deprivation would attain its object—would enable the individual subsequently to practise with success that voluntary abstinence which he could not previously achieve? The verdict upon this point of those qualified to judge has varied, but, on the whole, it is hopeful. There can be no question that in the cases in which successful voluntary abstention has been practised, the craving for alcohol in time becomes far less intense, until it ultimately ceases altogether. Analogy forbids us to doubt that the case is the same with the more severe cases of dipsomania; that in them, too, the tendency to drink is reduced by abstinence to more manageable limits or removed entirely. The chief difficulty is the facility with which relapses occur. A single drinking bout will place the patient almost in the same position of inordinate desire and powerless will which in the first instance needed restraint, and this necessitates a repetition of that restraint. But there is reason to believe that even the cases which relapse may ultimately be successfully treated by repeated restraint. The testimony to the value of such treatment which we have from the other side of the Atlantic is most encouraging. The experiment has been tried there with a fair measure of success, a measure sufficient at any rate to warrant us in following the example set before us. It is an encouragement, too, to learn that an observer so acute and experienced as Sir Thomas Watson is now convinced of the possibility of recovery, which he once doubted. We may conclude that the probability of success is sufficient to justify the experiment.

The question which remains behind is the most difficult of the three, How can the needed restraint be applied? The need is urgent—the remedy desirable: can it be employed? The opinions of authorities on legislation have differed regarding the practicability of restraint in these cases. Our readers are aware that the proposed measures have been of two classes. One has contemplated the detention in a proper institution, during their dipsomaniacal paroxysms, of those who, in clearer intervals, have placed themselves under effective supervision. At present no means exist of detaining those who have so placed themselves. A man may go into an institution, may beg and implore the authorities to retain him there for three months, and to keep all intoxicating drinks out of his reach; his friends may join in the request. A week afterwards, when the intense craving for the stimulant which follows the first deprivation of alcohol has bewildered his reason and paralysed his will, he may refuse to stay, and in spite of his friends' request, and his own expressed desire, he cannot be detained. To provide such power of compulsory restraint, to be submitted to voluntarily, is one object of such measures as those which have from time to time been before the public. It is not easy to conceive any circumstances in which such power would lead to injustice; it would traverse no fundamental principle on which society is organised; it would involve no necessary hardship to the individual, and it is probable that it would be productive in a large number of instances of incalculable good.

But the effect of such a provision would be limited to a narrow class, and to the less severe instances of the evil it is proposed to attack. Only among the upper and middle classes, probably, would dipsomaniacs be found willing thus to give up their habit by an indirect renunciation. The worst cases are incapable even of this, and the drunkenness among the lower classes would be almost entirely beyond the reach of such a measure. Hence the proposals of the late Mr. DALRYMPLE were much more comprehensive, and included provision for the involuntary restraint, at the instigation of friends, or on the motion of proper authorities, of all those who come within the range of the term "habitual drunkard." It is evident that such a measure, involving the application of a treatment hitherto reserved for the criminal or the confessedly insane, to those who, according to the common interpretation of the terms, are neither criminal nor insane, involves a new principle in practical sociology of no small importance to all members of the community, ebriate and inebriate alike. The system is obviously open to many difficulties, theoretical and practical, to which we may return more fully on another occasion. Those difficulties, the advocates of repressive measures urge, are not insurmountable, and should serve rather to stimulate than damp the ardour of those who feel strongly the pressing evil of habitual intoxication.

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THE subject of Competitive Examinations is just now exciting a good deal of attention both in and out of Parliament. On the one hand, it is urged that this system secures what practically no other system does — viz., the throwing open of public appointments to all alike, so that what previously required political or social interest to procure now requires brains and culture; that by open competition you test the only qualities in the candidates capable of being tested, physical inefficiency being guarded against by medical examination; and that it is altogether the fairest system for distributing public appointments, among the middle classes especially, and, on the whole, the best method for securing efficiency. Theoretically, no doubt, it seems an excellent method; and, practically, it is extremely difficult to provide a good substitute for it. The old plan of patronage is founded on a wrong principle, and is obviously open to abuse. On the other hand, it is urged that examination does not gauge intellectual capacity and sound training; that it does not even attempt to test qualities of judgment, common sense, and character; that it encourages a process of rapid and superficial education which tends to debilitate rather than strengthen and discipline the mind; that it frequently injures the health; and that, while the system secures at best a high average in the successful competitors, it frequently excludes the best men. When the examination really tests the reasoning faculties and judgment as well as the memory the system is undoubtedly a good one as far as it goes, but it is questionable whether it is not an inadequate and inapplicable method for some kinds of appointments. Let us take the army and navy, for example. As regards the latter, we have recently had the report of the committee appointed by the Admiralty to inquire into the system of training the naval cadets. The committee expresses its entire disapproval of the present system of entry by competition. The hard preparatory study—amounting to ten hours and more daily—in the case of boys from eleven to thirteen years of age must be injurious by curtailing the amount of open-air exercise and the amount of sleep required to keep boys of this age in good health. Then, again, the mental worry and anxiety attending the preparation for an examination, the work at high pressure in the case of very young boys, especially if delicate or of nervous temperament, must, we think, prove injurious to them in more ways than one. They are not in a position to do justice to themselves in their subsequent studies whilst suffering from the effects of previous overwork; the mental tension prevents their assimilating properly what they learn, and hard study at such tender ages disgusts them with books; the overtaxed brains get exhausted, and a condition of mental nausea is induced every bit as much as their systems would become nauseated if they ate too much or were fed on too rich a diet. No wonder that many of these lads had a jaded and pallid appearance. Again, it seems monstrous that a boy's career in life should be finally decided by his conduct at an examination at this early age, when his character is quite unformed and the state of his memory so often depends upon the state of his stomach. Anyone acquainted with boys must know how an insignificant physical cause, such as a headache, bilious attack, or trifling indigestion, will make all the difference; and, what is more, a vigorous, healthy, and altogether superior lad will require a larger amount of air, exercise, and sleep to keep his organs in full physiological play, than another of different physique and temperament, who may be capable on that account of bringing more application to his preparatory work. The Committee, in their report, appear to us to have recognised these things and attempted to provide against them. As regards the army, there are many qualities requisite to make an officer besides book lore. A large number of young men are at present, we believe, undergoing a competitive examination for direct commissions. The army is now a profession to be studied and practised like any other profession, and not to be taken up as a kind of temporary occupation for lazy men whose desire is to get social standing with as little to do as practicable, and it is quite right that they should bring strong brains as well as strong bodies to their work. But we believe that many experienced commanding officers are not at all in love with the new system of officering the army by means of competitive examinations. Where so much turns on the possession of robust health and good physique, it might be well to go further in the competitive direction by classifying the candidates and giving the preference to the strongest in wind and limb. The competitive system is said to answer best for the scientific branches of the service; and the examination for Woolwich is really a test of a man's mental powers, in consequence of mathematics forming so prominent a part of the examination. As far as the Medical Service is concerned, however, the system of competitive examination exists only in name, for the unpopularity of that service has been so great of late—and it is especially so at the present time—that there is no competition; it amounts to a selection of the best men that present themselves.

WE have been waited upon by a deputation from the tradesmen of Sloane-street, with reference to the report of the prevalence of scarlet fever in that street. The deputation assure us that they have made the fullest inquiries, and cannot discover that any case of the fever has occurred in Sloane-street.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF SURGEONS' ELECTIONS.

The result of the election last week at the Royal College of Surgeons is a matter for general congratulation. It has, indeed, very rarely happened that three candidates so worthy as Mr. Prescott Hewett, Mr. Cooper Forster, and Mr. Birkett, have been elected at the same time members of the Council of the College. The last election declared, moreover, the sentiments of the Fellows of the College. Mr. Hewett and Mr. Birkett were retiring Councillors, but sought re-election, and gained it, thereby receiving the assurance that during their term of office they had not forfeited the confidence of their constituents.

Mr. Cooper Forster, who now takes his seat in the Council for the first time, had so thoroughly gained the good opinion of the Fellows that his return was from the first a matter of almost absolute certainty, as we did not hesitate to affirm. He came forward as a well-known and tried man, and was sure of success. For this reason it would have been well if Mr. Spencer Smith had seen fit to retire altogether from the contest, and the result has shown that such a course would have been prudent. To be elected a member of the Council is certainly an honour of considerable value, but to be the only unsuccessful candidate out of three for re-election can neither serve any useful purpose nor be gratifying to the aspirant. It may be, however, that Mr. Smith and his friends imagined that they had a stronger hold on the Fellows of the College than proved to be the case. That Mr. Smith's friends worked hard for him before the election we have very good reasons for knowing and remembering, and that his friends did not desert him in the day of trouble is very clearly seen by the fact that, out of 97 votes which he gained, 32 were plumpers; while the three successful candidates had altogether only 11 plumpers.

It may not, perhaps, be out of place here to remind the recently elected members that their constituency will regard them with a jealous eye, and that where much has been given much will be required. We are justified, we think, in expecting some more definite action on the part of the College authorities in all the matters that concern the progress of surgery and the advancement of medical education. Nor shall we be deemed too sanguine if we look for greater promptness on the part of the Council in the matter of the Conjoint Scheme, seeing that one-fourth of the present Council of the College consists of members of the Committee of Reference.

THE EPIDEMIC OF MEASLES AT FIJI.

The late outbreak of measles at Fiji seems to have been a somewhat remarkable as well as an unfortunate occurrence—most unfortunate from a humane and political point of view, and remarkable for the rapidity and extent of the spread of the disease. The epidemic appears to have been an extension of that which had been prevailing in Australia. King Cakobau, with some of his family and suite, had been on a visit to that country, where His Majesty had the misfortune to contract the disease. He had recovered, however, by the time he had reached Levuka from Sydney, on the 15th of January last, in H M.S. *Dido*. Of the nature of the disease and of its contagious character there could have been no doubt among the officers, medical or otherwise, on board the *Dido*. According to the interesting account in *The Times*, however, the Fijian authorities, from not having been made aware of the risk of its spreading, adopted no precautions against its doing so. It is possible that the safe return of His Majesty may have been a subject of congratulation, rejoicing, and festivities, and that in this way a large number of native chiefs and others were exposed to the contagion, and afterwards spread it; but there still seems to be considerable room for doubt as to whether there was anything more than an apparent connexion between the arrival of the ship and the outbreak in question. However, the disease, once introduced, spread far and wide. Nor is this the first occurrence of the kind. Dr. Litton Forbes, in his book entitled "Two Years in Fiji," speaks of a similar outbreak among the islanders. A missionary, the Rev. W. Gordon, is said to have been murdered, with his family, by some Erromango men in consequence of the occurrence of a very fatal epidemic of measles having been attributed to his influence. The unfortunate missionary had, it appears, a short time previously to its outbreak, told the islanders that if they did not repent and become converted they would be visited with a pestilence. On the authority of Dr. Litton Forbes's work, we learn that the natives are so depressed and cast down by disease that they may even be regarded as dying occasionally of fright, and in the present instance the inhabitants seem to have been panic-stricken. No sooner did the unfortunate victims of measles suffer from the attendant febrile symptoms than, we are told, they exposed themselves to cold in every way, jumping into the water to cool their bodies. The weather was exceptionally stormy, and from the exposure, and a disregard of proper measures, owing to the conviction that they were being poisoned, the mortality from the epidemic seems to have been enormous. Much sickness still prevails, and it is said that typhoid fever has made its appearance. We hope that medical and every other aid has been forwarded from Sydney, and that the sickness may have entirely disappeared long before the body of Royal Engineers proceeding to Fiji from this country shall have reached their destination.

TREATMENT OF TYPHOID FEVER BY THE COLD BATH.

The recently published Transactions of the Medical Society of the Paris Hospitals contains a suggestive and practical paper on this subject by Dr. H. Libermann. The author, who is surgeon-in-chief of the military hospital of Gros-Caillou, acknowledges that his attention was first drawn to the value of this method of treating typhoid fever by the success with which he had observed it to be pursued in the German ambulances during the war of 1870. He then gives a full historical sketch of the bath treatment of fever, assigning to Currie the honour of its introduction, and giving full credit to the good work done by the German physicians, notably Brand, Ziemssen, and Liebermeister. His own experience has at present extended over twenty cases, two of which were fatal, but he cannot adopt in its entirety the confidence that Brand has in the use of this valuable therapeutic aid. He gives, however, several statistics showing that the death-rate has been considerably reduced by the use of the bath (to nearly one-third of its previous scale), and this from a large number of cases, with deaths from all causes. The most marked reduction, however, has been in those cases which are fatal from the pyrexia itself. The plan of treatment pursued by Brand is now well-known in this country. It consists in the systematic employment of the cold bath (63° to 70° Fahr.) for a time lasting from fifteen to twenty minutes three or four times daily, during which the temperature of the body is reduced from 2° to 7°, the amount of reduction being generally in proportion to the slightness of the case. The warm bath is indicated in cases of extreme nervous prostration, with feebleness of heart's action, or where there is much diarrhœa. The effects of the warm bath are of course not so striking as those of the cold, but both methods are marked by their sedative action on the nervous system, and the disappearance of dichrotism from the pulse. Dr. Libermann then enters fully into the indications and contra-indications for the use of the bath, which he says should be reserved for severe cases—a reservation incompatible with the early adoption (in the first week) of the treatment by Brand, a plan which doubtless has influenced that physician's statistical results. He believes the bath should be employed if, at the end of the first week or the beginning of the second, there is a high evening temperature with but slight morning remission, assigning a temperature of 104° (in rectum) as the usual limit; or if on any one occasion it should reach 105·8°; or if the remissions for days together do not exceed 1°. The bath is contra-indicated in slight cases or in cases complicated with severe diarrhœa or symptoms of perforation of bowel, or where the rise of temperature is obviously due to collateral causes. Pneumonia and hypostatic congestion are benefited by the bath, owing to the improvement effected in the vigour of the heart's action. He appends a few cases, and the whole essay, which is well worthy of perusal, is a gratifying indication that some Frenchmen, at least in medicine, are not slow to learn what is valuable from those who politically are their opponents.

THE FACTORY POPULATION.

DR. FERGUSSON, certifying factory surgeon at Bolton, gave some instructive evidence last week at Manchester, before the Royal Commission appointed to inquire into the working of the Factory and Workshops Acts. Dr. Fergusson has held his appointment for fourteen years, and the result of his observations is that there is a steady degeneration going on among the factory population. He had kept an accurate account of the physical development of all children who came under his notice, and he found that the number of children physically unfit for work went on increasing year by year; of late years, indeed, quite one-half of those submitted for examination were unfit to work full time. This is a depressing account of the Lancashire operatives, but we hope and believe that matters are not quite so bad in other counties. It is often stated that factory labour and factory hours are operating prejudicially on the district population. Dr. Fergusson denies this, and attributes the physical deterioration of the population solely to evil habits. Intemperance, whose wide-spread prevalence in this country is forcing itself on the attention of our legislators, is regarded by Dr. Fergusson as the first cause in debilitating the race, and in transmitting feeble offspring, while a good point was made in condemning the vicious practice now common of rearing children without milk. Dr. Fergusson's statement on this head receives frequent verification in the reports of medical officers of health. It is no uncommon thing in rural districts to find infants fed on coffee and tea, often given them three or four times a day. Another cause given of the degeneracy was the abuse of tobacco. Dr. Fergusson stated that at least one-half of the boys in the mills from twelve to twenty years of age either smoked or chewed tobacco, or both. The injurious effects of tobacco on the young are regularly pointed out in our columns. Happily the abominable practice of chewing—a process in which all the soluble parts of the plant are taken up by the saliva—is rare in this country. The effect of this process on the constitution of a boy is most disastrous. We hope Dr. Fergusson's evidence will be the means of directing the attention of philanthropists and reformers to the condition of the Lancashire factory population. Parliament wisely regulates the age at which boys may commence work, and the hours of their labour, but the measures required to cope with the evils described by Dr. Fergusson are educational and moral.

"LOPSIDED GENERATIONS."

THE ninth volume of the *Journal of Anatomy and Physiology* contains an article by Dr. Hollis with this heading, which gives some interesting particulars as to the history of dexterity. Its prevalence among mankind dates from the earliest biblical records. The ancient bas-reliefs of the Assyrians attest the fact; and anyone who chooses to look over the Kouyunjik gallery of the British Museum will see other proofs, notably in the carvings illustrative of the battle between Assur-Bani Pal and the Susians. The Ancient Greeks were right-handed at a very early period; and the metaphysical use of δεξιὸς, as given by Pindar and other writers, confirms the hypothesis of the prevalence of dexterity in that country. Most if not all languages, on the other hand, have a word signifying "left-handedness," with a meaning closely allied to that of the French *gauche*—i. e., clumsy. Failing to ascertain the origin of right-handedness in post-historic times, the author turns for the clue to the anatomical mechanism of the human body. The larger number of our organs are in duplicate. Those single in man have frequently traces of such duplicate formation (as the nose, brain, heart, and liver). And we know also that our right lung, kidney, liver-lobe, and limbs exceed in size those of the left side; involving, of course, a greater amount of tissue structure, and a larger supply of nerves and blood-vessels for their nutrition. It is known that a person walking in a dense fog figures with his feet the segment of a circle; and that if he is right-handed he takes a direction to the left, because the right leg naturally takes a longer stride. Dexterity appears to be confined to the human race, for the monkey tribes use their right and left limbs indiscriminately in grasping objects given to them. But the differences as to right and left viscera are in many cases greater even than in man, so that this latter circumstance does not conduce to dexterity, though possibly determining in some way the primeval selection of the right hand in man. The left side of the brain is larger than the right; it has been shown that the power of articulation in the right-handed is confined to a certain convolution on the left side; and hence we arrive at the fact that in speaking and thinking we use the left, to the exclusion of the right, side of our brain, this being the result of dextral education. Amnesia and aphasia in right-handed men indicate disease of the left brain; and Brown-Séquard and Ferrier state that this lesion may be removed by exercising the opposite side for articulatory purposes. Hammer palsy (as recorded by Dr. W. Frank-Smith) and writers' cramp (specially commented upon lately by Dr. Poore) show the results of excessive working of the left brain. The author of the paper cites as examples of sacrifice to what he calls this "Moloch of education" the cases of Dr. Johnson, Dean Swift, Spalding (the eminent German scholar), and Dr. Milligan. Brains, in these days of high-pressure speed, break down occasionally perhaps by overwork, but more especially by ill-balanced work; and the obvious deduction drawn and forcibly put before the reader by Dr. Hollis is, that we should "adopt a system of education which will enforce an equal prominence to both sides of the brain in all intellectual operations." Physicians have already learned to relieve the right eye and ear by employing them in turn with the left at the microscope and stethoscope. Why should we not thus educate our hands, and so change Horne Tooke's definition of the left hand as "that which we are taught to *leave out* of use when one hand only is employed," into "that which is *left* for us to use when the right hand is wearied by continued work"?

THE LYON JONES FUND.

IT may probably be known to our readers that a very considerable sum of money—amounting in round figures to £360,000—was left to the Liverpool charities, medical, religious, and general, by the late Mr. Roger Lyon Jones, of that town. Up to the present time the charities have not, however, been benefited by this magnificent bequest; on the contrary, they seem to have occupied the position which a comparatively needy man does to a rich relative. It is a case of great expectations, and it is apt to be forgotten that these do not provide for present requirements. Intending subscribers to the Liverpool hospitals may refuse to put their intentions into practice, and comfort themselves with the assurance that the Lyon Jones Fund will soon be distributed. If we may judge from the *Liverpool Daily Post*, the impression seems to be gaining ground that the executors (who are the sole administrators) intend funding the property and doling out the interest to the different charities. This method of dealing with such a princely sum, and the extent to which the medical charities are likely to be benefited by it, are points at present giving rise to much comment. We think it very necessary that the claims of the medical charities in Liverpool should be distinctly asserted. Certain it is that opportunities are not wanting for doing much substantial good in this direction. The Royal Infirmary is, we believe, considerably in debt, and it is capable of being improved in its construction and arrangements. The Northern Hospital is too small for the requirements of the population amongst which it is situated; and the Infirmary for Ophthalmic cases is quite insufficient as a building to meet the demands made upon it. We adduce these as instances showing that there need be no difficulty in finding directions for doing great and lasting good to local institutions of the most useful and valuable character.

SCARLET FEVER IN SOUTH KENSINGTON.

A SOMEWHAT remarkable outbreak of scarlet fever has excited considerable attention in South Kensington. From the scanty materials at our disposal, it would appear that on or about the 9th ult. a dinner party, followed by an "at home," was given at a house in one of the most fashionable thoroughfares of that very fashionable locality. There had been no illness of any kind in the house previously, and there was no ground to suspect anything wrong in its sanitary condition. Nevertheless, within two or three days afterwards, out of sixteen persons who sat down at the dinner-table, no fewer than six were laid up with scarlatina. More than this, several of the visitors at the reception were similarly affected or attacked with characteristic sore-throat. Nor were the domestics spared, two of them developing the fever shortly after, and other victims of the outbreak suffering from sore-throat. There were, as might be expected, numerous waiters at this party; but we believe no suspicion attaches to them in connexion with the outbreak. Indeed, so far as we can learn, all the facts of the case exclude the idea of personal contagion. The one point which appears to have been clearly made out in the study of the etiology of this outbreak is, that all those who were affected either with primary scarlatina or with sore-throat had partaken of cream in some form or other. Naturally that article would be more largely used at the dinner-table than at the evening reception, and hence the larger proportion of attacks amongst the guests at the dinner. Many persons of course who partook of the cream have escaped, but their immunity may have been due to a variety of causes, and does not furnish an argument against the validity of the *suspicion* that the contagium was carried in the cream. So far scarlatina has not been clearly traced to any person connected with the dairy whence the cream was obtained. The inquiry, however, is still pending, and before long we hope to be able to present our readers with a full account of this remarkable outbreak, which, notwithstanding that it has not proved fatal in any case, has, nevertheless, caused a great deal of distress, and is, in the words of "the medical attendant," "unparalleled in suddenness, variety of age, numbers, and rapidity."

OVERCROWDING IN WATERING-PLACES.

THE overcrowding of watering-places is growing worse year by year in consequence of the increasing throng of visitors at these summer health resorts. It is evident that in many of them no sufficient provision is made for the sudden influx of a transient population, and but slight precautions are taken to prevent dangerous overcrowding. Many seaside villages, whose sanitary arrangements as to drainage and water-supply may be satisfactory and all-sufficient for their usual residents, cease to be true health-resorts when crowded by five times as many visitors. Already watering-place statistics begin to show the results of this overcrowding, and the death-rate from enteric fever in these health resorts, although still low, is highest in the summer quarter of the year, contrary to the experience of other populations. If the sanitary authorities in watering-places neglect much longer to put some check upon the cupidity of lodging-house keepers, and the carelessness of seaside visitors, it will soon be a case of killing the goose for the golden eggs, and the British public will learn for themselves that health will best be preserved by staying at home. There has been a recent attempt to take a census at Blackpool, which appears to have been a failure. The object was probably to ascertain the population of the town when full of visitors, but at a recent meeting of the Census Committee of the Local Board it was stated that large numbers of the enumeration papers had been burned by the householders instead of being filled up and delivered to the collector. It appears that some of the cottage houses had as many as 35 and 40 persons sleeping therein on the census night, and the householders, fearing that the Local Board Commissioners would prosecute them for overcrowding, destroyed their census papers. Whether the Blackpool census prove a failure or not, the Local Board will be wise not to lose sight of this matter of overcrowding.

VERDICTS AT CORONERS' INQUESTS.

THE primary object of holding an inquest is undoubtedly to ascertain the cause of a death, whether it resulted from natural causes or from violence. Before the value of vital statistics was either understood or appreciated, such verdicts as "Death by visitation of God," or "Death from natural causes," or "Accidentally killed," &c. &c., answered all the purposes which inquests were then intended to serve. Now, however, that mortality statistics are turned to increasingly useful account by the expenditure of much time and money, both public and private, such verdicts as these not only cease to be satisfactory, but are decidedly objectionable. Coroners appear too often to lose sight of the fact that the verdict at inquests is entered on the Death Register as the cause of death, and that such verdicts as those we have mentioned are valueless for purposes of classification. About a week since an inmate of Millbank Prison died while undergoing a sentence of seven years' penal servitude. According to custom, although the cause of death was patent to the medical officer of the prison, an inquest was held before Mr. Bedford, one of the Middlesex Coroners. Dr. Munro, the medical officer, gave evidence that deceased when admitted was suffering from tubercular disease of the lungs, and was on this account at once ordered into the prison infirmary, where he died. A post-mortem examination supported this evidence by showing that both lungs were extensively diseased and covered with tubercles. The jury returned a verdict of "Death from natural causes," and the cause of this death will be so entered in the Death Register. Here is an undoubted case of death from phthisis, and had no inquest been held the cause of death would have been so certified by the medical officer; in consequence, however, of this open verdict the cause of the death is in reality "not stated" in the Register. As inquests are held in about six per cent. of the deaths in England and Wales, well-defined verdicts are essential to the value of mortality statistics.

HEALTH OF JERUSALEM.

For more than a year small-pox has been exceedingly prevalent in Jerusalem, Bethlehem, Jaffa, and other towns in Palestine. There are, unfortunately, many native customs and prejudices which militate against a cessation of the epidemic. In the first place vaccination is almost entirely neglected. There is no attempt to isolate small-pox patients, while the sufferers are carefully guarded against the access of fresh air, by which means the atmosphere in the apartments and the clothes of the persons therein become saturated with the poison—thus greatly facilitating the communication of the disease to others. Again, the prejudice against adopting medical treatment for small-pox is almost universal, while the general insanitary condition of the towns and villages is notorious. On the whole the mortality does not seem as great as might have been expected, the disease not having been of a virulent type. But numerous deaths have occurred, and a great many eyes have been destroyed for want of efficient treatment. With the season of early fruits, which are frequently eaten in an unripe state, diarrhœa and cholera have become common in Jerusalem. Some of the cases have been of great severity, accompanied by cold skin and tongue, husky voice, a bluish tinge of countenance, feeble pulse, and cramps of the legs. Desultory attempts at improving the sanitary condition of Jerusalem continue to be made, and the steady influx of Europeans cannot but have a beneficial influence on the health and prosperity of the Holy City.

THE INFLUENCE OF CHLOROFORM ON FERMENTS.

Some important observations have recently been made by M. Muntz on the effect on various ferments of the addition to them of chloroform. He finds that its effect is very different on the two classes of ferments which have been distinguished by Dumas as chemical and physiological ferments. On the former, which consists of a nitrogenised but unorganised material, it has no effect; on the latter, those in which the fermentation is the concomitant, if not the result, of a process of growth in vital organisms, chloroform has the effect of arresting the fermentation at once. Milk, to which a small quantity of chloroform had been added, remained for four months without becoming curdled, and no organism appeared in it; fresh urine, under the same conditions, remained for two months at a temperature of 25° to 30° C. without undergoing ammoniacal fermentation or yielding organisms; the result was the same with flesh, gelatine, and starch. The alcoholic fermentation of sugar in contact with yeast was completely arrested by the presence of chloroform. On the other hand, chloroform had no appreciable effect on the quantity of glucose developed in malt in a given space of time and at a certain temperature. Exactly the same quantity of hydrocyanic acid was formed in bitter almonds with and without the addition of chloroform. Saliva changed sugar into starch at the same rate. Thus this agent offers a means of distinguishing accurately between ferments of the chemical and of the physiological class; and M. Muntz hopes to be able, by its help, to study from a new point of view the nature of the various morbid animal matters which have so disastrous an influence on the economy. At any rate, the effect of chloroform will enable a distinction to be drawn between the forms of animal poison which act in a manner similar to diastase and its analogues, and the altered liquids which are supposed to owe their virulence to the presence of bacteria and vibriones. The influence of chloroform on the organic bodies in arresting all action seems to be transient, but the ferment is afterwards incapable of acting with the same intensity. The lactic acid ferment has a greater power after its recovery from the influence of chloroform than yeast possesses, but prolonged contact with chloroform in each case produces the death of the organisms, and incapacity for further action.

HÆMOSTASIS IN SURGERY.

What shall we do with the arteries after surgical operations? It seems now to be a matter of taste; for, to take only the hospitals of London, it will be found that acupressure, torsion, and the ligature, either with silk or catgut, are severally practised in different institutions. No one will, however, complain that various means should be at hand; it is for the surgeon to decide which is the most appropriate in a given case. Much may depend, however, on whether ischæmia (Esmarch's compression) be used or not. Torsion is a favourite practice in some hospitals; but we have seen abundant secondary hæmorrhage after it, and statistics in this respect are wanting. We are, no doubt, far from the time when hot oil was used; and we may boast of a gigantic stride in regard to hæmostasis, though we are apt, now and then, to fall back upon the practice of our ancestors. And here we have Professor Verneuil, of Paris, who is strongly advising *forci-pressure*, which, as the Professor mentions, was first practised by Desault in 1790. It chiefly consists in the application of forceps with continuous pressure, which may be kept up from twenty-four to forty-eight hours without inconveniencing the patient. The instrument has even been known to remain until it became spontaneously detached. The blades may be smooth or toothed, the latter acting more quickly and, in most cases, successfully. M. Verneuil is convinced that this practice, so long neglected, will not again be so unaccountably abandoned.

ECHINOCOCCUS FLUID.

The chemical composition of the fluid contained in an echinococcus cyst presents so many curious peculiarities that an especial interest attaches to the careful analysis recently made by Dr. Munk of Strasburg. The cyst was situated in the liver. The quantity of solid constituents agreed nearly with that usually found, amounting to 1·574 per cent., of which ·968 was inorganic and ·606 organic matter. The latter contained a distinct trace of albuminate, which has not previously been detected. There had been no inflammation which could account for it. A considerable quantity of grape sugar was present, as Bernard and Lücke had previously found, amounting to ·06 per cent. of the fluid. Dr. Munk suggests that glycogen may be present in the fluid, and transformed by fermentation into sugar after its removal. He could find no glycogen, but the fluid had been drawn off five or six hours before the analysis was made. Urea and kreatin were both detected, and in each case more than a mere trace, but the quantity could not be ascertained. Of the inorganic portion, chloride of sodium constituted about two-thirds (·61 per cent. of the fluid). Traces of lime and magnesia were present, and small quantities of carbonate and sulphate of soda. Only a trace of phosphoric acid was found, probably united with lime and magnesia. No potash could be detected, and the absence of potash and the small quantity of phosphoric acid, both so abundant elsewhere in the body, is very remarkable.

THE TOULOUSE INUNDATIONS.

IF it be true, as the great Italian poet tells us, that there is nothing more painful than the remembrance of happy times amidst affliction, the French people have indeed had much cause of late for sorrow and regret. Whilst only just recovering from the tide of war which had swept over their country, they have had to encounter the effects of this disastrous flood, by which so many have lost their lives, and a far larger number have been rendered homeless. It is needless to say that the suffering has been great, and that this calamity has fallen on France at a time when her people are weighted with a heavy war tax. Under circumstances such as these, acts of international sympathy and help are rightly regarded as a duty; and although we cannot give insertion to some communications that have reached us on this subject, we are glad to call attention to it in the full assurance that assistance will not be withheld by members of the medical profession in carrying out an object like that which the Mansion House Inundations Fund has in view.

PHYSICAL EDUCATION.

MR. BUTLER-JOHNSTONE recently called the attention of the House of Commons to the desirability of introducing physical education into the public elementary schools of this country, and we quite agree with him. We have frequently urged that more might be done in this direction, and with very great advantage to the health and physique of the youth of this country. Too much attention is given to the mental, and too little to the physical, education of the poorer classes, and the consequence is that too many of them, especially those of the manufacturing towns, are stunted in growth, jaded in aspect, and very vulnerable to the exciting causes of constitutional disease. Mr. Butler-Johnstone pointed out that Sweden was the first to adopt this system of education on a sound basis, and that she had been followed by Prussia, and was being followed by Russia, Italy, and Saxony; and we should be glad to add, England.

ABERDEEN UNIVERSITY.

THE Chair of the Practice of Medicine in the University of Aberdeen is vacant by the resignation of Dr. McRobin. The venerable professor retires after a service of no less than 43 years, and will carry with him into private life the good wishes of many old pupils and friends. The vacancy of so important a chair in the practical side of the school will no doubt cause a stir among the physicians of the north. We understand that Dr. Smith-Shand, senior physician and lecturer on Clinical Medicine at the Aberdeen Royal Infirmary, is in the field as a candidate. As the Chair of Midwifery in the same University is still vacant, the filling-up of these two chairs must be a matter of no small concern to those who are interested in strengthening the practical departments of the Aberdeen school. Both chairs are in the gift of the Crown.

THE CONTAGIOUS DISEASES ACTS DEBATE.

THE number of statements of an erroneous character which gain credence from going uncontradicted is probably very large; and the opponents of the Contagious Diseases' Acts have a good deal to answer for in this respect. Sir Harcourt Johnstone, for example, stated the other day in the House of Commons, that "among many surgeons there was a strong feeling against applying these Acts at all, but these officers had been officially informed that their chances of promotion depended upon their willingness to carry out the Acts." As our contemporary the *Broad Arrow* remarks, one would like to see the terms of such an official order. The whole thing is absurd on the face of it. No one has the power to frame any such order, and would not be so silly as to issue it if he had.

THE MEDICAL COUNCIL.

As noticed in a previous number of this journal, the appointment of Mr. Richard Quain as representative of the Royal College of Surgeons of England on the Medical Council will expire on the 14th inst. The following additional vacancies will occur during the present year:—The Apothecaries' Hall, Dublin, represented by Dr. Leet, in August. The University of London, represented by Dr. Storrar, in October. The King and Queen's College of Physicians in Ireland, represented by Dr. Aquilla Smith, during the same month.

DIAGNOSIS IN THE OUT-PATIENT DEPARTMENT.

A CASE of alleged neglect at the Manchester Infirmary is reported. A man who had been thrown by the buffer of an engine against a post was taken to the infirmary. After thirty or forty minutes the junior house-surgeon attended and dressed the patient's head and hip, and told those in charge of him to take him home. The patient died on the way home. It is right to say that he did not seem to wish to stay in the infirmary, though the principal witness, a fellow platelayer who helped to take the deceased to the infirmary, thought he should have been detained. Unfortunately no post-mortem seems to have been made, and the cause of death, though presumably connected with the accident, must remain uncertain. It is to be regretted that the case was not treated more promptly and detained to be watched.

DR. FLEETWOOD CHURCHILL, OF DUBLIN.

THIS well-known obstetrician has resigned practice, and will reside for the future in the North of Ireland. He was President of the College of Physicians in 1867–68, and has presented about one thousand volumes, consisting mostly of works on obstetric medicine and the diseases of children, to the library of that institution. The College have arranged to have a life-size portrait of Dr. Churchill, painted in oil by Mr. Jones, R.H.A., placed in the Examination Hall, and an illuminated address will shortly be presented to him by the Fellows of the College, assuring him of the respect and esteem in which he is regarded by each member of that body.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

A LARGE meeting, presided over by Mr. Sampson Gamgee, was held in the Committee-room of the Town Hall, Birmingham, "to consider the scheme of the Queen's Hospital Committee to abolish subscribers' tickets, charge patients registration fees, and inquire officially into their circumstances." Changes in this direction were strongly denounced by the speakers, especially by Mr. Gamgee, at any rate until further inquiry, and after full consultation with the general body of subscribers and with the committees of the Hospital Sunday and Hospital Saturday Funds. A deputation from the meeting was appointed to attend a special meeting of the governors on the 9th inst.

LYMPHATICS OF THE CHOROID AND RETINA.

This subject has been recently investigated by Morano. He last year announced the discovery of minute perivascular lymphatic channels in the choroid, communicating with the perisclerotic space, and penetrating to the chorio-capillaris; and he has now ascertained the presence of stomata in the pigment layer of the retina (formerly called "choroidal epithelium") similar to the stomata described by Recklinghausen in the serous membranes. These retinal stomata are best marked in the frog, and are mostly formed by the separation of three or four of the epithelial cells; they present internally a curious valvular arrangement due to the presence of three or more small processes from the sides of the orifice, and covered by a delicate endothelium. In mammals they are less constant, and may be destitute of valves, if present.

A parliamentary return obtained by Colonel North has been issued, containing some correspondence which passed between the Lord Chancellor and Dr. Hardwicke in March respecting the proceedings at the inquest upon the body of Sir Charles Lyell. Lord Cairns, after receiving Dr. Hardwicke's explanation of the course he pursued, directed his secretary to state that, while ready to believe that the coroner had acted in the matter under a scrupulous sense of what he considered to be his duty, he "feels obliged to point out to you, as he has done, the considerations which lead him to the conclusion that in a more sound and careful exercise of your discretion you would have adopted a different course, and to express a hope that in future more accurate and reliable information will be obtained before proceeding to public investigations of death, which must be so harrowing to the feelings of relatives and households."

We understand that Captain Webb, who a few days ago swam from London to Gravesend, a distance of twenty miles, is the son of a medical man. Such a feat, performed without any artificial aid whatever, surpasses, in our opinion, Boyton's voyage across the Channel. Captain Webb proposes next month to swim from Dover to Calais, an undertaking that will tax his endurance and stamina to the utmost. There are a few yet living who can recall the profound sensation created in England when Lord Byron, in imitation of Leander, swam across the Hellespont. A humorous print at the time described an imaginary swimming match, in which each competitor started with a huge wallet of provisions strapped to his back. Such conditions of natatory enterprise will probably soon be realised.

The South Durham and Cleveland Medical Society has just published its second annual report. The report is interesting, and a glance at its contents shows that the practitioners of the district take a warm interest in the prosperity of the Society. As the success of a society of this kind depends largely on the industry of its secretaries, we are sure that great credit is due to Drs. Foss and Ellerton.

As Dr. George Wilson, of Paddock, Huddersfield, accompanied by his coachman, was, on the 1st inst., going his usual professional round in a trap, his horse took fright and dashed the vehicle violently against a cart. The doctor was thrown out, and unfortunately sustained a fracture of one of the bones of the arm.

We were under the impression that the authorities at Guildford had lately perfected important sanitary measures and improvements, and had generally put the town in good order. An inhabitant, however, writes to the local newspaper charging the sanitary authority with permitting the sewerage of the borough to remain in a disgraceful state, and alleging that there are numerous cesspools scattered about, which pollute the atmosphere. The writer calls for a complete reform of the system of drainage now prevailing. If the allegations are true, the local board of health has yet a great deal of work before it.

Dr. Iliff, Medical Officer of Health to St. Mary, Newington, has just presented to the vestry nearly 140 volumes on sanitary subjects, including the Registrar-General's printed weekly return of deaths from the year 1856, several valuable Parliamentary Returns, nine volumes of sanitary pamphlets, and a complete analytical index. The vestry, in according their thanks, referred it to the General Purposes Committee to select a suitable permanent place in the Vestry Hall for their preservation.

A recent order of the Local Government Board placing the medical superintendents of the hospitals at Stockwell, Homerton, &c., in the position of general governors, has, in compliance with the wishes of the Metropolitan Asylums Board, been "modified." We suppose that the order has practically been rescinded, and so retaining in the hands of the managers absolute control over the institutions. It is not often that the central authority reconsiders a decision.

The *Army and Navy Gazette* states that Deputy Surgeon-General J. F. Beatson will leave England in the course of a few days to enter upon his new appointment as Surgeon-General, Bengal Medical Service, to which he is to be gazetted on Sir J. C. Brown's retirement, at the end of the year. Dr. Beatson joined the Bengal Medical Department June 16, 1843, and has been Deputy Surgeon-General since April 20, 1869.

Dr. Orme Dudfield, medical officer of health for the Kensington district, in his last report to the Vestry, calls attention to the recent outbreak of scarlet fever in the neighbourhood, which will be found to be dealt with in another column.

The *Portsmouth Times* states that so many cases of fever have lately occurred among the ships of war forming the Channel Squadron that the return of the fleet to Spithead will in all probability be delayed.

Sir William Wilde, of Dublin, has been elected an honorary member of the Royal Academy of Science at Upsala, and a corresponding member of the Geographical Society, Berlin.

We learn that at the recent Dublin Assizes a man was sentenced to five years' penal servitude for causing the death of a child by inoculating it with small-pox.

Last week's mortality returns for the metropolis reveal a considerable increase in the mortality from scarlet fever. Diarrhœa is also shown to be rapidly extending.

We regret to have to announce the death of Mr. J. F. Clarke, M.R.C.S., of Gerrard-street, Soho, at the age of sixty-three years.

Dr. George B. Owens, J.P., has been nominated Lord Mayor of Dublin for next year.

THE DEBATE ON PUERPERAL FEVER.

The discussion on Puerperal Fever at the Obstetrical Society was brought to a close on Wednesday evening last, after having occupied four meetings of the Society. The President, Dr. Priestley, again occupied the chair, and the large attendance of fellows and visitors (including Dr. Fordyce Barker, of New York, and Dr. William Farr) testified to the continued interest taken in the debate. Many doubtless were attracted by the expectation that Dr. Fordyce Barker would address the meeting, and his most able and closely reasoned argument was received with great attention and marks of approbation. The other speakers included Dr. West and Mr. Spencer Wells, who closed the debate. The preliminary proceedings included the announcement by the President of a gift to the Society's museum of certain models of uterine diseases from Dr. Farre; and the exhibition of some interesting specimens by Dr. Stoddard (of Hull), Dr. Newman (of Stamford, who showed a uterus on which Cæsarean section had been performed some years before), and others by Dr. Barnes and Dr. Routh.

A letter was read from Dr. Cordery, of Geneva, containing an account of a case of scarlet fever in an infant, the mother having been exposed to the contagium previous to parturition. The infant died, but the mother did not take the disease. A letter was also read from Dr. Ainsworth, of Ontario, giving an account of a case of measles in a puerperal woman, the disease running its ordinary course.

The President having called upon Dr. Fordyce Barker, that gentleman began by stating that it could not be supposed that anyone could answer in the affirmative all the questions propounded by Mr. Wells; for if some were accepted, others must be rejected. That a special morbid poison does not always give rise to the same disease he instanced by quoting cases of "typho-malarial" fever and diphtheria arising under the same conditions—viz., escape of sewer air into the house. Criticising the case quoted by Dr. Playfair of septicæmia occurring in a puerperal woman whose husband was at the time ill with diphtheria, he said that it was implied that identity of cause must always be followed by identity of result. He believed, however, that puerperal fever was a *distinct* disease, and thought the definition contained in the "Nomenclature of Diseases" was an accurate one. To ascertain the truth of his statement as to puerperal fever being a disease peculiar to the puerperal state, it must be studied as to its causes, its clinical features, and its pathological characters. With regard to the causes, he thought that there was abundant evidence from the study of epidemics that whereas the prevalence of scarlet fever, typhoid, or the other contagious fevers does not give rise to puerperal fever, yet there is a certain relation between erysipelas and puerperal fever; for erysipelas will give rise to this fever in lying-in women, and the puerperal poison will develop erysipelas in men. It is possible that a septic poison acting on the peculiar state of the puerperal woman would give rise to a disease distinct from that produced by the same poison in any other condition of body. The clinical facts bear this out, since septic poisoning never gives rise to an epidemic when it appears among surgical cases, while if it attack a woman after childbirth, it does become epidemic, and is highly contagious; and that puerperal fever is epidemic he showed by quoting statistics of the prevalence of that disease in certain quarters in New York, for a certain time, under insanitary conditions. The clinical phenomena of puerperal fever are quite different from those of surgical septicæmia and pyæmia, and when these affections complicate puerperal fever they modify its symptoms. As to the pathological features of puerperal fever, he maintained that few, if any, uncomplicated cases of the disease had been studied pathologically, and it would be nothing strange if there were no distinctive lesions met with, for what are the distinctive (post-mortem) lesions of the exanthemata? He thought, then, on clinical grounds chiefly, that the term "puerperal fever" should be retained, as signifying a specific affection peculiar to the puerperal state; and in conclusion, he quoted the saying of Oliver Cromwell: "I beseech you, by the mercies of God, conceive it possible that you may be mistaken."

Dr. West, referring to the question as to the presence of organisms in connexion with the disease, thought that question was premature with regard to puerperal fever, seeing how much at variance were observers as to their occurrence in other better known diseases. He thought but little had been added to our knowledge of puerperal fever since Dr. Ferguson, thirty-six years ago, taught that it consisted in a "vitiated state of the fluids;" and he pointed out how much the affection wanted the characteristics of a specific fever, as to its cause, its multiformity, its origin from many sources, &c. The disease received its special characters simply from its arising in a special state of the system, in which retention of effete matter was the chief factor.

Dr. Snow Beck then read a long statement of his belief that puerperal fever was not a disease *sui generis*, and that it might arise from general or from uterine causes. He advocated, therefore, the removal of the term from the nosology.

Mr. Green gave the results of his experience in a large number of cases of puerperal fever, arising from decomposing clots, contamination from attendants, scarlet fever, small-pox, erysipelas, and typhoid; and concluded that there was no specificity about the disease.

Dr. Routh stated that he was present at Vienna in 1846–47 during the time of the memorable outbreak of puerperal fever in the hospital there, and he gave some interesting details concerning this outbreak, which was clearly proved to be due to carelessness on the part of students attending the dissecting-rooms and dead-house. At this epidemic it was distinctly made out that the disease was *not* contagious from one woman to another, save by inoculation; also, that the infants born of the affected patients all died of peritonitis. But there is doubtless another variety of puerperal fever, which is eminently contagious, and this form arises from the poison of scarlet fever &c.

Dr. Hill quoted his recent experience of some cases of puerperal fever of pyæmic origin which were not contagious, while others which followed exposure to typhoid poison were eminently so.

A Member read a long statement, the main drift of which appeared to be an attempt to show the identity of scarlatinal, typhoid, and puerperal poisons.

A communication from Dr. Holman, of Reigate, was taken as read.

Mr. Spencer Wells then replied. He said he would go beyond Dr. Barker's position, and affirm that a specific morbid poison must always produce the same result. If puerperal fever be a distinct disease, its specific cause must be shown. The Registrar-General had furnished him with the statistics of an outbreak of puerperal fever in South London two weeks ago, in which three cases, attended by one practitioner, were fatal, but two others did not take the disease. Scarlet fever was very prevalent in that district, and it would be interesting to know if the two women who escaped had previously had scarlet fever. Mr. Wells also read extracts from several letters he had received of cases of scarlet fever, erysipelas, and typhoid giving rise to puerperal fever; and also an important letter from Dr. Keith, of Edinburgh, in which the connexion between puerperal fever, pyæmia, and erysipelas was strikingly shown occurring in connexion with some recent operations of ovariotomy performed by that gentleman. In conclusion, Mr. Wells deprecated strongly the attempt that had been made to enlist the sympathy of the Society on behalf of those midwives who had recently (through their wilful disregard of caution given them by medical men) been guilty of "homicide by infection"; and he thought that far more good would be done by inculcating the necessity of taking extra precautions, even to giving up practice for a time, so as not to endanger the life of one puerperal woman.

The meeting then adjourned. A full report will appear in our next issue.

STATE MEDICINE.

SURGEON-MAJOR DU CHAUMONT'S concluding lecture at Apothecaries' Hall was delivered on Saturday, June 19th, and was devoted to a consideration of the prevention and propagation of disease, epidemics, and the value of statistics relating to sanitary questions.

It is obvious, observed the lecturer, that the efficacy of the methods employed for the prevention of disease depends upon our knowledge of its origin and modes of propagation, and, failing such knowledge, upon the view or theory which is held. Thus a disbeliever in contagion would probably think isolation unnecessary, while a man who rejected the possibility of water conveying disease would look with indifference upon the pollution of the water-supply. On the whole, however, we find that whatever view may be held about the actual *modus operandi* of disease, all persons are substantially agreed that general unhygienic conditions are favourable to it; and it must be admitted that if such conditions can be avoided more than half the battle will be won. But there is still something beyond, and we must view the possibility of the introduction of morbific poison even when purity and plenty are attained in the matter of air and water. Let it be granted that there is such a thing as a communicable *materies morbi*, and the question is then reducible into disinfection and isolation.

The object of disinfection is to destroy the morbific poison, or to suspend its action if its destruction cannot be accomplished. The destruction may be effected by airing, by certain chemical agents, or by wet or dry heat. The first method, that of exposure to air, is slow and uncertain. The chemical agents used in disinfecting are chlorine, nitrous acid, sulphurous acid, chromic acid, and the permanganates, the first three being available for fumigation. However, the best method of destroying morbific poison is exposure to heat. Boiling is very efficacious, but steam under pressure, or a gas-disinfecting chamber, is still better. A dry heat of 230° Fahr. effects the object without charring clothes. A disinfecting chamber ought to be provided and made readily accessible in every district or town, so that there might be no excuse for allowing infected bedding to lie about. The activity of morbific poisons may be suspended by extreme cold, or by carbolic acid, and certain other vegetable products, but these agents do not destroy the poison. Minute organisms, such as monads and bacteria, cease to move or reproduce in the presence of such substances, and there is a singular absence of life in tarry water. The most important application of this fact is the well-known antiseptic method of Professor Bristowe.

Thorough cleansing and fumigation ought to be carried out even in the case of diseases not looked upon as contagious. Care should be taken to provide as few resting-places as possible for morbific poisons; yet so little is this considered that we often find bed-curtains and window-curtains even in hospitals. Stools ought to be disinfected, and the sick room carefully dusted; for the emanations from the skin in small-pox, scarlatina, and measles may be disturbed, and find a new and appropriate nidus after a considerable period of rest.

As to isolation, it is next to impossible in ordinary dwellings, and therefore adequate means for securing it ought to be provided by the sanitary authority. The importation of a single case of disease is often enough to light up an epidemic. The question of quarantine is a difficult one; but, no doubt, if quarantine could be effectually carried out it would check the spread of disease.

There is one special branch of isolation of great interest and importance, and that is the prevention of venereal disease under the Contagious Diseases Acts, which apply to seaport and garrison towns. Similar measures have been in operation on the Continent for many years, the result being that syphilis was much less frequent there than in our own country before the passing of the Acts. In Malta an Act of the same kind has been long in vogue, under our own Government. A temporary suspension of the Act in Malta took place about sixteen years ago, and this suspension was followed by an increase of the disease. A similar Act has been enforced in Calcutta with excellent results, although its application was a matter of great difficulty. In spite of what has been written against the Acts in this country, it can be safely asserted that their operation has been decidedly beneficial. It is only necessary to turn to the army and navy returns to see the necessity of legislative measures on the subject. Returns compiled by Dr. Stewart Balfour show that before the passing of the Acts about one-fourth of all the cases of disease admitted consisted of primary venereal sores and gonorrhœa. The returns for Portsmouth showed 503 cases per 1000 admissions in 1860, and 485 in 1861. Reckoning the value of a soldier's services at £100 a year, the loss of service from enthetic diseases amounts to about £221,000 a year, without including the loss from diseases aggravated or influenced by the venereal class. The testimony of the dead-house at Netley is grimly significant, hardly a body being opened there which does not show traces of syphilitic influence. The diseases influenced or aggravated by this means are chiefly those of the heart and great vessels, of the cerebro-spinal system, phthisis, rheumatism, ophthalmia, and skin diseases. Could we stamp out syphilis we should reduce sickness in the army and navy by one half. In the Crimea, where the possibility of venereal disease was eliminated, sickness almost entirely disappeared.

The lecturer then dwelt at considerable length on the objections which are generally urged against the Acts. In answer to the statement that the action of the legislation tended even to increase the prevalence of the disease, he compared two groups of stations of about the same numerical strength, in only one of which the Acts had been enforced. In that group where the Acts had operated, there had been a well-marked decline in the number of cases since 1866, when the second and more complete law was passed, as compared with the previous period, although there had been fluctuations, as there always must be as long as the disease exists. In the group which had never been under the Acts, there appeared to be no tendency whatever in the disease to die out. As to the assumed immorality of the Acts, he contended that prostitution is no more provided for now than it was formerly; but the Legislature, having recognised the existence of an evil, has taken means to check it, and thus avert from the community the burden which would be entailed by the infirmity of the sufferers themselves, and the vitiation of their innocent offspring. Those who object to the requisite examination must be very innocent or very disingenuous if they really think that it can have a demoralising effect upon the loose women who are the associates of soldiers and sailors. In answer to those who say that the disease is sent as a punishment for sin, and therefore ought to be left to take its course, the lecturer pertinently asked, in the words of the great Master, "Were those on whom the Tower in Siloam fell sinners above all others?"

As to the origin of disease in general, we are still as far as ever from any real knowledge of it. The vexed question of the existence of germs of disease, or the propagation of disease *de novo*, deserves attention. The majority of observers are in favour of the view that there is a special poison which produces a particular disease, and the evidence supports this idea. Again, it has been urged that the doctrine of evolution may be applied to material organisms;

but at no time does the doctrine of evolution ever contemplate the direct change of one organism into another; and another important part of the doctrine is, that when organisms become determinate in a particular direction and reach a high state of perfection, their chances of evolution become lessened if not nullified. It would seem, on the other hand, that when the limit of integration is reached the type tends to decay. It may be thus with the germs of disease, and, probably, from their low type of life, the limit is soon reached. Thus it is not improbable that some diseases will disappear altogether from sheer decay before we are able to discover their nature, or we may stamp them out before they have time to decay.

The theory of the spontaneous origin of disease supposes that a disease may be produced from organic germs different from itself, and that these germs may arise directly from combinations of inorganic matter. The advocates of this view, however, among whom Bastian is one of the most noted, can hardly have understood the tremendous nature of the postulates they demand. The simplest process of chemistry, such as the formation of a drop of water from its constituent gases, requires as much force as would furnish a flash of lightning; and yet we have people who ask us to believe that creatures as high in the scale as paramecia, and even acari, can arise spontaneously.

In treating of the subject of epidemics, the lecturer mentioned the recent paper of Dr. Tripe, in which he states that his investigations as to scarlatina seem to point to the existence of periodic waves of disease. If, as Dr. Tripe concludes, scarlatina, like other diseases, is controlled by influences which are not within the scope of ordinary hygienic means, we cannot hope to stamp it out, but must only expect to modify it by care. It may be, however, that the apparent periodicity of certain diseases arises from the fact of a severe epidemic exhausting the supply of susceptible individuals.

The scientific history of epidemics has still to be written, but good work is being done in that direction. The science of statistics must be at the base of all inquiries on the subject, and ought to be more generally taught. A proper attention to it would prevent crude generalisations from insufficient data. When facts are honestly collected and sufficiently numerous, averages give a very fair approximation to the truth.

In concluding his discourse the lecturer expressed a hope that he had been successful, however imperfectly, in putting before his hearers reasons for believing that there was a great future for sanitation, and that, if the State did its duty, this subject must be hereafter one of its chief cares.

CHARING-CROSS HOSPITAL.

THE annual distribution of prizes took place in the Board-room of the hospital on the 24th ultimo, the chair being ably filled by Admiral Strange, a governor of the hospital, and one of its warmest supporters.

The report, which was presented by Mr. Hird, the Dean, alluded to many matters which were subjects for congratulation. The arrangements for teaching had been greatly improved by the opening of a fine new suite of Physiological laboratories; the opening of two new wards offered a wider field than heretofore for clinical study; the library had been enriched by a gift of over two hundred valuable books from Mr. Hancock; and the system of test examinations, which had been lately instituted, had borne good fruit, in an unusual amount of success attained by the students at the College and other examinations. That these various points were appreciated was evidenced by the fact that during the past year fifty new students had attended the various courses of lectures.

The following is the prize-list for the year:—

JUNE 24TH, 1875.—Llewellyn Scholarship, Mr. P. B. Conolly; Governors' Clinical Gold Medal, Mr. Walter J. Brookes. Anatomy, Senior (Silver Medal), Mr. Arthur Greenwood; Certificates, Mr. D. Colquhoun, Mr. Hayward Whitehead, and Mr. F. S. Boreham. Anatomy, Junior (Bronze Medal), Mr. H. Hoole; Certificates, Mr. Sidney F. Newton and Mr. A. D. Leahy. Physiology, Senior (Silver Medal), Mr. D. Colquhoun; Certificates, Mr. Hayward Whitehead and Mr. J. L. Robertson. Physiology, Junior (Bronze Medal), Mr. H. Hoole; Certificates, Mr. Sydney F. Newton and Mr. A. D. Leahy. Chemistry (Silver Medal), Mr. H. Hoole. Medicine Senior (Silver Medal), Mr. Walter J. Brookes; Certificates, Mr. E. Manby Rodwell, Mr. Herbert Packer, and Mr. P. B. Conolly. Medicine, Junior (Bronze Medal), Mr. D. Colquhoun; Certificates, Mr. Hayward Whitehead and Mr. Arthur Greenwood. Surgery Senior (Silver Medal), Mr. P. B. Conolly; Certificates, Mr. Herbert Packer and Mr. J. A. Phillips. Surgery, Junior (Bronze Medal), Mr. D. Colquhoun; Certificates, Mr. Hayward Whitehead and Mr. Arthur Greenwood.

SUMMER SESSION, 1874.—Botany (Silver Medal), Mr. Sidney L. Newton; Certificates, Mr. D. Colquhoun and Mr. Arthur Greenwood. Materia Medica (Certificate), Mr. W. B. Hodgson. Midwifery (Certificate), Mr. P. B. Conolly. Forensic Medicine (Silver Medal), Mr. Walter J. Brookes; Certificate, Mr. D. S. E. Bain. Pathology (Silver Medal), Mr. Walter J. Brookes; Certificate, Mr. J. G. Blackman. Practical Chemistry (Silver Medal), Mr. D. Colquhoun; Certificates, Mr. Arthur Greenwood, Mr. Hayward Whitehead, and Mr. Sidney L. Newton. Psychological Medicine Prizes, Mr. P. B. Conolly and Mr. D. S. E. Bain.

The prizes having been awarded, the gallant Admiral made a most eloquent and feeling address to the students, and the proceedings terminated by the usual vote of thanks, which was proposed by Dr. Fayrer, one of the most distinguished *alumni* of the school, and carried by acclamation.

THE BRITISH MEDICAL ASSOCIATION.

THE final arrangements have been completed for holding the 43rd annual meeting of this Association at Edinburgh the first week in August, Sir Robert Christison, M.D., being the President elect. On the first day, Tuesday, the 3rd of August, the first general meeting of members will be held, at which the President will deliver an address; the annual report of the Council will also be given at this meeting. In the evening a reception will be given in the University Library. On Wednesday the second general meeting will be held, at which the Address in Medicine will be given by James Warburton Begbie, M.D., F.R.C.P., Edinburgh. In the evening a conversazione will be given by the Royal College of Physicians of Edinburgh. On Thursday the third general meeting will be held, at which the Address in Surgery will be given by Professor James Spence. In the evening the annual dinner of the Association will be held. On Friday, the last day, the Address in Physiology will be given by Professor Rutherford, and the concluding general meeting will be held.

Correspondence.

"Audi alteram partem."

ELECTION OF THE COUNCIL AT THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—The last election at the Royal College of Surgeons has revealed a widespread discontent amongst the Fellows.

It is assumed that the members of the Council are elected by the Fellows at large, but the election takes place at the College in London, whilst the majority of the electors reside in the country hundreds of miles distant, so that it is not possible that any election can represent the opinions of the general body.

It is a mere mockery of justice to bestow a franchise on Fellows which in so many cases they cannot possibly use, because they are unable to leave their duties, and incur the cost, the loss of time, and fatigue of the journey, simply to enable them to drop a voting paper into a ballot box.

Every man entrusted with a vote is bound to have a *bonâ fide* opportunity of recording it; for if he has not, he is virtually disenfranchised. For this reason Parliament has wisely decreed that the members of universities who are in a similar position with respect to residence to the Fellows of the Royal College of Surgeons can vote by papers without the necessity of a journey. By the Act 24 and 25 Vic., cap. 53, the members of the universities of Oxford, Cambridge, and Dublin, are empowered to employ voting papers. This privilege was extended to members of the London University by 30 and 31 Vic., cap. 102, and the details of election were further simplified by 31 and 32 Vic., cap. 65.

The College of Surgeons, having been shown the way, has only to take advantage of the precedent by procuring an Act of a few lines in length, rehearsing the University Election Acts, and applying their provisions to the particular case of the College of Surgeons before the next election can take place. The question has only to be raised for its propriety to be admitted, for where is the surgeon who would not rather watch a serious case where life or death may depend, than neglect his patient that he may formally hand over a printed paper to the recognised official of the College of Surgeons?

To obtain the desired end proper means must be taken. The body of country Fellows must ask before their request can be granted, and I shall be glad to receive the names of every Fellow desirous of voting by papers, that we may at once take steps to obtain the Act of Parliament necessary to obtain our just due.

I remain, Sir, your obedient servant,

Finsbury-circus, July 6th, 1875. ALFRED SMEE.

P.S.—Only fifty-seven country members could vote at the late election.

THE MEDICAL COUNCIL AND THE REGISTRATION TAX.

To the Editor of THE LANCET.

SIR,—The profession in general will thank you for your criticism on the Medical Council and its listless apathy toward the practitioners of this country, whom it is supposed to represent and to protect. A short time ago you published the stereotyped answer which the Council presented to all those who applied for its aid. I confess that this answer is sufficient to raise strong feelings of indignation in the breast of anyone who has been mulcted of the £5 5*s*. fine for having his name placed on the Medical Register. We feel, and I think no impartial person can be surprised at it, that we do not get a *quid pro quo*. We derive no commensurate advantage from having our names on the Register. If our rights or privileges are invaded, the august Council folds its arms, saying, "Really, my dear sir, I have pocketed your money, what further business *can* I have with you; but, 'pon honour, you know, if I were in your place I should prosecute the fellow." Then their tax is most undoubtedly a *cruel* one. Often when a man has just taken his qualifications, the heavy fees, &c., have left his pocket by no means well lined. Then, before he can take, or even become an eligible candidate for, any official appointment, he is obliged to pay his £5 5*s*. to the Medical Council, and I can affirm that most "grudgingly and of necessity" is the said fee always paid. Moreover, it is a most decided case of taxation without representation. We, the body of general practitioners of the United Kingdom, are not represented in the Council at all. Taxation without representation has always been recognised as a grave political error. It lost to this country America. I live in hopes that it may yet lose to our profession the General Medical Council. For my own part, I regret to say that I have often spent money foolishly, but never, even when I lost it in horse-dealing, or backed a "certainty" which "didn't come off," did I feel so utterly *done* as when I paid five pounds five shillings to enrol my name on the Medical Register.

One word more. If I venture to change my residence without giving due notice to this august body, I am liable to be removed from the Register. If Mr. So-and-so is committed to prison as a felon and vagabond, he is liable to be removed from the Register, and so far as I can see it makes little or no difference to either of us. Mr. So-and-so and myself may both retain our qualifications and practice, and the Medical Council has no further power over us; but it is flattering to a man of unblemished honour to place him in the same category as a convicted felon. Verily the code of the Medical Council is that of Draco, and death is its only punishment, with this difference, that "death" at the hands of the Medical Council seems very harmless.

I am, Sir, obediently yours,

NON PLACET.

PRIMARY EXAMINATION FOR THE FELLOWSHIP OF THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I am glad to find that the letter which I wrote to you on the 5th ult. has induced some other members of the profession to publish their opinions of this examination. I shall not trouble you with any remarks as to whether the qualification should be a test of larger acquirements from students, or merely an improvement of the professional status of the practitioner, although I cannot see why both might not be combined to the great advantage of the profession, instead of neither being satisfactorily attained, as at present.

I would again insist on the *uncertainty* of the examination as now conducted, and I am corroborated therein by all who have written to you on the subject. The limitation of time at the *vivâ voce* and the details of marking are evidently unfair, and I am glad to find that the former has been pointed out by the visitors as a blot on the Primary Examination for the Membership.

Mr. Macnamara is undoubtedly a most competent judge of the examination, and he in the main agrees with me. Whether four questions only on such wide subjects are preferable to a larger number is a matter of opinion, but it must be remembered that the Fellowship is a *pass*, and not a *competitive*, examination, and therefore that no opportunity of discovering how much a man really knows should be omitted.

I perceive that the visitors to the various examining bodies have pointed out to several of them that the number and extent of their questions are insufficient, and I have little doubt but that they will come to the same conclusion when they visit this examination.

May I venture to recommend to the authorities of the College as model examination papers in Anatomy, Physiology, and Comparative Anatomy (should they decide to include the last subject), those set during the past few years by the examiners for the Second M.B. at the University of Cambridge?

I am, Sir, yours very faithfully,

July 5th, 1875. W.

OVERWORK.

To the Editor of THE LANCET.

SIR,—I have recently had under my own eye a case remarkably illustrative of the views propounded by Dr. Wilks in his interesting letter last week on Overwork.

Between two and three years ago a "delicate" young lady, eighteen years of age, was cooped up in a luxurious home, her parents believing her to be the subject of heart disease. She certainly suffered at intervals distressing paroxysms of neuralgic pain, chiefly in the left temporal region, but sometimes also over a small space below the left breast, and she had a slight nervous movement of the fingers, I forget now whether of one hand only or of both; I think of both.

The life of this young creature was being partly wasted in general invalidism, as she was not allowed to exert herself in any way whatever, or to have any social excitement, and partly spent in the endurance of acute agony, sometimes lasting for hours. Happily, however, she became a temporary resident in a school where, under medical direction, all this was changed.

A sedative was administered when needful to secure sleep, but the treatment was chiefly hygienic. She was encouraged to rise between seven and eight, to take easy walks, to pursue courses of study, and now and then to attend a concert, and after a while she began to ride on horseback, and to dance.

The result of this aim to develop natural energy has proved all that could be desired. By degrees the neuralgia has quite passed away, all invalid habits have been cast off, and my young friend has for the last twelve months been as bright and active a girl as you could wish to see. I am persuaded that the plan of recommending young ladies, when they complain of headache and depression (most likely resulting from dyspepsia dependent on errors in diet), to discontinue mental exertion, and to become idle, is a great mistake. Supposing the absence of organic disease, sufficient out-door exercise in good air, simple, nutritious, regular food, and early sleep, with a fair supply of oxygen at night, no harm can come of hard work by body or mind. I have been a toiler for thirty-five years, and enjoy perfect health, although it has never been my habit to rest except when asleep.

I am, Sir, yours, &c.,

June 28th, 1875. M.D.

CATHETER STAFFS.

To the Editor of THE LANCET.

SIR,—Allow me to inform Mr. Teevan that the first surgeon who employed a staff with a sliding catheter for perineal section was the late Dr. Mackenzie, of the Royal Infirmary, Edinburgh, who used it in the year 1854 (*vide* THE LANCET, vol. i. 1857, page 282).

I remain, Sir, your obedient servant,

Surrey-street, July, 5th, 1875. R. WILLIAM DUNN.

BIRMINGHAM.

(From our own Correspondent.)

A SPECIAL Committee of Investigation has been deliberating for some months on the general system of administration of the Queen's Hospital with a view of ascertaining the means by which a balance between income and expenditure may be effected. A report has just been issued by the committee, which will be submitted to the governors on the 11th inst. This report contains the following recommendations: "The abolition of the privileged system, the cessation of notes, and the working of the hospital on the basis of free admission, regulated solely by the needs and fitness of the applicants and by the means at the disposal of the charity." In conjunction with this scheme they propose, except for accidents and urgent cases, a registration fee of one shilling for each patient, such fee to be renewed at the expiration of a month. Much excitement has arisen, and not a little opposition is being shown to the adoption of the free system by some of the subscribers and by the working classes, while the registration fee is also condemned by a majority of the staff of the hospital. The free system is justly allowed to possess the merit of giving absolute freedom to the medical staff in deciding as to the medical fitness of applicants for relief, and is no doubt the simplest and most effectual way of working this or any other hospital. The registration fee, however, had better be given up; it is no integral part of the free system, but, on the contrary, it will be looked upon by many of the artisan class as a direct payment for medical attendance, and will therefore render the hospital unpopular with them, and it will also alienate a large number of the medical profession, who already believe that the hospital attends to many patients who could well afford to pay them a fair sum for their advice. The ticket system cannot be with propriety continued, for it is evidently not effective, and is not appreciated by the governors. During 1874, out of 1863 in-patients who were admitted, only 345 were admitted by ticket, and 1338 were admitted free, while of the out-patients nearly one-half were attended to without tickets. The registration fees on the number of patients treated in 1874 would produce £847, a sum quite inadequate to cover the estimated deficit for the ensuing year, which is set down at £1718. As, however, some of the artisans and middle-class subscribers will very likely withdraw their subscriptions should this plan be adopted, there will ultimately be rather a loss than a gain to the hospital from its adoption.

Four applications have been sent in for the office of coroner, two by members of the medical and two by members of the legal profession. One of the latter, Mr. Alderman Hawkes, a sexagenarian who is known as the Nestor of the so-called Liberal party in Birmingham, will no doubt be elected, as a majority of the corporation absolutely invited Mr. Hawkes to become a candidate directly the office was declared vacant, and promised him their support even before they knew who had or even who were likely to come forward for the appointment. Several medical practitioners of good standing, among them the present medical officer of health for Birmingham, would have become candidates, but they very wisely and properly withdrew when they found that the invitation to send in applications and testimonials was all a farce, and that the appointment of Mr. Hawkes, as a reward for political services to the Liberal party, was already a *fait accompli*.

Wolverhampton is not to have a park after all. The Mayor has done his best to promote the interest of his fellow-townsmen, but the parsimony and narrow-mindedness of the great majority of the Town Council have prevented the proposed purchase of the park out of the rates.

Dr. Ballard thought that Sedgley was the most unwholesome town in the Black Country, when he examined it, but the palm is now awarded by him to Oldbury. He describes the place as utterly devoid of drainage, the solids and sewage lying about on all sides, impregnating the water-supply, and filtering in many places into the houses. He finds that only 1172 out of 3475 houses receive the company's water, and that the rest depend on surface wells, all of which are more or less polluted; as a natural result the death-rate has risen from 22 to 28 per 1000, and out of the total deaths in some parts of the town during the last five years, more than 50 per 1000 have arisen from zymotic diseases. The Local Board, although censured by Dr. Thorne for a similar condition of things four years ago, did nothing but appoint an officer of health at the munificent salary of £30 per annum, and channel a few of the streets. Dr. Ballard has informed the Local Board that if steps are not at once taken to remedy the present insanitary state of the town, the Government will compulsorily carry out the necessary reforms.

Birmingham, July 4th, 1875.

Obituary.

M. DEMARQUAY.

DEMARQUAY, whose death we announced with regret in our last issue, was one of the most active, laborious, and inventive French surgeons of the day. Through his elaborate productions, as well as his valuable additions to practical surgery, he had won for himself a distinguished and enviable name in surgery, not only in his own country, but wherever surgery is studied and practised.

He was of most humble origin. He literally rose from the ranks, and by dint of strong will, unflinching purpose, and hard work, after having been compelled to take various occupations for a livelihood, he attained one of the highest scientific and professional positions in Paris. About forty years ago he left his father's house at Longueval, in Somme, with the intention of following some manual trade, and two weeks before his death he quitted Paris, where he had become rich, popular, and esteemed, to go and die in his native place, on a large estate which he had bought when wealth had come with reputation and honour.

His scientific titles, his various additions to practical surgery, his numerous inventions and modification of modes of operating, or of surgical contrivances, would be too long to mention in this short necrological notice. The most widely known of his elaborate works of surgery are those on Glycerine, Surgical Pneumatose, Renovation of Tissue, and his complete and interesting relation of the working of the Ambulances of the Press during the Paris siege. But these are only a few of his literary productions. Demarquay was an incessant writer. His communications to the Paris medical press, to the Academy of Sciences and that of Medicine, were most frequent; and they all bore the stamp of great quickness of intellect, keenness of inquiry, and an inventive and practical turn of mind.

His activity in all the other paths or duties of his professional life was quite as great. Every morning at the Maison Municipale he was most busily engaged in his wards, speaking or giving short clinical lectures at the patients' bedside to the large number of pupils, medical journalists, and foreign *confrères* who attended his visits. His labours in his surgical laboratory and lecture-room, which he had had built up and organised for himself at the hospice, were constant. In this small laboratory there was always something new going on. Some question of the day to be investigated; some subject of physiological surgery to be experimented on; some surgical specimens to be shown. The remainder of the day was taken up by the urgent duties of his extensive *clientèle*, consultations at home, visits and operations in town. His evenings were devoted to study, literary writing, or social parties, in or out of his house, which were always very frequent. Demarquay loved to receive his friends in his splendid apartments in the Rue Taitbout.

His great popularity was due not only to his intrinsic worth, his kindness to hospital and town patients, but also to his special connexion with the Maison Dubois, to which he was attached for years as head surgeon. This hospice, though under the same administration as the other Paris hospitals, only receives patients who can pay, and it is the great resort of the artists and literary characters of Paris when the hour of illness comes. Thus Demarquay had a wide circle of grateful literary friends, who contributed much to make his name popular.

Many anecdotes are related of his generosity to his poorer patients. He had a peculiar, blunt, genial way of doing good; a kind, authoritative paternal bearing to the inmates of his hospital. He was of tall stature, rather bulky, but of commanding appearance, with a large round face, high forehead, frizzled hair, and pale, freckled complexion. His health, which had always been very robust, seemed to fail some time ago, and he would complain of weakness in the stomach; but no one scarcely suspected the possibility of a cancer, which so soon carried him off. He was not a brilliant operator, in the sense of nimbleness of fingers and elegance of touch; but he was steady, careful, and inventive.

He was a member of the Academy of Medicine, and also of the Paris Society of Surgery, which, at its last meeting, unanimously declared the sitting adjourned when the President announced Demarquay's death.

He was a bosom friend of Ricord—his *alter ego*, his *inséparable*. Their friendship had sprung up and grown strong, under trying circumstances, during days of work, grief, and danger, when they both had the ambulances of the press under their direction during the siege, and did their duty together on the battle-fields round Paris. Since then they were inseparable. Their names almost always came together before the public. They went out for their holiday excursions to distant places, to Constantinople and the East, and published their travelling impressions in the racy, witty, lively style peculiar to both of them. More than once they came together to England, as will be remembered with mingled pleasure and regret by those who saw them in London after the war, and in Birmingham at the Association meeting of 1874.

THE PROFESSORSHIPS AT THE ROYAL COLLEGE OF SURGEONS.

ON Thursday last the Council of the Royal College of Surgeons elected the professors and the lecturer for the year. Mr. Erasmus Wilson was re-elected to the professorship of Dermatology, which, it will be remembered, he himself created in 1869, and which he has since continued to monopolise, to the detriment of younger members of the profession, who naturally desire the honour of occupying that chair, and whose ambition it would be to fill it worthily. Mr. Parker was reappointed to the Hunterian professorship of Comparative Anatomy and Physiology; Mr. Turner, of Edinburgh, was again appointed the Arris and Gale lecturer on Anatomy and Physiology, but will in the ensuing year be associated with Mr. Flower, who, we are glad to find, is sufficiently recovered to undertake his duties at the College.

But the most important professorship at the College, as far as the great body of the profession is concerned, is of course the Hunterian Professorship of Surgery and Pathology, and this year the appointment is of exceptional interest, inasmuch as a new principle is involved. The successor to Mr. Henry Lee, of St. George's Hospital, is Mr. Brudenell Carter, ophthalmic surgeon to the same institution. It will doubtless take many of the older members and fellows of the College by surprise to find that the Hunterian Professorship of Surgery, which has hitherto been occupied by a general surgeon, has this year been bestowed on a specialist. But it must be distinctly borne in mind that Mr. Carter is elected Professor of Surgery, with, of course, the tacit understanding that he will devote his lectures to some part of ophthalmology, although there is nothing to prevent him lecturing on any department of surgery that he may choose. We shall not now discuss whether it is well to make the chair of general Surgery and Pathology available for lectures on a special subject, important though it be; nor whether it would not have been preferable to have made a definite recognition of ophthalmology by instituting a separate course of lectures thereon, as has been done in the case of dermatology. Suffice it for the present, that the vacancy was duly advertised, and as Mr. Carter was the only applicant, he was nominated last month, and has been elected at a full meeting of the Council. Apart from this, there can be but one opinion of the worth of the newly-appointed professor. Mr. Carter, by his writings, discourses, and orations, has given us good grounds for expecting from him a course of carefully prepared lectures that will redound to the honour of the College, and will serve to advance the science and art of ophthalmology.

Other important business was conducted at the same meeting of the Council. A report was received from the Court of Examiners giving the number of candidates passed and rejected for the Membership during the year 1874–75; and a report, which we shall refer to at an early date, was presented by the President respecting the affairs of the College.

Sir James Paget succeeded Mr. Le Gros Clark as President, and Mr. Prescott Hewett and Mr. Birkett were made Vice-Presidents by rotation. Drs. Peacock and Wilks were again elected Examiners in Medicine; Messrs. T. A. Rogers and Barrett were elected Examiners in Dental Surgery; and Mr. Quain was re-elected the College representative to the Medical Council.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on July 1st:—

Collins, Henry Abdy, Bayswater.
O'Callaghan, Kenneth Macdonald, Blackrock, Co. Cork.
Rees, Alfred, Maesteg, Glamorganshire.
Saunders, Edward Argent, Haverfordwest, South Wales.

The following gentlemen passed the Primary Professional Examination on the same day:—

Jakins, Percy Septimus, St. Mary's Hospital.
Skerman, Sidney, King's College.

At the recent examination for the prizes in Botany given annually by the Society of Apothecaries to medical students, the successful candidates were:—

1st.—Neville Scott Whitney, University College. Gold Medal.
2nd.—William Rushton Parker, University College. Silver Medal and Book.

ROYAL NATIONAL LIFEBOAT INSTITUTION. — A meeting of this deserving institution was held a few days ago at its house in John-street, Adelphi. Various reports were read, all proving the great usefulness of the Society. Several substantial contributions were announced in the course of the proceedings.

Dr. Ainley, medical officer of health for the Halifax borough, believes he has discovered the origin of the enteric fever which prevails within a small radius of the Northowram township. After a thorough investigation, Dr. Ainley has satisfied himself that the disease was introduced into the district by means of the milk supplied by a dealer who had fever in his house.

The death-rate of Berlin has been gradually increasing for some time past. We now learn that there is a large amount of sickness in the city, including what is called European cholera. With the hot weather advancing, and knowing the filthy condition of the Spree, we shall not be surprised to find an epidemic prevailing in a short time.

Health of Ireland.—From the Registrar-General's report for the quarter ending 31st March we learn that the births registered during that period amounted to 36,444, and the deaths to 30,589, or a mortality of 23·1 per 1000, the high death-rate being mainly attributable to the harsh weather and the prevalence of scarlatina. Small-pox also existed to a considerable extent, and the registrar of Bella, near Castlebar, states that a very malignant type of the disease caused 36 deaths, inoculation being still carried on to a great extent in the district. The following are the deaths from the principal zymotic diseases during the three months:—Scarlatina caused 1107 deaths, fever 769, diarrhœa 450, whooping-cough 322, small-pox 239, measles 195, diphtheria 128. The mean temperature was 42·9°, and the rainfall measured 6·816 inches.

Sanitary and Educational Exhibition.—An exhibition of sanitary, educational, and domestic appliances will be held from the 6th of October to the 16th, in the Corn Exchange, adjoining the Pavilion, Brighton, in connexion with the Social Science Congress to be held contemporaneously in that town. The object of the exhibition is to bring under the notice of the public generally, and particularly those who are interested in social, sanitary, educational, and economical questions, the latest scientific appliances for improving the public health, promoting education, and advancing social economy. These will be classified under the following heads:—1. Warming, ventilation, and lighting. 2. Domestic appliances and apparatus. 3. Sanitary architecture and appliances. 4. Sanitary engineering and methods for disinfecting. 5. Food and clothing. 6. School furniture and school apparatus.

Bequests, &c., to Medical Charities.—St. Mary's Hospital, Paddington, has received an additional £100 from Mr. Charles Baring Young, and an additional 50 guineas from the Clothworkers' Company. The Worcester Infirmary has become entitled to £500 under the will of Mrs. Jane Barton. The York County Lunatic Asylum has become entitled to £200 under the will of Mr. Green Simpson.

Medical Appointments.

Browne, T. H., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Frankford Dispensary District of the Parsonstown Union, King's County, vice Ridley, resigned.

Buckley, Mr. T. W., has been appointed Dispenser and Assistant to the House-Surgeon at the Staffordshire General Infirmary, Stafford.

Callanan, Dr. M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilbrittain Dispensary District of the Bandon Union, Co. Cork, vice Crowley, resigned.

Cogan, P. E., M.D., C.M., has been reappointed Medical Officer of Health for the Allerton Urban Sanitary District, Yorkshire, his term of office having expired on the 1st of May.

Davies, J., M.R.C.S.E., has been appointed Medical Officer to the Western Dispensary, Bath, vice Brabazon, resigned.

Davies, W. H., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Mynyddislwyn District of the Newport Union, Monmouthshire, vice W. J. Davies, F.R.C.S.E., resigned.

Duncan, Dr. G., has been appointed Medical Officer and Public Vaccinator for the Parishes of Knockbain and Killearnan, vice Smith, resigned.

Duncanson, J. J. K., M.D., C.M., F.R.C.P.Ed., has been appointed Surgeon to the Dispensary for Diseases of the Ear, Cambridge-street, Lothian-road, Edinburgh.

Dunn, G., M.R.C S.E., has been appointed Medical Officer for No. 5 District of the Hertford Union, vice Smith, deceased: £60 for one year.

Edgeworth, H., F.R.C S.I., has been appointed Medical Officer for the Longford District of the Midland Great Western Railway of Ireland, vice Peter, deceased.

Eyeley, J. F., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the West Gloucestershire Friendly Society, to the Midland Railway, and to the Dursley Female Friendly Society.

Gray, F. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Ottery St. Mary Urban Sanitary District, vice Morrell, resigned: £20 per annum; acreage 9944; population 4107.

Hickson, A. T., M.B., L.R.C.S.I., has been appointed Assistant Medical Officer to the Lancashire Lunatic Asylum, Rainhill, vice De Denne, resigned.

Horne, J. F., L.S.A.L., has been appointed an Assistant Resident Medical Officer to the Leeds General Infirmary, vice Bower, resigned.

Huston, R. T., jun., L.R.C.S.I., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Tynan Dispensary District of the Armagh Union, vice C. T. Huston, L.R.C.S.I., L.M., deceased.

Imlay, G. A., M.B., C.M., has been appointed Physicians' Assistant to the Bristol General Hospital, vice Thorneley, appointed Assistant House-Surgeon.

Kebbell, A., M.R.C.S.E., has been appointed Medical Officer for the No. 4 District of the York Union, vice Wright, resigned.

Kisby, W. J., L.F.P. & S. Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the Ballyfarnon Dispensary District of the Boyle Union, Co. Roscommon, vice Nixon, resigned.

Lithgow, R. A. D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Certifying Factory Surgeon for the Wisbech District, vice Maynard, resigned.

Lovett, H. A., M.R.C.S.E., L.M., has been appointed Second Assistant Medical Officer to the Worcester County and City Lunatic Asylum, Powick, vice Cooke, appointed Senior Assistant Medical Officer and Deputy Superintendent.

Mitchinson, C. C., M.R.C.S.E., has been appointed Surgeon to Lodge No. 7 of the Grand City Order of Odd Fellows, London.

Molony, J., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Drumahair, Co. Leitrim, vice Palmer.

Moore, A., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Collooney, Ballicodare and Ballintogher, vice Armstrong, deceased.

Pearson, G., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Brass Station of the African Association of Liverpool, vice Stanmore, who retires on account of ill-health.

Thornley, J. G., M.D., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Leicestershire and Rutlandshire Lunatic Asylum, Leicester, vice Dixon, resigned.

Wacher, F., M.R.C.S.E., has been appointed a Surgeon to the Kent and Canterbury Hospital, vice Denne, deceased.

Watson, Mr. E. J., has been appointed Out-door Assistant to the Friendly Societies' Medical Institute, Northampton, vice Munro, appointed Medical Officer to the Bradford Medical Aid Association.

Welsh, F. F., F.R.C.S.E., has been appointed Medical Officer for No. 5 District of the Saffron Walden Union, Essex, vice Balding, resigned.

Wybrants, R. B., L.K.Q.C.P.I., L.M., M.R.C.S E., has been appointed Medical Officer and Public Vaccinator for the Wincanton East District and the Workhouse of the Wincanton Union, vice Cardell, deceased.

Wynne, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed House-Surgeon to the Bridgnorth Infirmary and Dispensary, vice Davison.

Births, Marriages, and Deaths.

BIRTHS.

Churchill.—On the 1st inst., at Sumner-place, South Kensington, the wife of Frederick Churchill, M.D., of a daughter.

Cooper.—On the 30th ult., at Leytonstone, the wife of Frank W. Cooper, L.R.C.S.Ed., of a daughter.

Fraser.—On the 30th ult., at Greenlaw-park, Mid-Lothianshire, the wife of H. M. Fraser, M.D., Deputy Surgeon-General, of a daughter.

Gordon.—On the 29th ult., at Herbert Hospital, Shooter's-hill, the wife of H. G. Gordon, M.D., Deputy Inspector-General, of a son.

Jones.—On the 27th and 28th ult., at Weston-super-Mare, the wife of E. S. Jones, L.R.C.P.Ed., of twin daughters.

Kerr.—On the 2nd inst., at Grove-road, Regent's-park, the wife of N. S. Kerr, M.D., of a daughter.

Mackay.—On the 30th ult., at Palmfield House, Crook, *viâ* Darlington, the wife of Alex. Mackay, M.D., of a son.

MARRIAGES.

Adams—Harvey.—On the 6th inst., at H.B. Majesty's Legation, Brussels, J. O. Adams, F.R.C.S., to Anne, daughter of the late Francis Harvey, Esq., of Thringstone, near Ashby-de-la-Zouch, Leicestershire.

Newington—Barnes.—On the 1st inst., at St. George, Hanover-square, Alex. Samuel Lysaght Newington, M.B., to Mary Gertrude Fancourt, daughter of Robert Barnes, M.D.

DEATHS.

Body.—On the 18th ult., at Crediton, Josiah Body, L.R.C.P.Ed., aged 65.

Crichton.—On the 5th inst., at Mortlake, Surrey, Alexander Crichton, L.R.C.P.Ed., L.R.C.S.Ed., aged 31.

Farr.—On the 25th ult., at Truro, G. E. Farr, M.R.C.S.E., aged 41.

Gouthwaite.—On the 4th inst., at Tranmere, Thos. Gouthwaite, M.D., aged 73.

Griffith.—On the 14th ult., at Westbury, Chas. Griffith, Surgeon, aged 70.

Johnson.—On the 30th ult., at Taunton, F. P. Johnson, M.B., aged 32.

Langworthy.—On the 17th ult., at Ermington, Devon, Southmead Langworthy, M.R.C.S.E., aged 46.

Rumbold.—On the 26th ult., at New North-road, T. Rumbold, M.R.C.S.E., aged 58.

Wardroper.—On the 26th ult., at Epsom, Wm. Wardroper, M.R.C.S.E., aged 71.

Willett.—On the 10th ult., at St. Chad, Shrewsbury, John Willett, M.D., aged 35.

Wolfe.—On the 29th ult., at Bonn-on-the-Rhine, H. Wolfe, M.D., aged 81.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Poisoning by Goats' Milk.

Throughout the month of June the inhabitants of the Rione Borgo in Rome suffered from quite an epidemic of gastro-intestinal irritation; in other words, from vomiting, pains of the epigastrium and bowels, with diarrhœa, thirst, shortness of breath, pallor, small and frequent pulse, and lowering of temperature. The symptoms were traced to the consumption of goats' milk, and were more or less severe according to the quantity of milk consumed. In some cases a healthy reaction set in within the twenty-four hours; others took four or five days to get round. Veterinary surgeons examined the goats from which the milk was taken; but nothing was found wrong with them. Professor Ratti, of the Sapienza, then subjected to chemical analysis the vomitings of the sufferers and the milk of the goats, and, in the first instance, found no trace of metallic poisoning. He next proceeded to the goats' pasturage, and found, among the herbage on which they browsed, four species of plants, all more or less poisonous—Conium maculatum, Clematis vitalbula, Colchicum autumnale, and Plumbago Europea. Every one of these bore marks of having been nibbled by the goats. Fresh experiments were then made on the vomitings and the milk, and Professor Ratti detected in both a solid matter of yellow colour, which yielded the chemical reactions of colchicina. The Colchicum autumnale had passed in the form of its alkaloid from the plant to the milk, and the drastic and other symptoms from which the consumers of the milk had suffered were at once explained. An attempt was made at the meeting of the Roman Academy of Medicine to supplement Professor Ratti's induction, by showing that Momordica elaterium was among the pasturage of the goats, and that its passage into the milk might account for the symptoms in the consumers, if not wholly, at least in part. But it was shown that the goats instinctively avoid this plant, and Professor Ratti's impeachment of the Colchicum autumnale remained, at the end of an animated discussion, untouched.

Dr. Fredk. Robinson.—We are sorry the communication cannot be inserted.

Solution of Lead as a Dressing.

To the Editor of The Lancet.

Sir,—In relation to the use of acetate of lead, I can fully confirm the favourable opinion expressed by Mr. Hutchinson. The prescription I have used, however, is different—viz., acetate of lead, ten to twenty grains; limewater, half an ounce; water, half an ounce. This gives a ready way of forming a solution of diacetate of lead, as the limewater takes up any free acid; while, so far as I can judge, the small proportion of precipitated lead, along with the acetate of lime probably formed, are useful adjuncts in promoting the healing and antiseptic properties of the lead lotion. At all events, this is the mixture I have used for about eight years to ulcers, wounds, and burns, without the remotest evidence of lead-poisoning, however extensive the injury treated. With the exception of boracic acid, which I have never tried, it seems to me to possess considerable advantage over every other antiseptic dressing. Thus with carbolic acid there is often disappointment at the amount of time taken to complete the cure, the acid seeming sometimes to even retard healing by, as I believe, checking granulation; while with this lotion a burn, severe in depth and extent, not only heals rapidly, but with an early remission of pain, and the resulting cicatrix so thin as to be almost transparent—in this respect rivaling the result claimed for boracic acid by Prof. Lister. Further, it has the great advantage of obviating the necessity for transplanting, because, whether at the edges or in the centre of a sore, wherever the lead is fairly deposited and a coating obtained, healing at once goes on beneath. It is consequently of paramount importance to produce the coating, and to do so I believe it will generally be found to be the best plan to keep, as far as possible, the lint or other dressing from coming in contact with the sore. Thus I sometimes take a syringe, and by it apply the lotion to the injured surface till a complete white coating is obtained; a ring made up of soft cloth to about half an inch in thickness, and of sufficient diameter to rest only upon sound skin, is fixed on, and over this a piece of lint, so that there is protection without contact. By repeating the irrigation every two or three hours, suppuration is almost entirely prevented, while the sore will be found healing from points in the centre as well as at the circumference. As the lead forms a firm crust, albuminate or fibrinate, with the discharge it is necessary in large sores that this crust should be carefully removed, lest it interfere with the healing process.

In the treatment of ulcers, whether of the healthy, weak, or indolent variety, the lead lotion is highly serviceable; whilst in the inflamed and especially in the irritable ulcer, where pain is usually so intense and healing difficult to obtain, relief is rapidly afforded; the sore becomes covered and protected by a crust, which sometimes rises considerably above the level of the skin; surrounding inflammation speedily subsides, and cure is often very quickly effected. In these cases, after applying lint soaked in the lotion to the whole inflamed surface till all inflammatory redness is gone, the dressing should then be made as nearly as possible the size and shape of the sore. It should be moistened every hour or two hours, be allowed to dry in the interval, be changed twice daily, and be thoroughly soaked with the lotion before removal. Of course, as with every other application, peculiarities in the case will call for modifications in management; yet, so far as my acquaintance with the remedy goes, the points mainly to be attended to are, a coating to the sore, and care that it be not prematurely rubbed off.

In conclusion, while discharge is not entirely prevented, it can, with very moderate attention, be kept so changed as to be free from putrefactive odour.

I remain, Sir, yours truly,
James Lawrie, M.D.,
Physician to the Dispensary of the Glasgow Royal Infirmary.
Glasgow, June, 1875.

Want of Mortuaries.

Dr. Bridges, Local Government Board Inspector, in reporting on the condition of the Shoreditch Workhouse Infirmary, complains of what must be considered a disgraceful state of affairs in the following words:—

> "Another serious nuisance pointed out to me was the habit of bringing in dead bodies and depositing them in the mortuary of the infirmary, owing to there being no mortuary belonging to the vestry. At the time of my visit there were three bodies, all 'found drowned' in the Regent's Canal, and two of them in a very advanced state of decomposition. The entrance to this deadhouse communicates directly with the corridor leading to the infirmary. I can conceive nothing so utterly at variance with sound sanitation as that decomposing bodies should thus be brought into proximity with the wards of a hospital. It is the business of the vestry to provide a mortuary. The workhouse hospital is not the proper place for it."

We are glad to find that the Shoreditch guardians have since called upon the vestry to provide a mortuary, and signified to them that they will after the expiration of a certain date refuse to receive at the workhouse dead bodies as heretofore. We fear there are many other workhouses in London where the practice censured by Dr. Bridges prevails.

Miners' Nystagmus.

To the Editor of The Lancet.

Sir,—While admitting the accuracy of Dr. Taylor's description of the form of nystagmus met with among miners, I confess I was not a little surprised at finding it spoken of as a "new disease." This feeling will, no doubt, be shared by most surgeons who are engaged in ophthalmic practice in colliery districts.

It is now some years since, while attending the Leeds Infirmary, that my attention was drawn to the frequency of this affection among colliers, and it was then generally called "miners' nystagmus," a name one has become accustomed to apply to it. Although it may not be referred to in our text-books, and nystagmus only very briefly dealt with, yet ophthalmic literature is not quite devoid of some reference to miners' nystagmus. I would refer Dr. Taylor to the *Annales d'Oculistique* for November and December, 1872 (page 241), for a summary of an article by Dr. Paul Schroeter (from the *Klinische Monatsblätter für Augenheilkunde* for 1871), on "Nystagmus chez des Mineurs." Two cases are reported, both patients following the employment of miners. In each case the eyes themselves did not present the least alteration; vision, accommodation, and the associated movements of the organs were normal. The oscillation increased towards evening. In the first of these cases the author had recourse without success to "un courant d'induction, à l'application d'un vesicatoire, etc. Mais l'administration de la noix vomique à faible dose parvint a vaincre ce mal si rebelle." He considers the affection a simple neurosis, depending perhaps on a slow intoxication by the deleterious gas disengaged in coal pits.

Again, in the *British Medical Journal*, January 3rd of last year, there is also a communication by my friend Mr. Oglesby, of Leeds, "On a Peculiar form of Nystagmus," where he says, "A fact worthy of special note is that all the patients as yet examined are by occupation colliers," and enters into a full description of this affection.

Four cases of miners' nystagmus have come under my observation during the last few months, and from these, and other cases previously noticed, it seems to me that this disease occurs chiefly, if not entirely, in those colliers who are obliged to do their work in the pit whilst lying on one of their sides. I have also noticed that the oscillatory movements of the eyes have not only been to and fro horizontally, but also somewhat rotatory round their antero-posterior axes. Every medicament has seemed to me for the most part ineffectual, though in one case bromide of potassium appeared to lessen the oscillations.

I quite agree with Dr. Taylor that a discontinuance of occupation in the pit is of all-importance in the treatment of this disease, and it will be especially serviceable in recent cases, like those mentioned by him; but if of long standing, as one my attention was called to lately of more than twenty years' duration, little improvement could be expected from such change.

My friend and colleague, Mr. Gillott, informs me he has been familiar with nystagmus among colliers for many years. He also says he has performed tenotomy in two cases with perfect success. First in 1867, and again in 1873, and both of these patients have since followed their employment in the pit without recurrence of the disorder.

I am, Sir, yours &c.,
Simeon Snell, L.R.C.P. Lond, &c.,
Surgeon to the Sheffield Eye Dispensary.
June 12th, 1875.

J. W. M., (Bristol.)—The connexion between atmospheric vicissitudes and suicide may be studied in De Muralt's paper just published in the *Statistical Journal* of Berne; and also in Brierre de Boismont's treatise on the subject.

Dr. M. G. Evans, (Cardiff.)—Write to the *Globe* Office.

Urethrotomy or Lithotomy in Aged and Debilitated Persons.

To the Editor of The Lancet.

Sir,—In your issue of May 30th, 1874, appeared a letter signed G. Turnley, professing to be a statement of facts in connexion with the operation of urethrotomy and dilatation of the prostate as performed by myself. That it is so I most strongly demur, and, in proof thereof, quote the following from the ward register of the General Hospital, the same being public property, and, although always open to inspection, has never up to the present moment had its accuracy challenged.

"C. H."—Dr. Turnley says "I made a preparation of this man's bladder. The prostate was so extensively lacerated that the little finger could be laid in the rent."

The public register kept in the hospital, and the case fully entered immediately after the post-mortem had been made, records: "*The annular arrangement of the prostate was intact, the parts through which the stone had passed being free from injury.*"

It was not until my son arrived from England that Mr. Turnley's letter was pointed out to me, it having escaped my notice. I at once applied to see the preparation. Judge of my astonishment when I was informed "*that it had disappeared, and was nowhere to be found.*"

I am, Sir, yours truly,
William L. Crowther.
Hobart Town, May 8th, 1875.

A GOOD MOVE.

A NUMBER of gentlemen in Glasgow have banded themselves together for the purpose of defacing the announcements of quack doctors, which are frequently exhibited in large numbers on the walls and hoardings of the city and suburbs. They have employed a man to go round and cover over all such bills with "lamp black," and it is said that in doing so he will have the protection of the police. The practice initiated in Glasgow may well be copied in all our large towns. The offensive bills and advertisements which the quacks of London are permitted to affix on dead walls and other places, and which constitute such an eyesore to decent passers-by, would take a small army of men with lamp black to obliterate.

PREPARATION OF SECTIONS OF BRAIN-SUBSTANCE.

To the Editor of THE LANCET.

SIR,—Having been engaged for some time past in the histological laboratory of University College in examining the structure of the brain, I venture to send you the following description of a process of preparing sections of that organ, which, after trial of numerous modes, I have found to yield most satisfactory results, and which I believe is in many respects entirely new. The process is as follows.

The brain is to be operated on just as it is obtained from the subject, without the employment of any hardening or preserving reagent. Sections or slices are to be made of the part the operator wishes to examine by means of a large amputating knife, kept constantly wet with spirit. Sections should be made as thin as possible; but those of one-eighth or even one-quarter of an inch in thickness will answer the purpose. Having obtained a sufficient number of these sections, they are to be dyed. The dye I use, and which I have selected after the trial of very many reagents, is a half per cent. solution of aniline black (this can be obtained from Hopkin and Williams, Hatton-garden). It is of a dark purplish-blue colour, and when used of the above strength the solution has the appearance of ink. The sections should remain in the dye for from six to twelve hours, or until they have acquired a very deep colour. The dye is then to be poured off, and the sections washed by the addition of fresh water, when they should be floated on to the slides, and placed in position. All excess of water should be wiped from the slides, which are now to be put in a dry place for a few days, until the preparation has undergone complete desiccation. Should the sections be very thick, gentle warmth may be necessary, in order that they may dry before putrefaction occurs. The portions of brain will now be found firmly adherent to the glass, and of such a consistence that it can be easily pared down with a razor or sharp scalpel. I have, however, contrived an instrument which is much more efficient. It consists of an ordinary two-inch rebat plane, such as carpenters use, but which I employ the reverse way, or with the blade uppermost. On each side of the plane are fixed adjustable guides, which can be raised to various heights above the cutting edge of the plane. The slide with the preparation downwards is passed over the knife, and the shaving is gradually regulated by the set screws until the section is sufficiently reduced in thickness. The preparation may then be cleared with varnish, and examined and mounted if found satisfactory. The method is particularly adapted to display nerve-cells and their processes.

I remain, Sir, yours &c.,

University College, June 21st, 1875. H. R. O. SANKEY.

Register.—Has not our correspondent been incorrectly informed? We have always understood that army medical officers are required to place their names on the Medical Register. As regards the holders of appointments in the Indian and Colonial services, however, we cannot be so sure.

CASE OF RAPID HEALING OF ABSCESS IN THE GROIN.

To the Editor of THE LANCET.

SIR,—The following case may be worth recording, as an example of the way in which nature will sometimes take a case out of our hands, and, in utter defiance of the all-pervading "germs" about which we hear so much, will set to work in her own way, and heal up a considerable abscess cavity as if by magic.

Mrs. ——, wife of a well-to-do tradesman in this town, came under my charge six weeks after confinement, suffering from phlebitis of right saphena vein, which presented the usual hard, painful cord in the groin, and accompanied with a good deal of fever, loss of sleep and appetite, wasting, and night-sweats—in short, the patient was run down pretty low, the case being undoubtedly one of phlegmasia dolens, but without the œdema so characteristic of that disease in general. The treatment consisted in keeping the part poulticed, and supporting the strength with liquid nourishment, little and often, Dover's powder at night, &c. After a fortnight, fluctuation became apparent in the groin. The abscess was opened in the ordinary manner, and three ounces of healthy-looking pus let out. Fully expecting a tedious suppuration and a slow healing of the cavity, I laid in a stock of tenax and a large bottle of carbolic lotion in preparation therefor. The cavity, however, got only one syringing with the lotion, as I was called away a distance of forty-five miles (which in this part of the world, and in midwinter, means an absence of not less than three days), and on my return Dr. Simms, who had kindly undertaken to see the case for me, informed me that he had found, on visiting the case the day after I left town, the wound all but closed, and no discharge, nor, in fact, anything calling for interference; and on my visiting the patient four days after the opening had been made I found the wound quite healed, the cavity obliterated, and no trace of pain or tenderness remaining; in short, it was completely well, healed by first intention, one might almost say. The patient after this rapidly picked up flesh and strength, and is now well.

Now, if I had been a disciple of Prof. Lister's, and a believer in his germ theory, and had treated this case accordingly with a like result, not all the Colleges of Surgeons combined would ever have convinced me that the said result was not owing to my antiseptic dressings and precautions. I am taking it for granted that a simple and single washing out with weak carbolic lotion, with a pad of oakum and a bandage, will not be called antiseptic dressing—at least not by those who go in for opening abscesses under a cloud of spray, and all the subsequent complicated dressings, gauzes, boracic lint, &c., which are described as indispensable to that form of treatment.

I am, Sir, your obedient servant,

St. John's, N.F., April 27th, 1875. THOS. HOWLEY, L.R.C.S.I., &c.

FORTY YEARS' SERVICE AS PAROCHIAL MEDICAL OFFICER.

WE are glad to learn that the Dover Board of Guardians have unanimously voted a retiring pension of £130 a year to Mr. John Walter on his retirement from the office of Surgeon to the Dover Union. Mr. Walter has spent forty years of his life in the Poor-law medical service, and, while congratulating him on his well-merited pension, we cannot help expressing our regret that the service is so badly paid as compared with other public departments.

ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—In the address of Sir William Jenner delivered before the Clinical Society on the "Etiology of Enteric Fever," I noticed with interest that he regards the experience of private practitioners who have to do with isolated cases of the disease as being of value in deciding the vexed question of the nature of its origin. In accordance with this suggestion, I venture to offer you the history of two outbreaks of enteric fever within my own practice—one I think showing as clearly as possible the generation of the disease from putrid sewage; the other, its communicability under favouring circumstances.

The first mentioned of these occurred in a house most healthily situated on one of the spurs running down toward Lyttelton harbour, at least 250 feet above the sea level; the house was only a few years old, and no case of fever or in fact of disease of any kind had occurred in it previously. Only one house was situated higher on the spur, the drainage from which led quite away from it, and the occupants of which had never suffered from fever in any form. As is usual with houses built in such a position, there was a considerable excavation into the hill at the back, round which was a catch-water drain on the surface, running along the back and by the side of the house, intended to carry off storm water, but which had been for a long time used as a channel for getting rid of dish washings and house slops, and which at the time spoken of had become foul for the want of sufficient fall. On the 12th April, 1871, the weather at the time being very hot, Mr. K——, the occupant of the house, with some of his children, set to work to clean out and deepen this drain. They suffered considerably from the stench, which permeated the house, and caused nausea to those within as well as to themselves. On the 21st I was called in to visit one of the younger children, who had unmistakable symptoms of typhoid, and within three days the whole family, including Mrs. K——, who had been confined on the 19th, were all, seven in number, down with the same disease, which in each case presented the true signs of typhoid fever—diarrhœa, deafness, delirium, &c. All recovered, and it is worthy of note that at the time there was not another case of typhoid, as far as I was aware, existing in the town, nor did it spread among those who were in attendance upon the family.

I cannot but think that this was a case of generation of the disease *de novo* from the putrid sewage disturbed in the alteration of the drain around the house, as I cannot see the possibility of any typhoid excreta having been present.

The other instance occurred among the families of the miners employed in making the Moorhouse Tunnel, which connects the port with the Canterbury Plains. It started with a young girl, who had left a family with whom she had been servant, in Christchurch. She came home to her friends, who were living in a small cottage in the Heathcote Valley, where a large number of the miners dwelt, complaining only of lassitude, want of sleep, and loss of appetite, and but for the fact that two deaths from fever had occurred in the house she had left I should scarcely have considered her case as one of the kind. Within a few days two of her sisters living in the house, and the children of one of them, were suffering with true typhoid; the mother, who officiated as a midwife, had conveyed the disease to a woman in childbed, who eventually died from it; and several of this patient's friends, who, in spite of my remonstrances, would crowd the little cabin in which she lived, sickened with the same fever, and these in turn communicated it to their husbands; so that within three weeks of the advent of the first patient I had *twenty-two* cases of typhoid, all traceable to the one source. These were entirely among the Cornish families, who had but recently arrived in the colony, and whose huts were for the most part damp and devoid of comfort, and who had not yet accustomed themselves to the more generous diet which the older colonists indulged in, living on a very small allowance of animal food, supplemented largely by indigestible material in the shape of "pasties" &c.; while the old Victorian diggers, who formed the larger body of the workmen, and who lived in rough plenty, had not a single case among them, although in some instances living under the same roof with fever patients.

I am afraid I am trespassing too much on your space with this communication, but think that it may be of some interest to those who are engaged in the investigation of the causes and nature of enteric fever—a matter of great moment to us in New Zealand at the present time, as there is scarcely a town throughout the colony that is not suffering severely from its ravages. Here they have not been confined to class or locality, many of the cases occurring in the most healthy and well-drained positions, and among the scrupulously cleanly; while in some places, where the reverse of this has obtained, the fever has been almost or entirely absent.

I am, Sir, yours faithfully,

JOHN T. ROUSE, L.M. Lond.,
Assistant Provincial Medical Officer, Littelton, N.Z.

Lyttelton, Canterbury, New Zealand, March 5th, 1875.

THE INTERNAL ADMINISTRATION OF PICROTOXIN.

A CORRESPONDENT wishes to know in what doses the active principle of cocculus indicus is administered in epilepsy, as advocated recently by a French physician.

THE FAMILY OF THE LATE MR. THOMAS.

To the Editor of THE LANCET.

SIR,—Allow me to avail myself of this opportunity to thank you personally for your kind co-operation on behalf of the widow and family of the late R. Thomas, Esq., surgeon, of Etwall, Derbyshire, and also to convey the thanks of the widow and family to you and to the subscribers to the Fund. Would you kindly acknowledge £5 from "A Friend at Kurrachee," per the Secretary to the Church Missionary Society, resident at Bombay. It may give you pleasure to hear that the Fund from all sources now amounts to upwards of £170.

Yours truly,

Burton-on-Trent, July 5th, 1875. FREDK. WILKINS.

Private Friendship and Medical Certificates.

A correspondent very properly calls our attention to the conduct of the Great Britain Mutual Life Office in directing a series of questions to him, a medical man, as to the health and habits of a candidate for insurance. To expect such information from a medical man, except on the ordinary professional terms, is not reasonable. Possibly the Office may not be to blame, but the candidate.

Fatal Peritonitis, in which the Patient pursued his Avocations until within a few hours of Death.

To the Editor of The Lancet.

Sir,—I remember having once incurred the ridicule of an experienced medical friend by telling him that a patient whom I had pronounced to be the subject of acute peritoneal inflammation was sitting up in bed reading a newspaper. In that case the subsequent course of the disease and a post-mortem examination established the correctness of the diagnosis; and I refer here to the opinion of my friend only as an illustration of the error into which we may be led by trusting in practical medicine to the guidance of mere presumptive evidence.

The case which I am now about to relate is an example of severe peritoneal inflammation, ending in collapse and death, and yet in which the patient followed his usual avocations until within twenty-four hours of his decease, and in which a resolution to disguise the severity of his illness apparently sufficed to mask a disease, whose prominent diagnostic signs are excessive pain and tenderness.

D. S——, a Frenchman, aged about sixty, had lived for several years as butler in an English family. On Wednesday, the 23rd ult., I received a note from the lady in whose service he was, asking me to go and see him, as he was very ill. I went to the house soon after, and the patient, clad in his ordinary attire, presented himself to me immediately in the dining-room. The servants subsequently told me that he had put on his coat, and came upstairs to see me, with an unusual degree of briskness. He gabbled about himself, as only an excitable Frenchman can, and it was with difficulty I made out that he had been ailing for the space of a week. He spoke lightly of his complaint, and particularly wished me not to trouble his mistress in reference to it. It appeared that he had walked some distance in the morning, had taken something to drink in company with another servant at a public-house, and had waited on the family as usual at luncheon. About twelve o'clock on the same day he had taken two pills, and at four o'clock he was seized with severe abdominal pain, which obliged him to throw himself on the ground. This was the only history I could obtain. As there was no couch in the dining-room on which he could lie, I made the man go downstairs again to his bed in the pantry, in order to examine the abdomen. I observed that he descended the stairs rapidly, and without making the smallest complaint of pain. On exposing the abdomen, it appeared somewhat retracted; but there was absolutely no tenderness on pressure over the cæcum or elsewhere; there was no hernia, and he said the bowels had acted on the previous day. I next inquired into the composition of the pills he had taken, and was shown a box of them, labeled "Podophyllin pills," which he told me had been prescribed for him by a neighbouring chemist. I then ordered six drachms of castor oil, with ten minims of liquid extract of opium, to be taken immediately, and directed him to apply a hot linseed poultice. On my way home I called at the chemist's to ascertain the exact strength of the pills, and found that two of them contained rather more than half a grain of podophyllin, besides a certain quantity of colocynth. To the characteristic action of two such purgatives I not unnaturally attributed the pain that had come on about four hours after they had been swallowed, and I thus felt tolerably certain that the symptoms exhibited were in great part accounted for. The three female servants sat up with him during the night, and reported that he became worse about half-past four in the morning. However, I was not summoned again till half-past one in the afternoon, and when I arrived about two o'clock the man was in a state of collapse, and died at five o'clock, within twenty-four hours from the time I had first seen him. He talked volubly to the last, turned without complaint from side to side, and kept his legs and thighs constantly extended.

Dr. Green kindly assisted me in making the post-mortem examination. On opening the cavity of the abdomen, evidence of severe peritoneal inflammation was immediately perceptible. The coils of intestine were wreathed with lymph, the various tissues were injected with blood, and the abdomen contained some pints of effused fluid. Each viscus was examined in turn for evidence of ulceration; but the stomach, gall-bladder, and appendix vermiformis were found intact, as was also the intestine, which was divided and carefully inspected throughout its entire length. The mucous membrane lining the intestinal canal was in a state of catarrh, and somewhat thickened, probably from the long-continued use of purgative medicine, and the intestines were quite empty. There was no intussusception present, nor any twisting of the gut, and the kidneys were found to be healthy.

In our opinion the condition that presented itself had been brought about by over-purgation, and I have since learned that the unfortunate deceased had taken as many as six of the above pills at a time.

I imagine the case may possess some interest in a medico-legal point of view; but it is also interesting clinically, as it is remarkable to find such a degree of idiopathic peritonitis co-existing with so few of the well-known and characteristic symptoms of that affection.

I remain, Sir, yours truly,
Sussex-gardens, Hyde-park, July, 1875. T. Fitzpatrick.

Mr. F. T. Williams, (Stoke Newington.)—We never recommend a particular physician or surgeon.

Pruritus Ani.

To the Editor of The Lancet.

Sir,—Some weeks since I saw a letter in your journal, recommending the use of "Wright's liquor carbonis detergens," in the proportion of one of the liquor to three of water, for pruritus ani. Having for years suffered from this disease, I followed the recommendation, and with entire success, and I think it due to the recommender of the remedy, to its inventor, and to sufferers like myself, to bring my experience to your notice.

Your obedient servant,
July, 1875. Civilis.

P.S.—I enclose my card that you may not think I am acting from interested motives.

A would-be Keeper of the Law.—A case of typhus fever is certainly a medical case. But if the passing of a catheter was required in it, that would be a surgical duty. Bleeding for pneumonia would not so clearly entitle the phlebotomist to recover if he had nothing but a surgical qualification. There are no legal decisions defining the line of demarcation between surgical and medical cases, but generally it is not indistinct.

The Apothecaries' Society.

To the Editor of The Lancet.

Sir,—I am no longer a young member of the Apothecaries' Society, and as I have in my turn incurred the expense of the stewardship of the first dinner imposed upon all members, and paid the fine of £30 in lieu of incurring last year the like cost of that of the herbarising dinner, I trust that interested motives cannot be attributed to me in now offering a few additional words from my humble pen to those which have already appeared in your able journal.

For many years I have, on principle, declined to attend any of these dinners, and my principle is this: When I discharged my proportion (as one of the stewards) of the first dinner, it was only then first known to me on whose shoulders the expenses of these dinners were levied. Hence I then felt, as I still feel, that I might on the former similar occasions have been entertained at the cost of some who could ill afford it. Such, indeed, is the probability. So I deem it just and honourable to stay away. If this view were generally adopted and acted on, these dinners would soon collapse. In paying the fine of £30, as before stated, and requesting my name to be removed from the list of stewards, I further carried out this principle.

You will perhaps kindly excuse my adding that I knew nothing of my having been promoted to the office of steward last year until I received a formal invitation to the dinner for myself and three other members, nominated as stewards. To such a high mode of compliment I am certainly not accustomed; nor am I in the habit of receiving such a peremptory letter as that which I got from the clerk in reply to my own, declining to serve, and asking my name to be taken off the list. It was, in its entirety, as follows: "You must serve, *or* pay a fine of £30."

It has been stated to me officially that no member is ever called upon to serve as steward, and thus bear the charge of nearer £80 than £60, who is not well able to afford it. But, in answer to this, let me ask, how can the authorities of the Society, or how can you and I, possibly ascertain the actual means or pecuniary position of the members? Have they access to our banking pass-books?

I am not ashamed of the name I bear, and see no reason to withhold it.

I remain, Sir, your faithful and obedient servant,
Whetstone, July 6th, 1875. G. Bury.

To the Editor of The Lancet.

Sir,—I trust that you will not allow your able advocacy of the abolition of the now effete and useless apothecaries' dinners to be diverted from the main question (which has not been even touched upon by your correspondent, "Another Member")—viz., the compulsory mulcting to the extent of £60 of those members who find it no slight hardship to provide this sum for dinners, which they neither approve nor attend. If "Another Member" desires "the opportunity of social companionship and good fellowship," let him take the initiative in a plan similar to that adopted by the Fellows of the College of Surgeons, and invite members of congenial views to a dinner or a series of dinners, when each one pays for his own ticket. I feel sure that the eminent provincial member who has taken up the cudgels in the cause of his fellow-dissentients will receive not only their warmest thanks, but their earnest and practical encouragement.

I am, Sir, your obedient servant,
July 5th, 1875. A Member of the Second Class.

An Intending Candidate will, doubtless, obtain the information he desires by applying to the Secretary at the College.

Nemo.—We are not acquainted with a work of the kind.

German Medical Literature.

To the Editor of The Lancet.

Sir,—"Fatherland" may find a work entitled "Lateinisch-Deutsches Wörterbuch für Medicin und Naturwissenschaften, bearbeitet von Dr. Ernst Gabler (published at the Verlag von Hermann Peters in 1857), useful to him. This work was got in Berlin to supply the want felt by "Fatherland" until the language *medically* had been mastered.

I remain, Sir, yours truly,
July 3rd, 1875. Farquharson.

To the Editor of The Lancet.

Sir,—"Fatherland" would, I think, find the assistance he requires in the second part of Dr. Shirley Palmer's "Pentaglot Dictionary of Medical and Scientific Terms." The copy in my possession was published by Longman in 1845, and I am not aware whether or no the book is still in print; but the medical booksellers would, of course, be able to inform him.

Yours faithfully,
July 5th, 1875. Germanicus.

Registration.

To the Editor of The Lancet.

Sir,—As everyone is desirous of knowing to a certain extent what purpose money is put to that he expends, could you inform me what becomes of the £5 fee paid for registration? and also if a qualified, non-registered practitioner lays himself open to a penalty by giving certificates of cause of death?

Your obedient servant,
July, 1875. Enquirens.

⁎⁎⁎ The £5 fee goes to defray the expenses of the General Medical Council, by which body the Medical Act is administered. A non-registered, but qualified, practitioner who gives a certificate of death does not expose himself to the risk of penalty. He must not, of course, represent himself as registered. Registrars are often too ready to take certificates even from unqualified practitioners. They may mark such deaths as uncertified; but they register them, nevertheless, on the strength of the certificates. Registrars are not supplied with the Medical Register, and are not guided by it.—Ed. L.

L.R.C.P. Lond.

A correspondent writes to us to say that he has lately had over a hundred cases in various provincial County Courts, and in every case he obtained a verdict with full costs on the strength of the L.R.C.P. Lond. The decision of the County Court Judges proves the value of the qualification.

Purpura treated with Arseniate of Iron.

To the Editor of The Lancet.

Sir,—On the 30th of April a girl, aged seven years, was brought to me, complaining of headache, languor, and loss of appetite. On examination, I observed numerous purple and red spots, slightly elevated, as if pinched by a pair of small-pointed forceps, situated on the trunk, legs, arms, lips, and fauces. The mother informed me that frequently of late the child had vomited dark-coloured blood, that also blood had come from her nostrils, and had been passed at stool. Before I saw her she had been treated with saline purgatives without any beneficial effect, and was in an extremely weak state. Contrary to the treatment of Drs. Parry, of Bath, and Harty, of Dublin, I prescribed a tonic in the form of arseniate of iron, at the same time beef-tea and other nutritious diet. In the course of five days the marks began to fade, the sores at the angles of the mouth healed up, no more blood was either vomited or passed at stool, and in a fortnight no traces of the disease were seen. The appetite returned, accompanied by strength, and now she is as strong as, if not stronger than, she was before her illness.

I remain, Sir, yours &c.,

Pathhead, Scotland, July, 1874. J. Lindsay Porteous.

Errata.—In the letter of "Chirurgeon" on the Fellowship of the College of Surgeons, published in our last, page 41, two inaccuracies occur which it may be well to correct. Near the end of the second paragraph, for "three months' dissection," read "*eight* months' dissection"; and in the last line but one of the third paragraph, for "for," read *of*.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from — Dr. Barnes, London; Dr. Wilson Fox, London; Mr. A. Smee, London; Mr. Ady, Wolverhampton; Mr. S. Snell, Sheffield; Mr. R. Wickham, Newcastle; Mr. Matthews, Longsight; Mr. Pitcaird, Littleborough; Mr. Brown, Edinburgh; Dr. Gerhardt, Leipzig; Mr. Chiene, London; Mr. Davidson, Birkenhead; Mr. Churchward, Dover; Major de Winton, London; Mr. Blenkinsop, India; Dr. Gillespie, London; Mr. J. Lean, London; Dr. Thornley; Mr. West, Birmingham; Mr. Monckton, Hurstpierpoint; Mr. Crowther, Hobart Town; Mr. Fitzpatrick, London; Dr. Carter, Birmingham; Dr. Foster, Birmingham; Miss Emily Faithful; Mr. Eyeley, Dursley; Mr. Kebbell, York; Mr. Fuller, Manchester; Mr. F. Underall; Mr. Mitchinson, Hackney; Mr. Dunn, London; Mr. Coleman, Birmingham; Mr. Mikins, Burton-on-Trent; Mr. J. V. Solomon, Birmingham; Mr. Domvill, Exeter; Dr. Singleton, Baltimore; Dr. Chaplin, Jerusalem; Dr. Hess, London; Mr. Gibb, Airdrie; Dr. Martin, London; Mr. Teevan, London; Dr. E. Tyler Smith, London; Mr. Williams, Stoke Newington; Mr. Walker, Manchester; Mr. Johnston, Fordown, N.B.; Dr. Griffith, London; Mr. Greenwood, London; Mr. Scott, Manchester; Mr. Young, London; Mr. Mercier, London; Mr. Hall, Swadlincote; Mr. Blanchard, London; Mr. Wilders, Birmingham; Mr. Dawson, Montreal; D. Keene, Watford; Mr. Thompson, Birmingham; Mr. Faunthorp, Canterbury; Mr. Watson, Kettering; Mr. West; Dr. Sedgwick Saunders, London; Mr. Bartley, Woolwich; Dr. Evans, Cardiff; Dr. F. Robinson, London; Dr. Duncanson, London; Mr. Davies, Bath; Mr. Ceely, Twickenham; Mrs. Brent, London; Dr. Kebbell, Brighton; Mr. Hartley, Cheltenham; Mr. Warren, London; Dr. Thomason, Sopley; Dr. Davidson, Birkenhead; Dr. Eddison, Leeds; Dr. Bond, Gloucester; Mr. Fox, Bristol; Mr. Lilley, Bridgwater; Mr. Watkins, Leipzig; Mr. Swaine, London; Mr. Fox, Manchester; Register; Royal Institution; Ichneites; Medicus, London; A would-be Keeper of the Law; W.; A Member of the Second Class; Microscopist; Fatherland; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Mr. Sampson, York; Mr. Clay, Matlock; Mrs. Carr, Stafford; Mr. Blakeney, Boyle; Mr. Collman, Leicester; Mr. Cogan, Northampton; Mr. Bryan, Norwich; Dr. Sutherland, Castletown; Mr. Blount, London; Mr. Skinner, Worksop; Mr. Garvie, Bridge of Earn; Dr. More, Rothwell; Mr. Wilson, Huddersfield; Dr. M'Nalty, Kelvedon; Mr. Pearce, Aylesbury; Mr. Thomas, Llanelly; Mr. Bolton, Nenthead; Mr. Lockwood, Westgate-on-Sea; Mr. Fox, Dover; Dr. Corns, Oldham; Mr. Roberts, Renishaw; Mr. Fox, London; Mr. Lascelles, Lincoln; Mr. W. C. Satchell, Tunbridge Wells; Dr. Morton, Sheffield; Mr. Batteson, London; Mr. G. Bury, Whetstone; Mr. Wilmshurst, Woodville; Dr. Rogers, Long Ashton; Dr. Mackay, Crook; Mr. Crane, London; Mr. Scott, Wellesbourne; Mr. Flint, London; Mr. Davies; Mr. White, London; Dr. Rogers, London; Mr. Carter, Chatteris; Mr. Warren, Salisbury; Mr. Johnson, Burnley; Mr. Morrison, London; P. M. O. V. H.; A. B., Hanley; F. R., South Hackney; S. T., Manchester; F. E. W., London; M.R.C.S., Yeovil; Epsilon, Preston; A. B., Calne; S., Eastbourne; Medicus, Sandown; M.D., Cuckfield; M.R.C.S., Margate; C. M. H.; J. B.; M.D., Salisbury; Physician, Birmingham; W. H. G.; X.; Iona; H. M., Rotherham; Zeta, Oldbury; A M.D., London.

Newcastle Daily Chronicle, Western Morning News, Welshman, Huddersfield Chronicle, Record, Surrey Advertiser, Liverpool Post, Manchester Guardian, Birmingham Post, Isle of Man Times, Holloway Press, Bolton Daily Chronicle, Dublin Evening Mail, Cork Constitution, and *Yorkshire Post* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

The Lancet Office, July 8th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
July 2	29·73	S.W.	57	61	101	70	56	0·25	Cloudy
„ 3	29·85	N.	57	59	99	70	58	0·09	Raining
„ 4	30·21	N.	55	57	81	62	55	0·26	Overcast
„ 5	30·33	N.E.	52	57	107	71	49	....	Cloudy
„ 6	30·32	N.E.	55	57	109	77	56	...	Fine
„ 7	30·30	E.	57	60	95	71	56	...	Overcast
„ 8	30·02	N.E.	55	60	...	...	57	...	Overcast

Medical Diary for the ensuing Week.

Monday, July 12.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

St. Peter's Hospital. — 3½ p.m. Expected Operations: Two Cases of Lithotrity.

Tuesday, July 13.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Wednesday, July 14.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1½ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Thursday, July 15.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, July 16.

St. George's Hospital.—Ophthalmic Operations, 1½ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Saturday, July 17.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

NOTICE.

In consequence of The Lancet being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

Lectures

ON SOME

NERVOUS DISORDERS THAT RESULT FROM OVERWORK AND MENTAL ANXIETY.

BY GEORGE JOHNSON, M.D., F.R.S.,
PROFESSOR OF MEDICINE IN KING'S COLLEGE; PHYSICIAN TO KING'S COLLEGE HOSPITAL.

LECTURE I.

GENTLEMEN,—I wish to direct your attention to a very numerous and interesting class of cases, in which a great variety of so-called nervous symptoms are traceable to the influence of overwork, anxiety, or mental shock. For the last quarter of a century I have taken an especial interest in cases of this kind, and so long ago as the year 1853, in a course of lectures which I delivered at the Royal College of Physicians, I described their general features, and gave a considerable number of examples illustrative of their etiology, their symptoms, and their successful treatment by a cautious temporary use of opium at bedtime. Up to that time my experience of these cases had been gained chiefly as a dispensary physician and in the out-patient rooms of the hospital. Since then I have met with them in all classes of society, and I know of few forms of disease in which a treatment based upon the recognition of the true nature and origin of the symptoms is, in a large proportion of cases, attended with more entirely satisfactory results. My treatment of these cases is essentially the same now as it was then, but the substitution of chloral for opium as a temporary soporific is a great practical gain. I say emphatically, as a "temporary soporific"; for I shall hereafter show you that I resort to the chloral only to tide over a temporary difficulty. Few drug-evils can be greater than that involved in the habitual employment of soporifics of any kind.

I shall endeavour to convey to you an accurate idea of the diseases in which I now desire to excite your interest, partly by a brief history of a few typical cases, and partly by a general description of their leading and characteristic features. In order to give greater variety and completeness to my illustration of these maladies I shall select some cases from those which I observed in my hospital practice many years ago, and others from the more recent records of private practice.

I beg it to be understood that in using the terms "mind" and "mental," as I shall frequently have to do in the course of these lectures, I mean by these expressions no more than is implied in their use by scientific psychologists. We know nothing of mind as a separate entity—apart, that is, from cerebral organisation and function. Mind is an abstract conception, like heat or motion, and it is conveniently used to designate a set of complex psychological energies. It comprehends volition, reason, affection, &c.—phenomena which are inseparably associated, so far as we know, with a material organisation. As physiologists, in our study of mental phenomena we make no reference to theological doctrines or metaphysical theories. We have no sympathy either with those who charge physiologists with materialism or with those who contemptuously speak of theologians as superstitious. With this preliminary explanation I will give you my first illustrative case.

CASE 1.—Mrs. L——, aged sixty-five, the wife of a farmer, consulted me on Jan. 8th, 1872. She had been ill and under medical treatment without benefit for a year. She was a woman of great energy and spirit, but since her illness she had been very weak and nervous, and unable to attend to her household affairs. Her appetite had gone, and her sleep was constantly disturbed by distressing dreams, during which she often fancied that she was falling down steep precipices or into deep water. After such a night she got up feeling more tired than when she went to bed. She perspired profusely during the night. Of late there had been some œdema of the legs, apparently from debility. There was no evidence of renal, cardiac, or pulmonary disease.

I now inquired for the cause of all this nervous disorder, and it was not difficult to find. She had been in perfect health up to a year before, when one day, as she was driving with her husband in a dog-cart, the horse ran away. Her husband was first thrown out, and after a gallop for some distance along the bank of the Thames, at the risk of being pitched into the river, she was thrown out, and her arm was hurt, but not very seriously. The arm soon got well, but the effect of the mental shock continued.

Having heard this history, I said to her, "If I can make you sleep quietly for a few nights I shall cure you quickly and completely." I then prescribed twenty grains of chloral hydrate to be taken every night, and a mixture, containing quinine, tincture of nux vomica, and hydrochloric acid, to be taken three times a day after food. I saw her again on January 16th. She had taken the chloral for seven nights. She had slept well without dreaming, she had therefore got up refreshed, her appetite and her spirits had returned, and she declared herself quite well. Her sister, who came with her, said to me, "Her recovery is quite a miracle." I replied that it was a simple and natural result of a few nights of quiet sleep and freedom from the harassing terror of the distressing dreams which had so long troubled her. I advised her to take a half dose of chloral for a few nights longer. Her sister called with another patient on February 26th, and reported that Mrs. L—— had continued her medicine for a week after her second visit, that her appetite, her spirits, and her sleep were good, and that she was quite well. I have several times heard since from the friends and relatives of this lady that she has continued in good health.

This case is a good example of a numerous class in which the effect of a sudden violent mental shock is continued and intensified by nightly recurring dreams, during which the brain is worried and exhausted, and the patient gets up feeling more tired than on going to bed. This condition of nervous system, if not removed by remedies, is often continued for an indefinite time until some more serious disorder results.

The following case is an illustration of the terrible consequences which may result if the state of dreaming restlessness, which was so speedily removed in the previous case, is permitted to continue unchecked.

CASE 2.—A. S——, a warehouseman, aged twenty-nine, came to me at the hospital in July, 1851, and said that he was subject to epileptic fits. His intellect was impaired, and he could give but an imperfect account of himself, so I desired him at his next visit to bring his wife with him. She was a very intelligent woman, and from her I obtained the following remarkable history. The husband had always been a sober and steady man, and he never had any serious illness until he became subject to fits, the origin of which she thus accounts for. Seven years ago he was returning with his wife and some friends from Epsom races, when a child in the road accidentally fell under the wheel of his chaise, and was killed. The man was much horrified at the sight of the child's crushed head. That night he started up in his sleep, and called out, "Oh! save the child." He continued thus to call out in his sleep almost every night, and sometimes two or three times in the course of the night. When he started up in this manner he often screamed so as to awaken and terrify his children. At the same time he struggled and clutched with his hands; but when his wife aroused him (which she sometimes had a difficulty in doing) he usually appeared to be quite unconscious that he had been dreaming or making a noise. At other times he complained of having frightful dreams, and, putting his hand to his head, would say that he felt as if he were going out of his mind. Sometimes he exclaimed, "That child haunts me night and day"; at other times, "There is that child again"; and often, when in the street he has seen a child near a horse, he has been in great terror, and his hands have been convulsively clutched. The state of things which I have described continued unchanged for about two years; then he was seized one morning soon after getting up with a sudden and violent fit of convulsions. About two or three weeks after he had two similar fits while in bed, and in about six or seven weeks after this he had another attack. The fits, which are evidently epileptic, frequently recurred up to the date of this history being taken. He has had three or four, and on one occasion, five fits in a day. The longest interval between the fits has been eight or nine weeks. One of the most remarkable features in the history of this poor man is the fact that he had continued to be haunted in his dreams almost every night by the same horrible vision of the child, exciting the same startings up with screams and exclamations. This had occurred, as his wife assured me, so lately as the night before these notes were taken, seven years after the fatal accident. After his epileptic attacks he had sometimes been maniacal, and more than once he had attempted suicide. He had a well-formed head, but his expression was heavy and fatuous, and his memory and his mental faculties generally were much impaired. This sad case had gone beyond the reach of remedies; but what a different history might not this have been if at any time during the two years before the occurrence of the epileptic attacks he had taken for a few nights in succession some soporific pill or draught, which might have broken the habit of dreaming, and thus restored rest to his distracted brain. The history of this case affords a good illustration of the tendency which the habit of dreaming restlessness, when once established, has to perpetuate itself, and to induce other serious consequences.

I will next give you some particulars of a case in which distressing symptoms of very long standing were completely removed by the temporary use of opium at bedtime.

CASE 3.—R. M——, a tailor, was thirty-two years of age when he came under my observation, in October, 1850. He had been a delicate child, but between the ages of nine and twenty-three he had been healthy and strong. At the latter period his father, who had a good business, absconded, taking his money with him and leaving his family destitute; and the son now had to provide for thirteen persons besides himself, including his own wife and one child. From this time he was fearfully harassed, and suffered the usual horrors of intense mental anxiety, restless nights, fearful dreams, spectral illusions, and confusion of thought, to a degree which has often rendered it impossible for him to attend to business. He has often been tempted to commit suicide, and has been enabled to resist the temptation only, as he says, by the force of religious principle. At one time, for a period of two or three years, he was so nervous as to be incapable of taking care of himself, and he had a man to watch him. His habits have always been strictly temperate. This history was obtained partly from himself and partly from his wife, who is a very intelligent and apparently truthful woman.

When I first saw him he was tolerably well nourished, but his face was pale; his expression was torpid rather than anxious; his sleep was disturbed; he complained of great confusion of thought and of "losing himself"; he had a slight cough, and a great dread of consumption. I did what I could to encourage him. I assured him of his freedom from bodily disease, and of my hopes that he might recover. I advised him to take a walk daily in the open air; and on the 28th October I prescribed compound soap pill, two grains every night; and tincture of perchloride of iron, twenty minims, with infusion of quassia, one ounce, three times a day.

On the 11th Nov. the report is that he sleeps soundly, and his appetite has been much better since taking the medicine.

Nov. 18th.—He is looking much better and brighter; he now feels that he can do his work, and he is confident that he will get well. He has had no confusion of thought the last few days. Repet.

Jan. 13th.—He has continued to improve since the last report, and considers himself quite well; his countenance is natural, cheerful, and intelligent; he sleeps well and has neither dreams nor fears; "life is now a pleasure to him instead of being a constant dread." He has no work at present, but he feels quite fit for working. He has continued to take the mixture regularly, but the night pills only occasionally.

March 27th.—Two days after my last report he undertook the management of an extensive tailor's business, which he conducts with ease and comfort to himself, and to the entire satisfaction of his employers. He declares that he never was better in his life, and his wife thinks the same. He looks well and strong. Since the last report he has taken no medicine except an aperient pill occasionally.

In no other case that has come under my observation have symptoms so serious and of such long duration disappeared so speedily and completely as they did in this instance. The improvement, too, was permanent. I saw the man two years afterwards, in March, 1853, when he told me that he was in the same situation, and although the hours were long and the work heavy, he had not been one day absent on account of illness. He slept and ate well, and his countenance was cheerful and intelligent.

I will next give you a brief report of a case in which mere overwork of brain was the exciting cause of nervous symptoms.

CASE 4.—Mr. H. C——, aged twenty-three, articled clerk to a solicitor, consulted me on March 7th, 1872. For several weeks he had suffered from headache, confusion of thought, and inability to work. His appetite was bad, and he complained of uneasiness after taking food. He slept badly, and was much distressed by dreams. The cause of the symptoms in this case was overwork of brain. He had been reading most injudiciously, sometimes from eight o'clock in the morning until two the following morning. When he came to me he had been away for a month's holiday, during which he abstained from all mental application, but he was no better for the change. He had continued to sleep badly, and he was therefore unrested. I prescribed twenty grains of chloral hydrate to be taken every night. He was on his way home when I saw him. He wrote to me on the 16th of March that "for the first four nights he had the most profound sleep, without any dreams; since then he had not had quite such unbroken sleep, but he was thankful to say that he was wonderfully better." I advised him, in reply, if the dreams continued, to take thirty grains of chloral for a few nights, and then gradually to reduce the quantity and leave it off. I heard from him again on March 26th that his sleep was now very good, the pain in his head had ceased, and he intended to return to work that day week.

I wrote lately to this gentleman asking for a report of his progress since I last heard of him. He states that he remained, with quiet work, in pretty good health for some five months, when he had a slight renewal of his old complaint. He took a few doses of chloral and a little rest from work, and then went to Switzerland, where he did some good mountaineering. He returned, read up for and passed his examination, and has stuck well to work ever since, feeling very little of his "old enemy" except "after sticking too closely to work." He goes on to say that he finds plenty of exercise and early to bed the great preventive, but he thinks "the chloral an invaluable remedy." He adds that "after taking the chloral for some time he found no difficulty in leaving it off."

In the next case excessive brain-work with anxiety caused painful symptoms, which quickly yielded to treatment.

CASE 5.—I was consulted a few months ago by my friend Dr. ——, thirty-five years of age, who complained of a painful hyperæsthesia over the whole left side of his body; so sensitive was the skin that even the touch of his shirt gave him pain. He was apparently in robust bodily health, but his nights were disturbed by dreams, and he got up unrefreshed. I knew that he was overworked, and that he was over-anxious. I advised him to take a small dose of chloral at bedtime for a few nights, and I said "a few nights of quiet sleep will rest your brain and remove your nervous symptoms." A fortnight afterwards I received from him the following note:—"Here is an interesting clinical fact. I suffered from hyperæsthesia of exactly one-half of the body—the left side—for nearly a month. Even Brighton failed to cure it. After ten grains of chloral I was much relieved, and after four doses of ten grains on alternate nights, *it has entirely disappeared.* My brain, which has for months felt queer, has got a new lease of activity; I feel ridiculously well, and am amazed at the change. I see now that my ailments have all been due to want of sleep." My distinguished friend has had no return of his unpleasant symptoms; he is now free from anxiety, and his energetic brain is working as hard as ever.

The cases which I have thus briefly described will suffice to convey a general idea of the symptoms which result from overwork, mental strain, and nervous shock. I proceed now to point out some of the more common causes of nervous disorder, with a view to facilitate their recognition by those who are investigating the history of nervous diseases. It will be unnecessary to dwell upon those causes of mental anxiety whose influence is immediately and universally recognised, such as the illness or the death of relations and friends; or, what is often worse than illness or death, the misconduct of those in whom a deep interest is felt, reverses of fortune, failures and disappointments in business, &c. The operation of these causes is so obvious and so powerful as to be seen even by the least observant. We may commonly notice that an overworked man, whether his work be mechanical or mental, becomes an over-anxious nervous man. The overtaxing of the strength is attended by a sense of fatigue and exhaustion, loss of appetite for food, and often by inability to sleep soundly; with this there comes an anxious dread of breaking down, and the combination of fatigue, anxiety, and unrefreshing sleep is a common cause of mental and bodily collapse. And here it may be observed that habitual indolence and neglect of duty often occasion as much mental disquietude as excessive labour and over-fatigue. Those who kill time are not unfrequently

> "Haunted much by visions strange,
> And sore perplexity of roaming dreams,
> The spectres manifold of murdered hours."

The infringement of moral laws brings discomposure and anguish upon the mind as a physical injury gives bodily pain. Some of the most distressing cases of nervous disorder are those which result from the excessive indulgence of the baser animal passions. This is partly a result of the nervous exhaustion and disorder which too often follow upon excessive nervous excitement; partly it is a result of the remorse and self-reproach which torture the man who is conscious of degrading habits. It is scarcely necessary to remark that alcoholic excess will aggravate the effects of overwork, anxiety, and other disturbing influences.

We frequently meet with instances of severe and long-continued nervous derangement as a result of a momentary but violent mental shock. Cases of epilepsy in which the fits have been the result of fright are by no means uncommon. It is a well-known fact that some young and nervous subjects have been frightened into epilepsy by seeing another in a fit. Some time since I heard of two twin brothers one of whom became epileptic. They both continued to sleep in the same room, and the result was that the second soon became epileptic too.

The causes of sudden and violent mental shock are very numerous, and most of them are so obvious as to require no comment. One of my hospital patients (a woman) was excessively nervous long after receiving a fright from the collision of two steamboats, and a false alarm that the boat in which she was a passenger was sinking. I have had several patients who have suffered long and seriously from the nervous shock of a railway collision. One gentleman who was much bruised and shaken in the collision at Harrow Station, in November, 1870, was excessively nervous, and had his sleep disturbed by frightful dreams for several months after he had recovered from the serious physical injuries which he sustained in that terrible crash.

The alarm of fire is a frequent cause of long-continued nervousness. Rather more than twenty years ago the Olympic Theatre was burnt down, and for two or three years after the fire I had several hospital patients, both men and women, who had lived near the theatre at the time of the accident, and who had continued to dream of fire, and to be excessively nervous and timid.

In directing attention to these various sources of nervous shock and mental anxiety, I have acted in the spirit of a suggestion which is contained in the following remarks by Dr. Latham:[*] "Prior to diseases, to their diagnosis, their history, and their treatment, prior to them and beyond them, there lies a large field for medical observation. It is not enough to begin with their beginning. There are things earlier than their beginning which deserve to be known. The habits, the necessities, the misfortunes, the vices of men in society, contain materials for the inquiry, and for the statistical systematising study of physicians, fuller, far fuller of promise for the good of mankind than pathology itself."

The kind of inquiry here referred to, and commended to our notice by Dr. Latham, is, in my opinion, an essential element of a truly scientific pathology, and with reference especially to diseases of the nervous system its paramount importance is indisputable. It would not be difficult to show that many serious errors which have prevailed with regard to both the pathology and the treatment of some of these affections are attributable to a disregard of that portion of the patient's history which precedes the occurrence of actual disease, and a study of which is requisite, as well for the discovery of the true cause as for directing the successful treatment of the malady.

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[*] Clinical Lectures on Diseases of the Heart.

Clinical Remarks
ON
TAPPING AND DRAINING THE PLEURA.

Delivered in University College Hospital,

BY BERKELEY HILL,

SURGEON TO THE HOSPITAL.

Gentlemen,—This patient, with fistula in the thorax and abscess in the right pectoral muscle, caused by the escape of pus from an empyema, affords me an opportunity of briefly reciting to you the leading points connected with thoracentesis.

The effusion may be merely dropsical fluid from neighbouring organic disease, inflammatory serous exudation, or pus. To remove these collections thoracentesis may be needed in three groups of cases. (1) In very copious effusions death is threatened by gradual suffocation, but it more frequently takes place suddenly by syncope—a contingency you should never forget. (2) When the effusion compresses one lung, and seriously impedes the action of the heart. (3) When there is hectic or pus it is necessary to open a free drain from the lower part of the cavity in order to gradually close it.

In chronic pleurisy absorption is very slow. Meanwhile the lung is squeezed against the spine, and in time its tissue becomes so much altered that it cannot expand again, or fibrous adhesions grow strong enough to bind down the lung permanently. Such bands also, though less frequently, fasten the pericardium in an unnatural position, by which the action of the heart is hindered. The pleura itself, by long-continued inflammation, becomes very thick. At the post-mortem of the child whose photograph is before you we found the pleura to be one-eighth of an inch thick, making a leathery unyielding cover, fixing the lung to the spine. In this condition, though we had no difficulty in draining the pleura, the lung could not expand to fill up the cavity. In consequence, the skeleton of the child continued to collapse and twist till this extraordinary deformity was produced. Serous effusions after a time are apt to become purulent; in this state they are still less readily got rid of than serum. Pus, too, frequently excites hectic or septic fever, and, by ultimately perforating the pleura, may penetrate to a bronchus or to the surface of the chest, and thus form bronchial or thoracic fistulæ. Spontaneous cure by this means is possible, but, through the indirect course of the fistula, it is tedious.

Formerly a long list of objections were put forward against this operation. Most of them are abandoned; but for the rest a few words of notice may be introduced. Let us take, first, the possibility of wrong diagnosis. Doubtless this cannot always be avoided. But in any case a fine canula and exhausting syringe may be plunged into the chest without the slightest apprehension. Dr. Ringer uses the ordinary subcutaneous injection syringe. This may be inserted in several places if the fluid be not hit upon by the first puncture. Such small wounds of a solid tumour or of the lung itself give no trouble. Bowditch[*] says he has never seen harm ensue even when blood has been drawn out through the ordinary canula. The risk of wounding the intercostal vessels is a bugbear only to the theorist; in practice it does not occur. I do not know that a single case has been recorded, nor has Bowditch met with an instance in 250 cases. It is alleged that to tap while fever is present increases the inflammation. But not necessarily. Dr. Ringer's observations[†] show that the temperature in several cases did not rise after tapping, while when hectic is present, as with our patient of to-day, the temperature rapidly falls after the pus has been withdrawn. Indeed, you may be convinced that no matter what other affections coexist, you will not increase but lessen the patient's sufferings, and help him to recover by drawing away the fluid that harasses him. Be quite satisfied on this point. That fresh fluid is often effused into the pleura after tapping is no real objection. It can be tapped again as often as it collects in any considerable quantity; nor is the absorption of consecutive effusions impeded by withdrawing the first. Indeed, contrary to what was once alleged, repeated puncture is more likely to prevent the conversion of serum into pus than to hasten it. Meanwhile the lung and heart, being frequently relieved from pressure, are less liable to be permanently fastened down in an unnatural position. The entry of air is an objection which has some weight, though it is greatly overestimated. Air has got into the pleura again and again without any mischievous result; but as it is easy to keep air out, that should be always done when the fluid is serous. Whether there is any advantage in closing the wound after evacuating pus is not yet clear; certainly the remainder or any subsequently secreted pus is rarely absorbed spontaneously when the wound is closed. According to my experience, the cavity shrinks and the lung expands only when constant drainage is maintained; thus time is saved by beginning to drain at once. But I must not omit to state that in some of Dr. Ringer's cases the pus gradually ceased to form after simple repeated aspirations; so that perhaps the following rule is the best to lay down for practice. You may simply tap all effusions the first time, unless you have already parietal abscess, hectic, or putrid pus; but on the second tapping, drain the purulent effusions; serous effusions may be simply tapped as often as any considerable bulk of fluid collects.

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[*] Thoracentesis. New York. 1870.

[†] Practitioner, Dec., 1874.

The mode of operation depends on the nature of the fluid. If serous—and it is probably so when not accompanied by consolidation of the lung or parietal abscess, nor of long standing—it can be reached most readily at the infra-axillary region, and in the sixth or seventh interspace. As you know, in the infra-axillary region the sixth interspace is on the level of the nipple; hence it is easy to select a convenient position for the trocar. This should be plunged in at once without preliminary incision, for the puncture closes, when the instrument is withdrawn, by the elasticity of the skin; but, to make sure, a bit of lint soaked in collodion may be put over the puncture. The quantity to be removed at one tapping depends greatly upon the effect the evacuation has on the patient. There is no advantage in extracting as much as possible, and great pain and even danger at times ensue from doing so. You need not aspirate at all, in most cases; the pressure within the chest will drive out the fluid fast enough, though the syringe is useful to force back a clot or shred of lymph, if such block the tube. Coxeter has lately improved the aspirator by connecting the evacuating nozzle with a long india-rubber tube, by which the stream can run direct to the pan without entering the barrel of the syringe, and the exhausting or injecting power is reserved to overcome accidental plugging. But in most cases I prefer the well-known Thompson's trocar, in which, as you see, the trocar, as it leaves the canula, enters an air-tight stuffing-box; thus air cannot rush into the pleura if the stream ceases to flow out. Under all circumstances let as much flow as will come readily, and stop it if the patient feels a tearing pain or begins to cough violently and continuously—symptoms which Trousseau tells us are caused by the expanding lung drawing air along its disused tubes. Should a second tapping be needed, the patient will readily consent when he has once felt the relief it brings.

When intending to drain, an orifice should be made further back and lower down than suffices for simple tapping. The best situation is that defined by Bowditch—one opposite the lower angle of the scapula, and (in an adult) two inches higher up than the lowest point of respiratory murmur on the sound side. He feels with his forefinger for an interspace, which would be the eighth or ninth, and plunges in his trocar quickly and freely, taking care to go deep enough that he may reach the fluid, through thick layers of lymph, if they be present. When quite sure beforehand that the fluid is pus, use a canula wide enough to let a drainage-tube pass through it; and when the stream of pus flags introduce five or six inches of india-rubber drainage-tube; tie a piece of silk thread firmly to the outer end, and secure that to the skin by placing over it a good-sized disc of diachylon plaster three or four inches above the wound, to prevent the whole of the tube slipping into the cavity—a mishap that has occurred ere now. Then cover the wound with a broad thick layer of tow or tarred hemp, which can be renewed as often as it is charged with matter. In a day or two the quantity will not exceed a few drachms per diem, and is easily managed. Keep the patient as much as possible on his back and injured side, and protect him well from chills, to which he will be sensitive for a long time, and thereby to fresh pleurisy. If the tube first used, being necessarily a small one, does not drain freely enough, in two or three days the orifice will have widened sufficiently to allow a larger tube to take the place of the first. Again, if while the fluid flows the character of the matter induces you to begin drainage when you had tapped with the intention of closing, you may widen the orifice by incising the skin and muscles parallel to the rib while the fluid is running freely, and pass in the drainage-tube by the side of the canula still *in situ*. If you leave the passing of the tube till the chest has emptied itself, you will have much more difficulty in accomplishing its introduction. When there is already abscess in the front of the chest, you may disregard it, and in most cases it is better to do so, and make your aperture at the back as if it were not present. The matter soon drains again into the chest and disappears. A patient put by Sir William Jenner under my care last spring had bulging abscess in the infraclavicular region. The skin was red and fluctuation most distinct. Drainage was made in the back. The abscess shrank considerably even while the pus was running through the canula, and in twenty-four hours all signs of it had disappeared.

With regard to using anæsthetics, certain authorities—Dr. Bowditch, for example—are most strongly opposed to their use. Dr. Bowditch has narrated* to Dr. Clifford Allbutt of Leeds, that in five cases where ether was administered, two died shortly after the operation, a third was restored only by most energetic means, including tracheotomy, and the ether was abandoned in the remainder before the operation was complete. With such examples, anæsthetics should not be used for simple tapping. If the patient dread the prick, the skin may be numbed by ether spray. Nevertheless, when an incision has to be made through thick muscles at the back, and the often tedious operation of introducing a drainage-tube to be undergone, the pain is severe and the shock to the patient in his depressed state proportionately great. In such cases chloroform is given without hesitation in this hospital, and certainly so far without a fatal result. I have notes of seven† cases where I have operated while the patient was under chloroform, large quantities—twenty, thirty, and thirty-seven ounces—of fluid having been withdrawn without any serious difficulty, and in most cases without any unusual symptom whatever. I do not know how often my colleagues have resorted to chloroform, but I am not alone in using it. Dr. Allbutt also remarks that in one of his cases chloroform was employed, and the result was "fairly good." Hence, though anæsthetics are not to be lightly resorted to, they may be safely employed when really required. It is worth notice also that *ether* was the source of mischief in the fatal cases, and that *chloroform* was well borne in our cases.

Lastly, a few words about injections. Boinet obtained great results with them. He used to tap the pleura and inject solution of iodine and close the wound at once, getting sometimes rapidly a complete cure. Used thus I have had no success with injections, and very little in any way. When there is stinking pus and septic fever, an effective drain usually quickly clears off the putrid matter, and the septic fever subsides rapidly. In extreme cases you may wash out the cavity with warm water injected through a flexible catheter, but astringent or antiseptic solutions of all kinds are not wanted, and they annoy or hurt the patient.

Sometimes, owing to adhesions or other loss of expansive power in the lung, there remains permanently a small cavity, which, if kept clear by assiduous drainage, interferes little with the patient's health or occupation. An omnibus-driver, who had extensive empyema three years ago, is now regularly at work, and pays us a visit now and then that we may be sure he keeps up proper drainage of a space that refuses to close completely. He, as well as another patient, who has worked on a lighter up and down the Thames for the last nine years, and is at the same work still I believe, wear a silver canula night and day, through which two or three teaspoonfuls of matter ooze daily. They are both much exposed to the weather, yet are strong and hearty.

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* Medical Times and Gazette, May 16th, 1874.

† An eighth case has occurred since these "remarks" were made.

The tube must be worn as long as any matter is secreted. One of the patients on whom I operated, a girl, wore it from her eighth to her thirteenth year, during which period she had scarlet fever; yet she is now well-grown, straight, and has very little contraction of the side where she so long had empyema. In concluding, let me mention that when there is great distortion and displacement of the viscera, through collapse of the thorax after empyema, sudden death by syncope may happen. The child whose pleura was so much thickened died thus.

A SECOND SERIES OF

CASES ILLUSTRATING THE TREATMENT OF HÆMORRHOIDS AND PROLAPSUS BY THE CLAMP AND CAUTERY.*

BY HENRY SMITH, F.R.C.S.,
SURGEON TO KING'S COLLEGE HOSPITAL.

Two years since I had the honour of bringing before the Fellows of the Medical Society of London the results of my experience of 300 cases of hæmorrhoids and prolapsus of the rectum operated upon by the clamp and cautery—a method of treatment which I had prominently brought before the profession eight years previously, when I had the honour to deliver the Lettsomian Lectures from this place. The aforesaid results were fairly laid before you in this paper, and, as some of you remember, were pretty freely discussed and criticised. Since that period my experience of this operation has brought my numbers up to more than 400 cases; and now that I have reached this point, and more especially as the experience of the last two years has enabled me to illustrate this operation by cases of greater severity and variety, I have thought it right to furnish you with the information which these additional cases have afforded me. You are aware that I have always contended that the operation by the clamp and cautery, as modified by myself, is a much safer and more satisfactory one than the old-fashioned plan of using ligature. The large experience which I related to you two years ago quite confirmed me in the views which I entertained about this plan of treatment when I delivered the Lettsomian Lectures. I am glad to say that this experience has been shared with me by many surgeons, not only in this country, but in America, India, and Australia; and the manner in which these gentlemen have spoken of the plan of treatment has been most gratifying.

It is not necessary for me to go into the details of the operation which I perform, as they were very minutely pointed out in my lectures, and I believe they are familiar to most surgeons. I will only briefly state that the main feature in this treatment consists in removing the diseased growths or tumours immediately, and arresting or preventing hæmorrhage by the application of the actual cautery. The fixing and removing of the growths are effected by the application of the screw clamp, and the subsequent use of scissors. The operation has the advantage of being completed at once, whereas in that proceeding which had been heretofore so much used, and indeed by some surgeons is used now, by the ligature, the operation cannot be completed at the time, as a given number of days must be allowed to pass before the complete removal of the diseased structures, which have been strangled by the ligature for the purposes of preventing hæmorrhage and causing sloughing and ulceration of the parts involved. This application of ligature to numerous sensitive growths and their subsequent separation are of necessity attended with much local and general disturbance, and when the ligatures separate at the end of a week there is still a large raw surface left, and of necessity the patient is confined to bed or his house for a much longer period of time than if the tumours had been bodily removed at once. However, these matters were freely discussed by me at the time, and they have been freely, and somewhat fiercely, fought over since in this room, and in the journals, and I shall not take up your time to-night in going over the ground again; but, just to show the extraordinary nature of the opposition which has been urged against the operation, I may state that one well-known surgeon wrote a long letter to THE LANCET denouncing the operation. Luckily for me, but most unluckily for himself, the writer let it appear that he had never once made trial of the operation. Another well-known surgeon wrote a book on diseases of the rectum, and so zealous were his efforts to prevent the clamp and cautery operation from coming to the front, that he stated one of the main objections to it consisted in this fact—that the proceeding lasted over an hour. It has often been a source of great amusement to the numerous spectators in King's College Hospital to hear this quotation when they have just witnessed the performance accomplished by me in a few minutes. Of course to such objectors no answer need be made, but others, like my friends Mr. Allingham and Mr. Cooper, have criticised it after having tried it, and such men have a right to be heard, and if they have not seen the merits of the treatment so clearly as I have, I can only hope that their conversion may arrive in time.

And, now, as regards the first and more important point furnished by the present series of cases—viz., the death-rate. When giving the results of my 300 cases, I had to mention the particulars of three cases in which death followed my operation; and, without repeating the details of these cases, I may here state that in all three patients the constitutional powers of life had been so reduced by long-continued hæmorrhage in two, and suspected organic disease of the liver in the third, that the deaths could not be fairly attributed to the particular kind of operation. I was in hopes that, when I presented you with my 400 cases, I might be able to say I had not another death to record; but I regret to state that one death has resulted, and I believe may be fairly attributed to the particular kind of operation performed, and here are the details.

It occurred in the person of a gentleman between sixty and seventy, who had suffered long and painfully from a very severe prolapsus of the rectum, consisting of a mass of mucous membrane and large folds of thickened integument, forming a large tumour. I unfortunately, as I believe now, determined to remove this growth at one operation, and proceeded to use the clamp. I first clamped three portions of mucous membrane high up, and applied the cautery; but, on proceeding to unscrew the clamp, I found one or two large vessels bleeding profusely. Knowing from previous experience that I could stop any hæmorrhage from the rectum by the cautery, I put on the clamp again and reapplied the cautery very vigorously, and completely arrested the bleeding. I then removed the whole of the large external mass with the scissors. The patient bore this severe operation very well, and did not have any bad symptoms the next day; but on the night following he was restless. On the third day he was suffering from abdominal pain, and soon got the anxious face accompanying peritonitis. The symptoms rapidly increased, and he died on the fifth day. Unfortunately, I did not get any post-mortem examination.

Now, on reviewing this case I cannot doubt that the death was due to peritonitis produced by the too excessive employment of the cautery; and I think it possible that I may even have injured the peritoneum, for we know that in some of these very old and large cases of prolapsus the constant descent and dragging on the peritoneum may dislocate, as it were, that membrane, and bring it down much nearer to the anal orifice than natural, and that it may be injured; at all events, if it were not directly injured, the mischief must have extended to it from the adjacent tissue. I was much distressed at this case, for I believe it ought not to have occurred, and I do not think it is ever likely to occur again; for since this event, now just two years ago, I have in such—of which I have had repeated—instances contented myself with clamping the mucous membrane very sparingly, and have been very liberal in removing the external or muco-cutaneous portion of the prolapsus, and in one or two very severe cases I have performed the operation at two sittings—viz., by clamping the mucous membrane first, and in a week or ten days afterwards dealing with the outer part. This case, I am happy to say, is the only instance where death has resulted, and I have had more than ninety cases since this occurred, and cases of the very worst description, where most certainly I should be afraid to use the ligature, in consequence of the mass of tumours which would have to be ligatured, or in view of the shattered state of the system produced by excessive hæmorrhage or other morbid conditions. Indeed, in this last series of cases this morbid condition has been most aggravated, and not without anxiety have I determined to deal with them. I will speak about hæmorrhage connected with the operation by and by, but I may here mention that the anæmia and reduced condition produced by long-continued bleeding is that which is so frequently met with in these cases, especially in ladies. And it is always a source of anxiety, for we all know what a tendency there is for pyæmia to follow a surgical operation when the blood is in the state mentioned. And I may now call to mind a case of a lady sent to me by Dr. Frank from Cannes. This poor lady was like dirty marble, she had suffered so terribly from hæmorrhage; she had also some chest symptoms, and had been told that she must on no account have the bleeding from the rectum stopped. Fortunately she saw Dr. Frank, who begged her to have my opinion. I could not find any active disease in the chest, although she had some spitting of blood, and I at once recommended the operation. Influenced, however, by the opinion already given, she would not consent until she had been seen by Dr. Peacock, and subsequently by Mr. Mac Cormack. Both these gentlemen agreed with me, and I operated, taking great care that she should not lose any blood at the time or afterwards. She made an excellent recovery, and some months afterwards my patient wrote to me saying she had got quite strong, and only expressed her regret she had not been operated on sooner. About the same time a very similar case of a lady who had gone through the most trying bodily and mental ordeals was sent to me by Dr. Fayrer. She also was terribly reduced by hæmorrhage and its sequelæ, but went through the operation as well as the other, with excellent results. These bad cases are those best suited for the treatment by the clamp and cautery, for the hæmorrhage is at once arrested, and the complete sealing up of the vessels produced by the hot iron is, in my opinion, the very best safeguard against pyæmia we can have.

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* Read before the Medical Society of London.

(To be concluded.)

ANALYSIS OF TWELVE CASES OF PNEUMONIA,

ADMITTED INTO WESTMINSTER HOSPITAL DURING THE MONTHS OF MARCH, APRIL, AND MAY OF THE PRESENT YEAR.

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BETWEEN the 4th of March and the 15th of May, or not quite eleven weeks, there were admitted into the Westminster Hospital twelve cases of pneumonia, some of which present special features of interest.

Of these twelve, ten were males and two females, which is a greater proportion of males than usual, the ordinary ratio being as two or three to one; the preponderance of males being accounted for by their greater exposure to vicissitudes of temperature.

If we except two cases on the list—No. 1, a man addicted to drink, and No. 4, a boy of eight, in whom the pneumonia was of secondary importance as compared with the pleurisy—the remainder occurred in early adult life, varying from seventeen to thirty, which is, according to Gunsburg's statistics, the period of life most prone to this disease.

Six of the patients died and six recovered. Of the six who died, two had been addicted to excessive drinking, another had just left the hospital convalescent from pericarditis; of the remainder the previous health had been good. The six who recovered had all enjoyed good health before they were attacked.

Dr. Peacock, in his interesting "Report on Cases of Pneumonia," says that the best measure of the intensity of the disease is undoubtedly the temperature; but out of 32 cases he records in only 3 cases did the temperature exceed 104° F., while in 8 out of my 12 cases the temperature reached or exceeded 104° F. Below is a table giving the number of the case, the highest temperature, and the day and period of day on which it occurred.

No. 2 ...	104·6° F.	on 6th day,	morning.
,, 4 ...	104·3° F.	,, 2nd ,,	,,
,, 5 ...	105·8° F.	,, 2nd ,,	evening.
,, 7 ...	104° F.	,, 9th ,,	morning.
,, 9 ...	104·6° F.	,, 2nd ,,	evening.
,, 10 ...	105° F.	,, 5th ,,	,,
,, 11 ...	104° F.	,, 3rd ,,	,,
,, 12 ...	104·2° F.	,, 5th ,,	morning.

As to situation: of the twelve, nine were on the right side and three on the left. Out of the nine on the right side, the base was attacked in five cases; in one case the two lower lobes; in one the upper and lower lobe, the middle lobe being unaffected; in one the apex; and in one the exact situation was not determined. Of the three cases on the left side, in one the apex was affected, and in the other two the lower lobes.

So much for statistics, and now for a closer examination of the cases, which I shall take in the order of their occurrence.

No. 1.—C. B——, male, aged fifty-six, admitted on the 4th of March. This case was not remarkable for anything very particular. The man had been a hard drinker. He was admitted with signs of pneumonia of the lower two-thirds of the right lung, but there was no expectoration. He was not able to answer questions in a coherent manner, and a few hours after admission fell into a state of low muttering delirium, and died from exhaustion on the 6th. A post-mortem examination was not allowed.

No. 2.—J. C——, male, aged twenty-four. Admitted March 12th; died March 26th. This was a case of pleuro-pneumonia on the right side, which ended in pyo-pneumothorax from the bursting of an abscess of the lung into the pleural cavity. I have not gone into any detail, as the pleural effusion was the chief factor, the pneumonia being of small extent only.

No. 3.—C. M——, male, aged eight. Admitted March 15th; died April 9th. Pleuro-pneumonia, left side, ending in empyema and death from exhaustion.

No. 4.—R. H——, female, aged twenty-one; admitted March 15th. Typical case of pneumonia, affecting the right lower lobe. A fall in temperature of nearly three degrees on the fifth day, but it did not drop to normal till the eighth day of the disease, probably kept up by an intercurrent attack of pleurisy, as she complained very much of pain in her right side, but no friction sound was audible. She was treated with salines, and jacket poultices to the side. Discharged April 10th, perfectly well.

No. 5.—J. A——, male, aged seventeen, admitted March 19th. On the day of admission the following note was made: "Fairly well and at work up to night of 17th, when he was taken ill with sickness, giddiness, and rigors; slept all night and almost all yesterday. Mother noticed that he was delirious this morning. Pupils contracted; no rash; temperature 103·6°; pulse 144, very feeble; heart normal; chest nil. Complains of pain in right side when he breathes, and has pain in the head. Tongue moist, furred, flabby; bowels acted this morning for the first time for three days."

March 19th. — Evening temperature, 105·8°. Ordered carbonate of ammonia, five grains; mixture of acetate of ammonia, one ounce: three times a day. Brandy, four ounces.

20th.—Pulse 136, feeble; temperature 104·2°. Restless during the night, but not actually delirious; eyes suffused; complains of being hungry; tongue dryish down the centre. Bowels acted in the night. Evening temperature, 105·4°.

21st.—3 A.M.: Crepitant râle at apex; no dulness. 11 A.M.: Dull at apex of right lung; heart sounds intensified; tubular breathing; rusty sputa; crepitation at base of both lungs. Morning temperature, 104·6°; evening temperature, 104·9°.

22nd.—Pulse 132; respiration 60; temperature 102·4°. Very delirious all night; rambling now, and trying to get out of bed. Dull right apex in front down to third rib, and to spine of scapula behind; tubular breathing, bronchophony, and a little medium crepitation. Over the whole of the right back there is crepitation, with impaired resonance. Tongue moist, clean. Evening temperature, 105°.

23rd.—Very restless all night; delirious, and trying to get out of bed. Pulse 128, full and hard; respiration 68; temperature 103°. At apex the physical signs are unaltered; the whole of the right back is duller than it was yesterday, with tubular breathing and crepitation. Tongue moist, clean. Bowels acted this morning. Evening temperature, 104·5°.

24th.—Temperature at 1 A.M. 105·2°; pulse 132; respiration 72. At right apex there is now only slight dulness above the second rib, with mucous râles; right back dull all the way down, with tubular breathing and bronchophony. Very restless and delirious all night, trying to get out of bed; tongue red and dry. Evening temperature, 105°.

25th.—Pulse 140; respiration 76; temperature 104°. Right front as yesterday; mucous râles all over right back; restless and delirious all night.

26th.—Pulse 130, intermittent; respiration 56; temperature 101°; countenance livid; pupils dilated; retention of urine, catheter passed; tongue dry and brown; profuse perspiration; involuntary defecation; delirium less violent; floccitation. His friends were sent for, as he appeared to be dying. Ordered three eggs and eight ounces of brandy.—10 P.M.: Temperature 100·8°; no change; passed water voluntarily.

27th.—At 3 A.M. the patient fell asleep, and remained so till 9 A.M., perspiring freely, when he awoke much improved in appearance; sensible when spoken to. Temperature 99·4°; pulse 112, regular; respiration 50. Sputa viscid, purulent, very slightly tinged with blood; no dulness at right apex; rhonchi posteriorly; dulness at base, with crepitation and rhonchus above.

28th.—Morning temperature 98·2°; evening temperature 100·4°.

29th.—Temperature 97·8°. Discharge from left ear began yesterday; no dulness anteriorly; good vesicular breathing posteriorly; resonance impaired at base; mucous râles. Evening temperature 99·5°.

30th.—Pulse 80; temperature 97·8°. Copious discharge from ear; no headache; bladder distended; large amount of water passed. Evening temperature 98·6°.

31st.—Pulse 88, good volume; respiration 34; temperature 97·4°. Resonance only slightly impaired at base, air entering freely; no râles; able to pass water all right. Evening temperature 98·6°.

From this date he continued to improve. On April 5th it was noted that there had been no discharge from the ear for two days. On April 27th, after a most careful examination, the note is, "Resonance impaired above right clavicle; feeble breathing at right apex; no abnormal sounds." Discharged same day well.

I have ventured to give detailed notes of this case as it is an exceedingly good illustration of apex pneumonia. In the first place, he was in a state of great pyrexia for four days before any physical signs of pneumonia were to be detected; this, with the drowsiness, delirium, and contracted pupils, suggested at first the idea of typhus fever. Secondly, I would remark on the extremely violent character of his delirium, and there was no evidence to show that he had been a drinker. It has been denied that the delirium of apex pneumonia is more violent than that met with in other cases where the lung is proportionally affected; but the cases I have seen tend to the opposite conclusion. The pulse-respiration ratio was also very characteristic, keeping pretty steadily, at the height of the disease, in the proportion of rather less than two beats for one act of respiration. Thirty hours before any signs of pneumonia were detected the temperature of the axilla had reached 105·8° F., being a good instance of what Wunderlich would call pneumonic fever. On the sixth day of his illness nearly the whole of the right lung was affected, though the apex was beginning to clear up. Defervescence began on the ninth day, and was accompanied by profuse perspiration and the greatest prostration; but, after some hours' sleep, he awoke quite rational. In this case, as in two others lately under treatment at the Westminster Hospital, the patients have suffered from temporary retention of urine during the commencement of convalescence. Owing probably to some loss of tone and sensibility about the bladder, they allowed it to become greatly distended, and yet, when urged to pass water, they were able to do so.

(To be concluded.)

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

THE discussion on the Relation of Puerperal Fever to the Infective Diseases and Pyæmia was concluded on Wednesday, July 7th, Dr. Priestley in the chair.

The PRESIDENT.—We now proceed to the discussion on puerperal fever, which has been adjourned on two or three occasions. It is the general feeling that the discussion should close this evening, and if necessary the time can be prolonged for the purpose. If Mr. Spencer Wells is present, he will have an opportunity of replying. I may add that we are honoured to-night with the presence of two of our distinguished honorary fellows, Dr. Fordyce Barker (who has come from America especially to take part in the discussion) and Dr. Charles West. Dr. Fordyce Barker has explained to me that he has much to say on this subject that may be somewhat at variance with what has been said by previous speakers, and he fears he will scarcely be able to conclude within the prescribed limits. He therefore throws himself on the indulgence of the Society if he transgresses.

Dr. SNOW BECK.—With your permission, Sir, I shall be very happy to concede any right of priority that I may have to the distinguished visitors who are present this evening.

Dr. FORDYCE BARKER.—Mr. President and Fellows of the Obstetrical Society: I feel that I have no right to waste your time in personal topics, except to express my warm appreciation of the honour I have received at your hands, and to appeal to your courtesy to excuse any deficiencies which may be charitably ascribed to weakness of the vocal organs or to the bashfulness which a stranger must feel in addressing such a body of obstetrical men on such a topic as puerperal fever. I may be permitted to say that this discussion is watched with great interest by your brotherhood on the other side of the Atlantic, but that, so far, it does not seem to have led to the happy result spoken of by the Psalmist, "He maketh men to be of one mind in a house." I shall aim, in the remarks which I am about to make, to confine myself closely to a discussion of the questions now before us, and to state my opinions, and the reasons which I have for holding such opinions, in the most terse, compact language compatible with clearness. If these opinions seem to be in antagonism with the great majority of those which have been expressed, I ask that they may not be regarded as partisan in their tone, but as a presentation of views necessary for a full and comprehensive study of the subject. I ask that the arguments urged may receive that candid analytical sifting requisite for a sound decision as to what is the true answer to the questions now before us. I concede to all, and I ask all to concede to me, that it is the truth, and not forensic success, which is sought for by all who speak in this discussion. I cannot suppose that the proposer of the six questions intended that all of us should accept each of these questions with all the qualifying phrases. Of the six questions proposed, the second and third only admit of the categorical answer of "yes" or "no"; and this will be one or the other, depending upon the answer given to the first question. If the first question be answered in the affirmative, the answer to the second will be in the negative, and the answer to the third will be in the affirmative; or the answers to all three of these questions may be exactly the reverse. I suppose the meaning of the first question, as defined by the second and third, to be: Is there a disease peculiar to women after childbirth never met with under any other circumstances, as distinct as typhoid or typhus fever, scarlet fever, measles, or small-pox? I do not suppose that the proposer of these questions intended or thought that all who believed that the first question could be answered in the affirmative, that puerperal fever is a distinct disease, must therefore accept all the qualifying phrases. "Distinctly caused by a special morbid poison" is one of these qualifying phrases. Is this considered an essential characteristic of a distinct disease? Has science yet determined what the special morbid poison of typhoid fever is? If the phrase had been "*often* caused by a special morbid poison," I should have accepted it as true of puerperal fever, as I believe it to be true of diphtheria and several other diseases. A disease caused by contagion or infection is distinctly caused by a special morbid poison; but there are many diseases which result from multiple causes, of which I may mention diphtheria, typhoid fever, and others. It is just this phrase which seems to have debarred Dr. Farre and Dr. Richardson from answering the first question in the affirmative; and it is just the idea involved in this phrase which seems to have caused much of the obscurity and ambiguity in its discussion. It implies that a given cause—a special morbid poison, if you please—which produces a distinct disease, must always result in this distinct disease. Is this the case with numerous other diseases? In a wealthy family belonging to my *clientèle* I saw, a year ago, a lady dangerously ill with pyæmia, in consultation with Dr. Sayre, who was attending her for a severe traumatic injury. At our suggestion a careful examination of the house was made by a plumber, but no defect could be discovered which could explain the source of the blood-poisoning. Soon after, three of the family, one after another, were taken ill with a typho-malarial fever. I even insisted that the walls of the room should be torn down, when it was discovered that a leaden waste-pipe had defects which permitted noxious gases to permeate the house, but which were not sufficient to permit the escape of liquids to stain the walls. During the past winter I attended a gentleman with severe typho-malarial fever. His residence was in a large house constructed on the plan of the French apartments. This house was entirely occupied by families of wealth and refinement. During his convalescence diphtheria appeared. In another family in the same house I saw in consultation the first child attacked; afterwards the father and two other children, one of whom died, were attacked with the same diphtheria; and it is worthy of mention that the mother, who was removed from the house during the illness of the others with diphtheria, was confined with her fourth child under the care of Dr. Stone, one of our prominent physicians, and that her convalescence was not impeded by any puerperal disturbance either from diphtheria or typho-malarial or puerperal fever. On examination, it was found that the waste-pipes in this house were in precisely the same condition as the house I before mentioned. At the last meeting of the Society Dr. Playfair related some facts of recent occurrence at Notting-hill, where septicæmia in the wife, from which she barely escaped with her life, and diphtheria in her husband, seemed to be due to the same class of causes as that which produced the disease in the case I have mentioned. I ask you to note the language used by Dr. Playfair in relation to these cases. He says, "Who can doubt that these two diseases were caused by the same septic poison?" One of these diseases he names, from his theory in regard to the cause of the disease, septicæmia; the other, from its clinical phenomena, he names diphtheria. The idea involved in this phrase, "distinctly caused by a special morbid poison," implies that it results from only one cause, and that this cause must always be followed by identity of result—that if the poison is known to produce any distinct disease, then this disease must always follow the cause. The second qualifying phrase, to which I will simply allude and not discuss in detail, is, "distinct in its progress and the local lesions associated with it," as certain diseases specified. I have only to say in regard to this, that it seems to me that the several diseases mentioned differ in degree as to the definiteness of their progress and as to the definiteness of their local lesions, and that consequently puerperal fever cannot be compared with these diseases as a group in these particulars. I will now give my reasons for believing that puerperal fever is a distinct disease occurring to women after childbirth only. I think the definition given in the nomenclature of diseases emanating from the Colleges of Physicians and Surgeons is absolutely perfect: "a continued fever, communicable by contagion, occurring in women after childbirth, and often associated with extensive local lesions, especially of the uterine system." It is a disease which results from the absorption of poison causing various blood changes, independently of local lesions, which produce certain general characteristic constitutional symptoms. I need not discuss this point in detail, for from what has been said it is evident that localism or Broussaisism has no status in this Society; and those who believe that this is only a disease resulting from septicæmia and those who believe it is a continued fever are in agreement on this point. We can arrive at truth in medical discussion only by using language accurately. There can be no accuracy of idea without accuracy of language. The established usage of standard authorities in medicine is to designate as fevers all that class of diseases which, from the absorption of some poison in the system, independent of local lesions, produce certain blood changes, and also cause certain general characteristic symptoms; so that under this designation are properly and legitimately included not only those diseases severally called typhus, typhoid, relapsing, intermittent, remittent, and yellow fever, but all those constitutional and infective diseases which occur epidemically and endemically. When the specific poison is known which causes these constitutional diseases as the result of blood changes, then the name of this poison is given to characterise the disease, and we have as accepted terms, uræmia, septicæmia, pyæmia, and others of a like character. I will simply remark here that none of this class of diseases, so far as is known, ever occur as an epidemic or are contagious. The point that we are trying to settle is not a question of name, except so far as this: I take it that we are all agreed that the name given to a disease should be significant and appropriate. The gist of the matter, stripped of all its superfluous and obscuring elements in the inquiry, is whether there be a distinct disease which occurs in puerperal women, and in puerperal women only. The answer to this question can be derived only, as I believe all will agree, from three sources—from studying the causes, the clinical phenomena, and the pathological anatomy. I do not think that much information can be derived from studying the causes of this disease in order to settle the question under discussion, any more than there can be in settling the question from studying the causes whether typhus fever, relapsing fever, and diphtheria are distinct diseases. The study of the causes is of vast importance in a sanitary point of view, and hence I regard the paper which was read by Dr. Braxton Hicks before this Society several years since as a most valuable contribution to the subject. I think no one doubts that if a woman after confinement be exposed to the poison of scarlet fever or that of any other infectious constitutional disease, she will have scarlet fever or whatever disease she absorbs the poison of. I do not understand Dr. Hicks to claim that puerperal fever is only scarlet fever in the puerperal woman, but names this as one of the causes in the same category with diphtheria, erysipelas, mental emotion, and so forth. I think the evidence is conclusive to the vast majority of minds in the profession, established by numerous incontestable facts, observed not in sporadic cases only, but in numerous epidemics and in epidemics which have not occurred alone in hospitals and large cities, but which have ravaged large tracts of country in sparsely populated rural districts, that the poison of erysipelas may cause in women after childbirth a distinct disease which some of us choose to call puerperal fever, and that the poison of puerperal fever, if absorbed into the system of a man or a child, will cause in that man or child erysipelas. I need not refer to the medical history of Great Britain in proof of this assertion, but I perhaps may be permitted to refer to that of my own country for corroborative evidence. A reprint of "Nunneley on Erysipelas" was published some thirty years ago, with notes by Dr. John Bell of Philadelphia, in which he gave facts showing the intimate relationship between erysipelas and puerperal fever in numerous epidemics which prevailed extensively over the United States. During the past year a valuable monograph on erysipelas and child fever, by Dr. Thomas C. Minor of Cincinnati, Ohio, has been published, which I had the opportunity of reading on my voyage over. The book is based on a most painstaking and laborious study of the vital statistics of the Census of the United States for 1870 and an epidemic of puerperal fever which prevailed in South-Western Ohio in 1872, and I think it is worthy of careful perusal by all who seek to influence medical opinion on the subject of puerperal fever. A careful study of these statistics does not seem to show any intimate relation between typhus fever, scarlet fever, pyæmia, septicæmia, and puerperal fever. An epidemic of scarlatina was rarely followed by an outbreak of epidemic puerperal fever, but an epidemic of erysipelas was invariably attended by an outbreak of epidemic puerperal fever. The argument that puerperal fever is not a distinct disease rests mainly on the ground that it is simply due to a septic poison. Septic poison is a term now frequently used, and often very vaguely, but those who claim that puerperal fever cannot be regarded as a distinct disease do not claim that all disease which results from the absorption of septic poison must be one and the same thing, and that this should be called septicæmia. Is there anything improbable or unphilosophical in the hypothesis that septic poison acting on the system in a peculiar state, which never occurs in the human system under any other conditions—that state so graphically described by Dr. Richardson and Dr. Farre in this discussion, — should result in a distinct disease which never occurs except when the system is in a special condition? The answer to this question is to be found in the study of the clinical phenomena and pathological anatomy of the disease. If septic poison never occurs as an epidemic (I do not say an endemic) among those who are suffering from traumatism, and is never contagious under these circumstances, and if septic poison in women after childbirth does occur as an epidemic, and is contagious and infectious, are not these two elements sufficient to warrant us in regarding this as a distinct disease? Those who believe that puerperal fever is only septicæmia have seen that they must accept this issue, and have been driven to deny that puerperal fever ever occurs as an epidemic or that it is contagious. If in a given territory women after childbirth die in proportion to the births in numbers fiftyfold or a hundredfold greater than they have died for several years previously, or than they die for several years following, would we not in common language say that an epidemic prevailed in that district? When, in four months of the year 1873, in that part of New York which is in the best sanitary condition of any part of the city, in which the most wealthy portion of the population reside, the number of deaths from a disease—call it puerperal pyæmia, puerperal septicæmia, or puerperal fever, as you please—is twenty times greater than it had been for twenty-five years previously, and double what it is in other portions of the city in much worse sanitary condition, where the poor women are crowded together in their houses, and quadruple what it is at the same time in the lying-in hospitals of the city, are we not justified in saying that an epidemic prevailed in the city at this period? When in Cincinnati in 1872 the deaths from this disease were 122, while the annual average of deaths from this cause for the five previous years had been $13\frac{3}{5}$. can we not properly say that an epidemic prevailed in Cincinnati at this time? In view of all the material abounding in medical literature, and such facts as these, I will not borrow a phrase from one of the speakers at the last meeting, and say that those who deny that this disease occurs as an epidemic must have minds which are not open to conviction; but I will say that they must attach a subtlety of meaning to that word "epidemic" not consonant with common sense. Please to observe that I do not use the definite article, and say "the common sense"; otherwise the phrase might be discourteous. I will now submit the three following propositions:—1. The clinical phenomena of puerperal fever are quite different from those of surgical septicæmia or surgical pyæmia. 2. These affections do occur in puerperal women, and the result is a disease which does not constitute a continued fever communicable by contagion. 3. When either of these affections complicates puerperal fever it modifies the clinical phenomena by symptoms which can be distinctly appreciated and accurately described by any careful observer. I will not give the evidence on which these propositions are based, because I think that this has been done in a work on Puerperal Disease which it would be indelicate in me to speak of in more definite terms. I will say but a few words with regard to the pathological anatomy of the disease. Dr. Richardson argued, at the first meeting of this discussion, that there are no local lesions which will permit us to say of a case in a dissecting-room, "This is a case of puerperal fever," as we would say, "This is a case of scarlet fever, or typhus or typhoid fever." I think it would be extremely difficult to prove that there are local lesions which have established the fact that scarlet fever, typhoid fever, and relapsing fever are distinct diseases. I will not illustrate this by the subject of scarlet fever, for I find that my time is fast going; but I will simply ask, Would any of the most recent authorities on the continued fevers—would Sir William Jenner, or Dr. Murchison, or Hoffman, or Lebert—insist that a disease could not be registered as typhus or as relapsing fever, except certain anatomical lesions could be demonstrated in the dissecting-room as determining this disease? All these authors agree that these diseases, which we accept as distinct diseases, have no pathognomonic anatomical lesions. The author of the address on Obstetric Medicine before the British Medical Association last year asserts that pathologists have torn in tatters the view that the disease which we are discussing is an essential fever peculiar to puerperal women, as distinct as typhus, or typhoid fever, or scarlet fever. When? Where? How? Give us the proof that any such pathologists have ever studied this disease, except in hospitals and large cities, where it is probably complicated with pyæmia and septicæmia. Of what value would be the researches of the ablest pathologists of Germany or England on questions relating to the pathology of yellow fever if such pathologists had no opportunity of studying this disease except in Germany or England? Has Spiegelberg, or Schroeder, or Schruechberg, or Mayrhofer, or Orth, or Heiberg, or Olshausen, or Fehling, or Cohnstein, or Breisky, or von Haselberg, ever studied puerperal fever as it is found in epidemics in rural districts where pyæmia and septicæmia are rarely met with? German is a difficult language to acquire, and it gives an attractive appearance of learning to introduce such names, even if nothing be quoted from them. I am familiar with their writings, and would not undervalue their researches; but so far as the elucidation of the question now under discussion is concerned, I think it of equal importance that we should carefully study, for the clinical phenomena of the disease, your English classical writers—Hulme, Leake, Kirkland, Clarke, Gordon, Hey, Armstrong, and Robert Lee. The hint on this point thrown out by Dr. Farre at the last meeting seemed to me most appropriate and timely. What progress is made in science—how do "we free ourselves from error," or gain in scientific precision or accuracy of description, in giving to this disease a new name—pyæmia, as Dr. Duncan would call it, while he confesses that it has no etymological signification in this disease, and in fact has no definite, positive meaning? What propriety is there in giving to an obstetrical disease a name significant and appropriate to a surgical disease, unless it can be demonstrated that the two diseases are identical in their clinical phenomena, and their anatomical lesion? The burden of proof to show this identity belongs to those who would call the disease puerperal septicæmia. Some think the negative has already been established. I have neither the time nor the voice to discuss the other questions which have been proposed. With my warmest thanks for your courtesy in listening to me so patiently, allow me to close with the suggestion that it may be well for all of us who discuss puerperal fever to remember the exhortation of Oliver Cromwell, when he lost patience with a Scotch Assembly, "I beseech you, brethren, by the mercies of God, conceive it possible that you may be mistaken."

Dr. WEST.—I came here to-night because I felt that honour implies duty, and having now for some years had the honour of being one of your fellows, I felt that if on the occasion of so important a discussion as this I stayed away, it would seem either as if I cared nothing about the exercise of my profession or about the furtherance of it, or as if some other motive—I know not what—had kept me away from your assembly. What I have to say I will say in as few words as possible. And first of all I have but one criticism to offer, and that bears on one of the questions which have been suggested with reference to the share that certain microscopic organisms have, or may be supposed to have, in the production of the disease called puerperal fever. It appears to me, with all respect to the gentleman who in his able paper proposed that question, that it is somewhat out of time to raise it. We have not as yet a sufficient amount of knowledge on the subject to be able to apply it or to draw from the observations that have already been made any correct and useful inference; and no one, I think, can have read with care the very interesting discussion on the subject of the germ theory of disease without being struck by the way in which men of the greatest talent and the sincerest love of truth differ not merely with reference to the conclusions that they drew, but also with reference to the very facts that they thought they had observed. I think, Sir, if this matter is to be settled, it must be settled, in the first place, in the case of some disease simpler in its nature than puerperal fever. I pass, then, from that in these few words, in which I would wish still to convey the very high respect I feel for a kind of knowledge to which I can make no pretension, and to assure you that what I have said means no disparagement to the study carried on by means of the microscope, nor any doubt of the great results that hereafter we may arrive at from them; but I refer to it from the conviction that the question so raised is, in the case of puerperal fever at least, premature. I now approach the other and more practical questions. It may be allowed me, perhaps, to remind the Society of what I doubt not they have not forgotten—that some thirty-six years ago a physician, now taken from among us, but whose professional chair it was my honour for a short period to occupy, wrote a work on the very subject which we are now discussing, and I do not myself see that we have advanced far, if at all, beyond the conclusions which Dr. Ferguson had laid down, that the phenomena of puerperal fever depend upon a vitiated state of the fluids, and that in the condition of a woman in the puerperal state, such vitiated state of the fluids is specially apt to arise. I do not think, therefore, Sir, that we can in any way assimilate the condition of what is called puerperal fever to typhus, typhoid, or scarlet fever. The disease wants those characteristics which more or less distinctly prevail in the case of the specific fevers. It has not the same regularity of course, the same regularity of incubation, the same regularity of outbirth. It has not the same diagnostic marks which we find in the case of the specific fevers, such as the pustules which appear, even though in small number, and characterise even the slightest case of small-pox. Nor is this all; but with reference to these fevers we know further that, for the most part at any rate, they produce a disease like to themselves, and that, though with many exceptions, they have a tendency not to recur where once they have happened. Now all these characters are absent in the case of puerperal fever; while the very circumstance that a far greater proportion of cases of puerperal fever occur in primiparæ than in those who have given birth to many children shows that there is a marked connexion between the liability to an outbreak of the disease and the difficulties attendant on the process of labour. If, further, one exposes a man to the contagion of puerperal fever, he does not get any disease as the result of it. If we expose a woman in the puerperal state to the contagion of scarlet fever, measles, or some other disease, she may have that disease, even though its characters may be masked and altered in some degree by the puerperal state. But it does not necessarily follow that she will have that same disease. In the cases related by Dr. Collins, of Dublin, with reference to two epidemics of puerperal fever, the introduction of a case of typhus fever into the hospital was followed on each occasion by an outbreak of puerperal fever. So it would seem that a cause distinct from anything which we can identify as the special poison of puerperal fever may yet, by the influence which it exerts upon the woman in this peculiar condition, produce a disease not distinguishable by any of its phenomena from that assemblage of symptoms which we ordinarily call puerperal fever. It seems as if the puerperal state was the condition of the development of this set of symptoms. Moreover, we must remember that there is not one single solitary cause to which we can refer the symptoms of puerperal fever; that it occurs now from one cause and now from another. I remember at this moment the case of a lady in a state of perfect health who was delivered at a time when puerperal fever was prevalent. She was a person in that position in society in which she was shielded from every possible danger. Soon after her delivery she was exposed to a current of air and caught cold. In a short time the symptoms of puerperal fever developed themselves, of which she died. Here was a case in which there was no special morbid poison existing—nothing but what could be derived from her own fluids or brought about by some impression on the system. Moreover, we know that mental shock will have the effect of producing the symptoms of puerperal fever, leading to a fatal issue. I remember the case of a lady who progressed perfectly well after an easy labour, but owing to some violent scene of domestic strife with her husband, she was seized almost immediately with symptoms of puerperal fever, at a time when no such disease was prevalent, and of that disease she died. I think, then, we are to look for the cause of puerperal fever rather to the condition of the person after delivery than to any special poison. Poisons of various kinds may produce it. We know that in Vienna puerperal fever was exceedingly prevalent, owing, as was discovered, in a great measure to the fact that the students left the dissecting-room and went with their hands imperfectly cleansed to attend the women in their confinement; and when greater care was taken, when careful ablution and disinfectants were insisted upon, puerperal fever diminished in its frequency to a very great extent. We know that local violence may produce it; in short, we know that a great number of cases may give rise to it, and that the only one factor in the production of that class of symptoms consists in the special state of the woman after delivery. That state I need not recall. It is a state in which the fluids are laden with old, effete, and useless materials, out of which the old uterus is removed and a new one is to be built up; they are laden also with those elements out of which eventually the new secretion of milk is to be established. None of us, except those few who, like Dr. Richardson, have given great attention to these inquiries, can describe at all wherein the alteration of the blood consists; yet, without indulging in any wild theory, we may say that there is a something—people used to call it a ferment; I do not care what it is called, provided we use the name, not as defining the thing exactly, but as a name only to which we attach no other meaning than that of a something by which we are to distinguish this or that from the other, while as yet we know not its real nature. For instance, in the time of the old alchemists, calomel and corrosive sublimate, the chemical composition of which was unknown, were respectively called Draco magnus and Draco mitigatus; and if we use names as the old alchemists used theirs, we shall be much more likely to keep from the error of hasty conclusions or rash generalisations than if we use a name to which we tack a definite scientific meaning while as yet we have no sufficient grounds to rest that meaning upon. Those were the chief things which, it occurred to me, might perhaps be worth the saying. Take a woman in the puerperal state in whom is checked in any manner, whether by poison from without, by mental shock, by cold, or injury, the regular performance of those functions that ought then to go on, and you have the condition thereby produced out of which the assemblage of symptoms that we call puerperal fever—and all the world is pretty well agreed to give it that name—arises. The only other word I would utter is, to quote a saying of a great, wise, old physician, who said that the highest aim of our art must be the greatest possible generalisation of diseases and the greatest possible individualisation of our patients, so that we have in each case to look to the prevention of puerperal fever, not simply to the removing of the possibility of contagion, not simply most carefully watching the local condition of the uterus and removing from its inner surface any possible decaying matter, not simply to the taking care that the air that surrounds the patient is good, but we are bound also to consider the patient's mental state, to regard minutely her individuality, and, if we wish to put a stop to the disease, to remove from around or from within our patient anything which can interrupt those important processes the interruption of which gives rise to those symptoms which we designate by the name of puerperal fever.

Dr. Snow Beck.—I never had so strongly the feeling that I would have been glad to escape from the position in which I may have been placed as I do this evening, after hearing the very learned and eloquent addresses with which we have been favoured; but I feel emboldened by the sentiment with which Dr. Fordyce Barker concluded, that possibly we may yet all be mistaken, to state the conclusion to which I have been led, chiefly from my own observations, upon the nature of the diseases which at present engage our attention. These observations have led me to a conclusion directly opposed to the opinions expressed by the previous speakers, for I am unable to perceive that there is any special or specified disease connected with childbirth, or to which the term puerperal fever can be properly applied. I must be also bold enough to contend that the definition published by the Nomenclature Committee of the College of Physicians cannot be maintained in practice, for I have never yet been able to make out "a continued fever, communicable by contagion, occurring in connexion with childbirth, and often associated with extensive local lesions, especially of the uterine system," which is essentially connected or associated with the condition of the system after parturition; or, in other words, which is not met with at any other period of the woman's existence. With reference to this definition, Dr. Arthur Farre informed us that the word "communicable" was only intended to convey that it might be communicated, but that it might also have a spontaneous origin, and the word "often" was only to call attention to the frequency with which these complications arise. Dr. Farre added that the Nomenclature Committee were entirely at a loss where the term puerperal fever ought to come in the catalogue of diseases. It was not placed among the fevers at all, but amongst the general diseases far away from the fevers, finding a place of refuge at last at the bottom of the list, after pyæmia, erysipelas, &c. But why should the Nomenclature Committee be in any such difficulty if there really existed any continued fever, communicable by contagion, specially connected with childbirth? Whilst admitting this difficulty, however, Dr. Farre said he was not prepared to admit there was no such disease as puerperal fever; he should be sorry to shut out the idea as one that is impracticable, and not to be entertained. If we are to look for a puerperal fever at all—one that can be properly so called, a disease which is *sui generis,*—we shall probably find it in the interruption to those healthy processes going on in the lying-in woman: first, the milk process, the milk secretion, and that attendant disturbance of the constitution which we term milk fever; and, secondly, a much more important one, the change which goes on in the uterus, and which we all know as the involution process. "Now we know," continued Dr. Farre, "that when this process is interrupted there is an arrest of all the eliminative action which the involution process implies; and we may fairly conclude that in consequence of this arrest there is some accumulation in the body of those effete matters which ought to be expelled from the system, and this, added to the existing blood dyscrasia, must very much aggravate the disease." But may it not be replied that this sounds very like admitting that up to the present time no such special or *sui generis* disease has been recognised? If such a disease be developed in the changes which take place after the birth of the child, why has it not been found and described during the years of diligent study which so many of our most able and acute physicians have devoted to the elucidation of these diseases? and why is it that we have got no further than the unsatisfactory statement, that if we are to look for a puerperal fever at all we may probably find it in some arrest of these healthy processes? What proof, it may be asked, is there that in the serious and fatal diseases following childbirth there is any interruption of those healthy processes which go on in the lying-in woman—any arrest of this assumed eliminative action? Supposing, however, for a moment that such an interruption or arrest should take place, what proof is there that this arrestment would create in the system so serious a disease—a disease *sui generis,* and capable of being communicated by contagion? It must not be forgotten that the growth of the uterus is a healthy physiological process, that the tissues which are formed are perfectly healthy tissues. When and where have there been any facts observed which justify, or even countenance, the supposition that the retention in the system of any portion of a healthy tissue will generate such a disease that the majority of the women in whom it becomes developed will die? I am not aware of any facts upon which the least reliance can be placed which justify the inference that such a disease-creating action is even probable; and I must add that, instead of speaking of it as possible or probable that such a *sui generis* disease would be found if looked for, would it not have been more satisfactory, and certainly more conclusive, if the symptoms which would indicate such a disease during life had been given, or the appearances in the dead body described, by which its previous existence might be affirmed. So far as my knowledge extends, no reliable facts have ever been recorded which show that any such *sui generis* disease has been observed in practice, nor can I think that anything is gained by substituting the term post-partum fevers for that of forms or varieties of puerperal fever, for these terms are evidently intended to denote the same class of morbid phenomena, whatever their nature may be. In further considering these questions, I must contend that the process of childbearing is a natural function in the female, and that nature has provided her with all the powers requisite for the complete performance of this function as a part of her natural endowments. Every day's experience appears to exemplify this fact, not only in the human female, but also in the female of all other animals; yet, on the other hand, no one doubts that the peculiarities of the system after parturition modify to a certain extent any disease which may have existed previous to the confinement, or which may have commenced subsequently. But I am not aware of any observations which support the notion that there is anything in these conditions which, in a healthy female, is the source or element of disease, or which in any way can alter, or has altered, the essential nature of any disease with which she may be attacked. All women, however, are not in health when they become pregnant, and consequently are not in health at the birth of the child; and many women are not endowed by nature with the constitution and formation favourable to the propagation of their species. Women in either of these categories must necessarily suffer from different diseases, and from various causes, after parturition; but the fault is here with the individual, and not with the natural and physiological process of procreation. But if it be true, as I believe it is, that there is not any disease specially connected with childbirth, it must not be forgotten that the converse is equally true, that there is not any disease from which the lying-in woman is exempt; in other words, that the condition of the system induced by pregnancy, or that which follows after parturition, does not prevent the existence of any other disease which may attend the female at any other period of her existence. Hence we must be prepared to meet with, in the lying-in woman, any of the diseases which flesh is heir to, and the diseases so met with become naturally divided into two classes—one class arising from the general system, and being the result of changes and accidents to which all women are liable at any period of their existence; the other class arising from the uterine system, and being the consequence of accidents incident to pregnancy or childbirth, yet not comprising any disease specially connected with either of these states. When speaking of these diseases, Dr. Farre observed that he had been in the habit of dividing what he termed post-partum fevers into three classes. First, those irritative fevers arising from some local irritation, and not implying blood infection of any kind, pyrexial states of a fugitive and transient nature, resulting from simple mammary irritation, slight injuries to the soft parts, laceration, and the like. Second, under the name of the milder forms of infective fevers would be classed all those in which the infection is not of a specified nature, in which the process does not undergo a period of evolution, a period of development, and in which the consequences follow no definite order. Thirdly, the eruptive fevers, and those which depend upon a blood infection, the poison following a specific course, having a regular period of incubation, and terminating in those several diseases, eruptive fevers, and the like, which occur of course in the lying-in woman in common with others. In glancing at the different diseases met with after childbirth, it may be well to do so under these heads. First, then, it would appear evident that those pyrexial states of a fugitive or transient nature, which are met with in almost every woman who has been confined, cannot be classed as belonging to the same category as those serious and often fatal diseases which follow parturition or abortion. We might as well include all the diseases in the nomenclature of diseases, for every one of these might, by possibility, be met with in a woman recently confined; yet it is singular how often these trifling and transient affections have been considered as the commencement or form of serious disease. Dr. R. Ferguson, in his admirable essay on Puerperal Fever, wherein he correctly attributes the most serious diseases to a vitiation of fluids, though the nature and source of this vitiation are not so clearly stated as perhaps they might have been, remarks (p. 101) that a dose of salts-and-senna so invariably brought on metro-peritonitis that he forebore the use of this drastic irritant as a routine dose; also (p. 16) that during a reputed epidemic of the peritoneal form, after two doses of Dover's powder of ten grains each the patients did not require any other treatment. Secondly, it is well known that the lying-in woman is often exposed to, and not unfrequently attacked with, the eruptive fevers or acute specific diseases. I believe that every one of these diseases has been met with at one time or another, and we cannot deny the proofs that they have been communicated by the nurse in attendance, and possibly, though very rarely, by the medical attendant. We all know that these diseases exercise a great influence, though in different degrees, upon the pregnant uterus. The rules under which women are received into the different lying-in hospitals when the pains of labour have commenced, and often during the night, give great facilities for the introduction of these diseases. Various instances are recorded where typhus and other fevers have been so introduced into lying-in hospitals, and have spread from patient to patient, constituting a so-called epidemic. It is recorded that on one of these occasions, after the introduction of a case of typhus fever into the Dublin Lying-in Hospital, "puerperal fever appeared in forty-eight hours afterwards, although the hospital had been free from it for a year before." But the disease which thus became developed was no doubt typhus fever, for evidence is entirely wanting to show that any of these infective or acute specific diseases have ever been known to change their nature. Some of the symptoms usually characteristic of these diseases may have been masked, or possibly absent, in some instances, but their specific nature has in no way changed. I cannot place any confidence in the statement that all these infective fevers "are excessively prone, if brought near the lying-in woman, to originate puerperal fever"; or that, by some wonderful and potent influence in a woman recently confined, all these different specific diseases are transformed into one and the same disease. Dr. Braxton Hicks appears to draw some subtle, and to me incomprehensible, distinction between puerperal diseases and puerperal fevers, and has carried this transmutation of diseases even further than those who have preceded him. He imagines that a disease not only changes its nature when it enters the system of a woman recently confined, but when it again leaves her system and enters into that of another—to quote his own words—"it becomes reconverted into the zymotic form whence it had sprung." The experience, however, which has been adduced by the different fellows during this discussion appears conclusive that these eruptive fevers do not become changed in any respect when developed in a woman recently confined; and I feel assured that Dr. Arthur Farre correctly stated the fact when he said, "I do not consider these diseases as in any way taking any part in the puerperal fever." Nor is there any evidence, such as in a scientific point we have a right to require, that the same cause can produce directly different results in different individuals—such, for example, as that mentioned by Dr. Playfair, where the same cause, included under the very vague term of "unhygienic condition" of the house, is said to have produced diphtheria in the husband and puerperal fever in the wife. I must admit to having a mind "not open to conviction" by such tales, where the effects supposed to have been produced are contrary to everything that has been observed in the course of nature or in disease, and where the statements rest only on the imagination of the narrator, unsupported by sufficient facts. Thirdly, all these diseases of the general system which have been adverted to are of minor importance, as only a small minority of them prove fatal. They evidently do not constitute that serious class of diseases which come on so insidiously, continue gradually from bad to worse, and so frequently end in death, that, as Dr. William Hunter said, "treat them in what way you will, at least three out of every four will die." These diseases, which have invested the term "puerperal fever" with such fearful significance, arise from the uterine system, and are included in Dr. Farre's second class, though I feel assured he has erred in supposing they are "infective fevers," or can be termed "the milder forms of infective fevers." They really constitute the serious, and too often fatal, diseases which are met with after childbirth. Let me sketch a case as illustrative of the class of diseases referred to. A healthy woman, after a natural confinement, with or without hæmorrhage, remains very well for two or three days, then has a rigor, which is followed by a very frequent and feeble pulse, a feeling of great prostration and sinking, some pain across the lower part of the abdomen, with considerable tenderness when pressed, gradual swelling of the abdomen and tympanitic resonance, considerable thirst, some sickness, with loose, offensive motions. Gradually the patient becomes weaker and weaker; some shortness of breath, with slight cough and expectoration, is noticed; and she sinks after two, or it may be three, weeks without more marked symptoms. After death the peritoneal cavity contains more or less turbid serum; some soft, friable lymph is deposited on the peritoneal surface, particularly in the pelvis, with more or less injection of the peritoneum or the omentum. The uterus is large; when cut into, the tissues are healthy, the inner surface covered by a muco-purulent, somewhat reddish secretion; more or less pus-like fluid is found in the uterine sinuses, which are pervious throughout to fluid injected into the pelvic veins. What is the origin and nature of an illness such as this? A great variety of names have been applied to this condition, according to the view which authors have taken of its nature. It has been called peritonitis, puerperal peritonitis, peritoneal inflammation, metro-peritonitis, &c., under the belief that the effusion of turbid serum in the peritoneal cavity, the deposit of soft, friable lymph on the surface, and some injection of or under the peritoneum, were unquestionable signs of previous inflammatory action. But these morbid signs differ much from the appearances of undoubted inflammation of the peritoneum, and are now recognised as exudations which result from the impregnation of the general circulation with some noxious fluid or material. It has been termed phlebitis, uterine phlebitis, suppurative phlebitis, in consequence of the pus-like fluid found in the uterine sinuses being considered unquestionable evidence of the previous existence of inflammation in these canals. Dr. Robert Lee has recorded several similar cases under the name of uterine phlebitis, and has described the pus-like fluid as suppuration resulting from previous inflammation; but it is extremely doubtful whether inflammation can ever take place in the uterine sinuses. These canals are only channels formed in the contractile tissue itself, and lined by a delicate and apparently non-vascular membrane. It cannot be supposed that inflammation could occur in this delicate membrane; and if it occurred in the adjoining tissue it would be inflammation of the contractile tissue of the uterus itself. There has been considerable difference of opinion expressed as to whether the pus-like fluid found in these canals was the result of inflammatory action, or had been taken up from without through the open orifices of these vessels at the inner surface of the uterus. But this question has been definitely decided by the injection of the perchloride of iron into the gravid uterus to arrest post-partum hæmorrhage. Where death has followed in these cases the uterine sinuses have been found gorged with black grumous fluid containing an abundance of iron, and as this iron could not be formed by any secretion from these canals, it follows that it must have been taken up from the inner surface of the uterus where it had been deposited after injection. Cases similar to the one sketched have also been described as puerperal fever, the typhoid form of puerperal fever, low typhoid pneumonia, typhus, &c., when the symptoms presented during life have alone been taken into consideration. They have also been termed pyæmia, septicæmia, ichoræmia, &c., from the symptoms and course of the illness being evidently similar to those which follow the introduction of noxious fluids into the general circulation. It is to be regretted that so much confusion has been introduced respecting the meaning of these terms; but so far as the present subject is concerned, it does not appear to be of much consequence which term is employed. Mr. Spencer Wells, in the opening address, says: "Supposing that the blood in the uterine veins clots, softens, breaks up, is the seat of chemical and vital changes, is detained in or near the pelvis, or is carried away to distant parts, or alters the composition and properties of all the blood in the body; that we have purulent infection or pyæmia, putrid infection or septicæmia; can all this arise in a healthy woman placed in favourable conditions if she be not exposed to some morbid poison?" Now the first thing essential to such changes must be the presence of clots in the uterine veins or sinuses, and as these clots have never yet been shown to exist, it is difficult to see how they could be the cause of so much that is supposed to follow. I am aware much has been said respecting the formation of clots in the uterine sinuses after parturition, and that these clots mainly contribute, in many cases, in arresting any escape of blood; but I am also aware that the blood during hæmorrhage does not come from these sinuses, that it is not a venous hæmorrhage by retrogression, and that these clots, about which so much has been said and repeated, have never been shown to be present in the canals themselves. Much, I am also aware, has been echoed from one writer to another, as to the influence of hæmorrhage in predisposing the system to those conditions known as pyæmia or septicæmia; but the only relation between uterine hæmorrhage and septicæmia is one of sequence of events. Want of contraction of the uterine tissues allows the blood to escape from the utero-placental arteries; the same want of contraction leaves the canals of the sinuses pervious, allows noxious fluids to be taken up through their open orifices, and to be conveyed into the general circulation. These facts appear to be the answer to Mr. Spencer Wells's question, Can all the consequences which he has depicted arise in a healthy woman, placed in favourable conditions, if she be not exposed to some morbid poison? There cannot be a doubt that they can arise, have arisen, and will again arise under the conditions named; indeed, it has always appeared to me one of the extraordinary circumstances in relation to this subject that such questions should ever have been entertained, for everyone knows that isolated cases of the most serious affections, ending in the death of the individual, every now and then occur in all parts of the country as well as in large towns, with ladies in good health, placed in the most favourable conditions and surrounded by every care and attention that art can devise. If the succession of these cases occurring year after year be not sufficient to answer this question, I know not what evidence can be required. The same succession of cases appears to be an undeniable answer to the supposed influence of a vitiated atmosphere, of overcrowding in any institution, or the supposed benefits to be derived from cottage hospital isolation, &c. All that is required for the production of these serious conditions of the system is a means by which these noxious fluids can be readily conveyed into the general circulation, and this means exists when the uterus remains imperfectly contracted, or afterwards becomes partially relaxed, so that the canals of the uterine sinuses continue pervious, and any fluids formed at the inner surface, or which may have been injected into the uterine cavity, may enter at the open orifices of these canals, and be conveyed into the general circulation. This want of contraction, or subsequent relaxation, which practically is the same thing, may occur in the most healthy individual, living in the most healthy situation, and separated from actual or supposed injurious influences, whilst the simple means to avoid the whole of these evil consequences consists in procuring and maintaining such an amount of contraction as will render these canals impervious and prevent the passage of any fluids along them. When the want of contraction or the subsequent relaxation is considerable, a portion of the placenta is often retained, or coagula form in the cavity of the body from the blood which has flowed from the pervious arteries. In these cases the sinuses also remain patent, and the usual noxious fluids—rendered more injurious by the decomposition of the retained placenta or coagula—are taken up in larger quantity, when the symptoms become more marked and the course more quickly fatal. Whilst dwelling upon this cause of the serious condition of the general system, arising from the uterine organs after parturition or abortion, and which I am under the impression has been much overlooked, I do not wish to infer that it is the only cause, or that other causes may not induce similar results. Severe laceration of any of the parts concerned in childbirth, followed by inflammation—inflammation arising from long-continued pressure of the head forced into the pelvis,—the formation of abscesses in the cellular tissue outside the vagina or in the pelvis, and other accidents, may, any of them, produce the condition of septicæmia; but, except in rare and exceptional cases, I cannot think that slight lacerations are followed by such serious consequences as have been attributed to them. Laceration of the perineum may exist at the same time as want of contraction in the uterus, but it is the want of contraction in the uterus which admits the septicæmic condition of the system to be induced, not the laceration of the perineum. Once the way is opened to the system being impregnated with noxious fluids or materials, the effect which is produced greatly depends—(1) upon the nature of the fluids introduced, some being followed by no perceptible influence, others by serious and fatal consequences; (2) upon the amount, as in the experiments upon animals—a small amount producing disturbances from which the animal recovers, whilst a large amount always causes death; (3) the state of health of the individual at the time of impregnation—for what to one appears a poisonous dose, to another causes only general disturbance; (4) the continual renewal of the infecting matters. As Cruveilhier observed, the chief cause of the fatal result was that the purulent infection was incessantly renewed from the original source. Moreover, purulent infections have not the same decided course of action as the poisons, whatever these may be, which originate any of the infective fevers or acute specific diseases. And when we take into consideration the serious factors of disease which have been glanced at, combining together in very varying proportions in women recently confined, it is not difficult to perceive that we may often meet with combinations which puzzle our powers of diagnosis, and render it impossible for us to determine the exact nature of the illness. But because we are unable to unravel some of these puzzles, or to determine the precise nature of any complicated or obscure illness, is that any reason why we should rush into the regions of romance, or by concocting some high-sounding word or words imagine we have solved a substantial difficulty, or have explained a pathological entity? The question of contagion has been made the starting-point from which many have endeavoured to maintain the existence of a special and essential disease occurring in connexion with childbirth; but it would be impossible to enter upon this question at present. Some of the acute specific diseases, after being conveyed into the lying-in hospitals, have spread from patient to patient, and have thus been mistaken for an apparent epidemic; but the reliable evidence is not sufficient to show that any other disease than these infective fevers or acute specific diseases has been propagated, either epidemically or by contagion. Most if not all of the recorded histories on this point appear to admit of another explanation, and many to have their foundation in the management of the woman during the period of parturition, or in the circumstance that some minute yet essential particulars in the history of each case have been overlooked in the course of the illness. To quote the words of Dr. Fleetwood Churchill, "I rather think these [accounts] prove too much, for *post hoc* is not always *propter hoc*"; and, so far as bacteria are concerned, these bodies, we are told, are found in the interior of the organs in every dead body, from whatever cause the death may have arisen, their development being only a question of time and temperature.

Dr. W. T. Greene.—Assuming that the object of the present discussion is to clear up what has hitherto been confused and doubtful in post-partum pathology and therapeutics by a comparison of the records of individual experience, and not to establish any particular theory, I trust I may not be thought too presumptuous for desiring to bring before you and the Society the result of some ten years' observations extending over nearly two thousand cases, of which a proportion of about 10 per cent. suffered in a greater or lesser degree from one or other of the various affections to which parturient women are peculiarly liable, and which have so frequently been confounded together under the general name of puerperal fever—a disease of which I had for some time doubted the existence, but which I am now satisfied has yet to be differentiated as a malady *per se*. So far from post-partum febrile affections being identical, I have observed that they invariably assume one of three distinct forms, differing essentially in their origin, progress, duration, and gravity; in other words, the exciting cause may be local and transitory, local and persistent, or altogether extraneous. In the first two forms the disease may be, and often is, autogenetic, but in the third this is necessarily impossible. Firstly, very alarming symptoms may be excited by the presence of a decomposing clot in the uterus or even in the vagina, or by an overloaded state of the bowels, but yield rapidly to an aperient or the use of the syringe; and I may be permitted to observe it is unpardonable in an accoucheur who fails to have recourse to such simple remedial measures on, or even before, the first appearance of the enemy. Some time since one of my patients on the fourth day after a comfortable delivery had rigors, and when I saw her had a pinched, suffering expression of countenance, considerable abdominal tenderness, suppression of the lochia, recession of the mammary secretion, high temperature (104°), rapid pulse (130), and in fact all the symptoms of so-called puerperal fever; but she also, as I was informed by the nurse, had begun to suffer from diarrhœa, which, on investigation, turned out to be the ineffectual efforts of nature to relieve the loaded intestines. I at once washed out the vagina, as there was rather more odour present than was usual, with a diluted solution of chloride of lime, my favourite antiseptic, and ordered five grains of calomel. Next morning, though informed by the nurse that she was weak and sinking, I found my patient wonderfully improved in every respect, but very angry with me because the powder I had prescribed had, as she said, purged her instead of stopping her diarrhœa, which, however, had then ceased to be troublesome. I ordered nourishment and a due proportion of stimulants, and she made an excellent recovery; whereas had I acceded to her wishes and checked, instead of promoted, the alvine discharge, she would, in all probability, have died; for I have, I believe, in one or two instances seen a patient lost because the attendant had an unreasonable dread of cathartics. Secondly, a foul, ill-ventilated, crowded, or over-heated room, by promoting putrefaction of the lochial discharges, will often give rise to septicæmia, and, unless the cause can be removed, to death, which the most earnest efforts on the part of the medical attendant will, in such a case be utterly powerless to obviate; or hysteritis, rapidly involving the adjacent parts, may result from injury to the uterus, by long-continued pressure of the fœtal head in tedious labours, by the unskilful or incautious use of instruments, or by the well-meant but frightfully injudicious attempts of the accoucheur to pass the swollen lips of the os uteri above the head of the child during the continuance of a pain—a very common practice, and often, I am convinced, productive of extremely disastrous consequences. A primipara, aged thirty-three, who had suffered a good deal throughout her pregnancy from sickness and general debility, was delivered naturally after a favourable labour of a healthy living child, and progressed fairly for the first couple of days. She was nursed by her mother-in-law, who persisted in keeping the room at stove heat. On the third day the patient had rigors, and severe symptoms soon set in, but subsided on the arrival of a more intelligent nurse. Unfortunately this person was soon called away; the mother-in-law became once more in the ascendant, stove heat was renewed, all my orders disregarded, and the patient died on the tenth day after her confinement, with every symptom of blood-poisoning. I might multiply instances, but *cui bono? Ab uno disce omnes.* In every such case—that is, ending in the death of the patient—I have no doubt (and this constitutes the essential difference between what I may call the first and second forms of post-partum febrile affections) careful inquiry would elicit the fact that the woman's health had been for some time in a more or less unsatisfactory condition, and to that cause, rather than to any accidental lesion, the unfavourable ending of the case must be ascribed; just as we not unfrequently find in the other sex, where the health has not been all that could have been desired, the most trivial injuries giving rise to septicæmia and death; otherwise nine-tenths of all women must sink after their confinements. In the third form, if I may so term it, of post-partum fevers, which comprises at least six-eighths of all cases, the contagion is conveyed to the patient from without, in shape of the germs of one or other of the zymotic class of diseases, by the medium of some one—doctor, nurse, or friend—recently in attendance on a person suffering from the same complaint; and of this fact I have had positive proof, although the possibility of its occurrence has been denied, and it has been even attempted to be proved that because some women resist the contagion none can suffer by it—a mode of reasoning, however, undeserving of further notice. Of all the exanthemata, scarlatina, in my experience, most frequently attacks the parturient female, and though giving rise to very alarming symptoms, is happily rarely fatal. Some years ago, during the earlier part of my professional career, I was attending a lad with scarlatina anginosa of a severe type, and at the same time nearly all my puerperal cases exhibited febrile symptoms and had more or less sore-throat, although the characteristic rash did not in every instance make its appearance. Several of the children sickened as the mothers were recovering, and exhibited every feature of scarlet fever. Fortunately none of them—parents or children—died, but I received a lesson I shall not soon forget. Since then, at different times, I have met with other similar cases, and have always been able to trace the contagion to its source. Post-partum small-pox I have met with in two instances where the preliminary symptoms were identical with those usually ascribed to puerperal fever. In both of these the patients recovered. Of post-partum measles I have had no experience, but I have met with several cases of erysipelas occurring in recently-confined women, who all succumbed to the disease. In one of these cases I was able positively to trace the disorder to its source. The nurse had come straight from the bedside of a man suffering from phlegmonous erysipelas, of which he afterwards died, to attend upon my unfortunate patient, in the raw placental surface of whose womb the insidious disease found too ready a nidus, and thence spread rapidly to all the adjacent parts, terminating fatally on the tenth day after the poor woman's confinement. The infant also died of the same complaint, thus confirming the diagnosis in the mother's case. I have had one case of post-partum typhoid fever, occurring soon after delivery in consequence of the patient inhaling the noxious emanations of a drain under the window of the breakfast-room in which she had been confined. After a hard struggle for her life this woman recovered, but her infant died with every symptom of typhoid fever. If it be asked why scarlet fever &c. assume so formidable a character in parturient women, I reply that in them the absorbents are in the highest state of activity, and the poison in consequence is conveyed with extreme rapidity to all parts of the system, and produces a correspondingly grave effect. With regard to the animalculæ which by some are supposed to play so important and destructive a part in septicæmia generally, and notably in the case of parturient women, and by others to be a delusion and a snare, I cannot boast of any great experience, but I can imagine that their presence within the body would have a tendency to cause increased irritation, just as maggots in an open wound would certainly retard if not prevent its closing. Hence the value of antiseptic lotions, especially the chlorides, which are fatal to bacteria and their congeners. To sum up, there is no such disorder as puerperal fever, and therefore the erasure of the term from the nomenclature of diseases is very urgently demanded, as utterly misleading, and in lieu thereof might be advantageously substituted the name of the complaint from which the patient had suffered, with the qualifying epithet "post-partum," thus:—Post-partum septicæmia, post-partum scarlatina, erysipelas, &c.; and a little care in analysing the symptoms and the history of each case would almost always render the diagnosis absolutely certain.

Dr. Routh.—I am anxious to make a few remarks in this discussion, since in early life it occurred to me to have seen perhaps a greater number of cases than any person in this room, having been present during part of that terrible epidemic which took place in 1846 and part of 1847 at the Vienna Hospital. During the first of those years 456 women died of the disease, and in the second 176. The greater number of those cases I saw, and therefore I had an opportunity of studying the disease very closely. On my return to England I published a paper, which is extant, and is probably known to many members present, therefore I shall only refer to it, in which I showed that the disease was communicated directly by inoculation from the hands of the medical students who came from the Coroner's Court, and, satisfying themselves with simply washing their hands in a little water, made examinations of women about to be delivered. One point in regard to the disease was clearly brought out

—namely, that it was not contagious from one person to another. That fact I took a great deal of trouble to find out, and I think it was proved in the most satisfactory manner that the disease was not communicable from one person to another, except the discharges were in some manner communicated, or except in the case of examinations made by the students under the circumstances I have mentioned. Many of the nurses and midwives who attended those patients were married women, and many of them had children, but not one of those women caught the disease. In the division where the labours were attended by women who had nothing to do with dead bodies, the disease did not exist, or if it existed at all the cases were so few and far between that there was no belief that it could be produced in any way by the attendants. And after the plan had been adopted of compelling every student to wash his hands in a solution of chloride of lime before he attended a midwifery case, the mortality in the first division, where about 3500 women were annually confined, diminished exactly to the same figure as in the second division, where a similar number of women were attended by midwives only. Well, that disease I showed from the evidence was not contagious from one person to another. That is exactly what is true of surgical fever. We all know that very often we communicate a disease to a lying-in woman if we come from a case with our fingers contaminated by some discharge. The records of medicine abound in cases of the sort. The cases published by Dr. Storr some years ago in the Transactions of the Provincial Medical Association showed how often the disease was produced in that way. Therefore I say it is clear from the evidence at Vienna upon a large scale, and from what I have seen and read upon a smaller scale in my own practice and that of others, that one variety of puerperal fever can be and often is communicated by direct inoculation of the practitioner. In the case of the fever at Vienna the children died generally a little before the mothers, and in all those cases it was found that peritonitis existed in the child. In Dr. Storr's cases it was found that many of the husbands of these women contracted peritonitis; and we have heard to-night of some cases in which the disease communicated was erysipelas. Therefore we must admit that under certain circumstances there is some contamination that takes place between parties coming in close contact, probably analogous to that which takes place with typhoid fever, which may be said to be communicated by discharges or by the powerful odour emanating from the patient. No man can read all the literature upon the subject, I think, without being convinced that there in another variety of puerperal fever which is eminently contagious. Whether it be communicated from erysipelas direct, or from typhoid, or from any of these diseases, it is communicable from woman to woman, even from woman to man. There is, I think, a point in which we have not made a clear distinction. There is indubitably a peculiar point in the contagion of several different fevers at which, when it attacks a lying-in woman, will develop in her a particular disease, call it puerperal fever, or call it a modification of the disease which originally infected her, but which, applied to another woman, would extend, and thus produce an epidemic. If we look at that question on a broad basis, we must come to the conclusion that some cases are not contagious and some are, and that those that are contagious are communicated by infection from other cases.

Dr. GREENE.—I may mention a fact which I omitted to state, that a midwife, whose son was suffering from erysipelas, communicated puerperal fever, or some febrile affection, which undoubtedly was erysipelas, to a number of her patients, many of whom died. That occurred recently.

Mr. WALLACE.—I am pleased to hear what Dr. Routh has said about the contagiousness or non-contagiousness of some cases of puerperal fever. Up to last October I was in the happy position of having attended over two thousand cases without having lost a woman from any disease whatever; like some of those gentlemen who write to the papers and say they have attended so many cases without a single death, and therefore think they are never to have one. However, my turn came at last. My *locum tenens* attended a primipara on October 5th. The house was in a bad hygienic condition, the rooms being ill-ventilated and most offensive, and the drains smelling. The woman died after six days of what I should call typhoid fever modified by the puerperal condition. The most singular part of the case was this. I should explain that I came back from the country the very night the woman was confined, and I attended her afterwards myself. During the first two days after my return I attended four women in their confinement, and they all did badly; none of them died, but they were all more or less ill for some time, and two or three of them barely escaped with their lives, so much so that I was compelled to give up midwifery practice for three weeks, when my trouble ceased. About two months afterwards a medical friend of mine attended a case for me, in which the woman died after five days of metro-peritonitis. While this woman was ill I attended several cases, and they none of them exhibited any bad symptoms whatever. I continued to attend midwifery cases, and all my cases did well; but after two months there was another case where the woman died. I may mention that in the second case the woman had a dead child, and there was decomposition of a portion of the placenta. What I wish especially to say is, that what would be called the pyæmic cases were non-contagious. I may also state that during 1870 in my neighbourhood there was an epidemic of scarlet fever. I had many cases to attend, and I also had a good deal of midwifery, but none of the women were taken ill. On several occasions children with the rash out were in bed with the mothers when they were confined. The same has been the case with measles. During the epidemic of small-pox which occurred in my neighbourhood in the East-end of London in 1871 those puerperal women who took small-pox had small-pox simply, not at all modified by the puerperal condition.

Dr. GRIFFITHS.—In the discussions which have preceded to-night's there seems to be some discrepancy as regards the relation of scarlet to the so-called puerperal fever, which, with the greatest diffidence, I submit may be explained in the following way:—Some gentlemen have seen and described true scarlet fever running the regular course, the subject of it happening, in the chapter of accidents, as it might be said, to be the lying-in woman in whom that fever which we know by the name of puerperal fever was not induced. Other gentlemen have seen after labour symptoms which they have considered scarlatina, but which really do not constitute that affection, being simply the outward and visible signs of the inward autogenetic poison of which—as, indeed, the word "autogenetic" implies—the woman is herself the factor and subsequently the recipient—recipient not alone because the poison generated in utero lies in or is received by the uterus, but because it is received into the lymphatics, the veins, the peritoneum, and into the body generally, as described by Dr. Tilt in his paper on lymphangitis in Pelvic Pathology, in the 16th volume of our Transactions, and alluded to by him in his recent speech. With the train of symptoms to which I refer, and which has been termed scarlet fever, who practising obstetrics has not had experience of it in cases of what, for the sake of distinction, we must term puerperal fever? But, Sir, is it scarlet fever at all, at least that form contracted from another affected with the ailment, and which in the usually accepted meaning of the name constitutes the true disease? The conditions alluded to, and which are identical with scarlatina, nay more, are in some instances, perhaps, the same, are the result of pyrexial action, the indication of latent mischief, and have their origin not from scarlet fever contagion—that is, from a scarlatina-infected person, the woman never having been exposed to the scarlatina virus,—but from the presence of some putrid or offending matter in uterus or vagina. The sickness, the headache, the hot pungent skin, the sore-throat and rash, congested eyeballs, the jaundice, the delirium, the oppressed heart and breathing, and, later, the diarrhœa; these are not scarlatina, in the usually accepted sense of the word, but a group of symptoms pointing to the toxæmic condition of blood dependent not upon the entrance of a specific virus, but simply of the noxious elements resulting from putrescent animal matter—are, in fact, the sequelæ and manifestations of the blood-poisoning which occasions what is termed puerperal fever, and which, if not checked or corrected, would immediately end fatally. In a scarlet fever epidemic, such happening to a lying-in patient would be set down to the scarlet fever poison; but I have seen them where no scarlet fever at all existed, and where no exposure to it had taken place. Those gentlemen who have seen scarlet fever attacking the lying-in, and running its usual course, well-defined, without inducing any form of puerperal fever, would do good by relating whether the lochia were offensive before the scarlatina set in, or at any time during its progress. If not before the invasion of the fever, then I say the case is one of true scarlet fever; but if the discharge become offensive only in the course of the scarlet fever, I would submit that the fever poison, perverting, as we all know it does, the entire blood, has vitiated, and it may be even rendered putrescent, the outcome of the blood—I mean the lochia; the relation of the scarlet fever being to the offensive discharge as cause to effect, the reverse of that which obtained when the symptoms exist which I have demonstrated as being those of so-called puerperal fever, and to which we might apply the term bastard, or simulating scarlet fever. Those gentlemen who hold that scarlatina is a great agent in producing puerperal fever would do well to tell us whether the scarlet fever symptoms came on before labour. If not, on what day after delivery? They should also state whether the lochia were fetid. If they were, how many days previous to the scarlet fever symptoms had they been so? I am led to the conclusions I offer by a case of autogenetic poisoning at this moment under my care, in which most, if not, indeed, all the symptoms of scarlatina obtained, but which, recognising to be wholly the consequence of a morbid condition of the uterine system and its excretions, the lochia, I attacked by imitating the eliminative action of involution, grasping the soft, spongy, uncontracted uterus with my hands, compressing it and expelling some clots, washing out the putrid or putrescent discharges of the womb and vagina by means of Higginson's syringe, Condy's fluid and warm water being used every two hours till the lochia became quite inodorous. Had I, however, seen the patient for the first time when those apparently scarlatinal symptoms were well developed, I might have erred in supposing I had a case of scarlet fever to deal with, have treated it as such, and lost my patient; but being alive to the puerperal facts to which I have drawn attention, I at once proceeded as I have described, and the correctness of the diagnosis was evinced by the immediate improvement in my patient, commencing as it did from the very time I got rid of the offensive clots and washed away the foul lochia. All the group of evils in this case might be termed scarlet fever, yet all at once disappearing under the defouling treatment named showed incontestably that the diagnosis was correct. Moreover, since her recovery I have made inquiries, and find no exposure to scarlet fever nor any presence of it in the town. One difference I noticed: there was no desquamation of the skin, although I should not have been surprised had such taken place, so high did the temperature run. I admit—as Dr. Savage, I think, said—there may be cases of septicæmia running to a rapidly fatal issue without any of the pyrexial disturbances I have named, or even any elevation of temperature from first to last; but that is where the patient is stricken down and overwhelmed by the dose of poison, or where the febrile symptoms occur in our absence, and hence may escape the observation of even the astutest. The same remarks will hold good of the rash as adduced by Dr. B. Hicks. I am led up to these conclusions because lately my mind has been exercised upon what I consider to be a fact—namely, that scarlet fever and typhoid may originate in the same way, from the same infecting source of poison developed in different persons or in the same persons at different times and under different circumstances; the poison at one time, determining to the lymphatics and glandular systems, producing what we know as scarlet fever, at another time determining with greater virulence to the intestines, particularly Peyer's patches, as in typhoid fever. In this—although I had arrived at my goal without knowing the way to it had been trodden before me—I find I am borne out by the previous researches of Dr. John Harley, which he published in a pamphlet he has had the kindness to send me since I commenced my investigations, also by the researches of Dr. Tilt, made known to us in his paper on Lymphangitis in "Pelvic Pathology," by Dr. Tilt's speech, by the speeches of those who have preceded him, and by my own at present somewhat crude experience, which I value very slightly indeed till I verify and check it by further careful inquiry. Bearing in mind, therefore, the life symptoms which exist in scarlet fever, puerperal fever, and typhoid, also the pathological conditions found after death, and how closely allied they are—nay, more, how much alike in a number of instances,—we can see how readily the first—that is, scarlet fever—can run into the second, puerperal fever; the second into the third; how typhoid came to be supposed to originate puerperal fever (Sir Henry Marsh's opinion, as quoted by Dr. Squire); and how true so-called puerperal fever may clothe itself in the garments of scarlet fever, so that only with difficulty it can be distinguished.

Mr. SPENCER WELLS.—The great difficulty I have in replying to-night in the few minutes that remain before the end of the discussion, consists principally in the great number of speeches that have been made, and the extremely numerous and important topics which have been suggested by different speakers. But I think I may congratulate the Society upon the very great importance of the discussion that has been carried on, and upon the very great ability which has been shown by a great number of gentlemen who have addressed us, and by none more so than by our friend from the other side of the Atlantic, to whom we have all listened with so much pleasure and instruction to-night. I will, with your permission, while what our friend has said is fresh in our minds, refer to two or three topics which he has raised, inasmuch as that will perhaps prevent the necessity of a good deal of repetition in discussing the first three questions which were placed before the Society in the little programme by which I endeavoured to give a direction to the thoughts of gentlemen who were going to speak. There was really nothing in these questions intended in the way that Dr. Farre supposed to lead to any very definite conclusion, or to any kind of suggestion that I myself had formed any decided or positive opinion upon them; it was more with the hope that different gentlemen would take up the different questions according as their opportunities gave them means of information, and would bring before us the results of their own individual experience upon these different questions. Dr. Barker has at once started the question by his statement that we must, as he says, from the identity of cause presume identity of result, or at any rate that if we have a specific morbid poison to deal with, that specific morbid poison always produces the same results; or, as I think I understood him to say, that I might, from the same specific morbid poison get very different results in different women under different conditions. For instance, given a morbid poison and that morbid poison received by a healthy woman, it would produce in her a very different condition from what it would produce if received by a puerperal woman, and by the puerperal woman if she is in an unhealthy condition at the time. I do not know that I exactly interpreted his meaning, but if I did I should like to say that I would go somewhat beyond that, and assert that if you have a specific morbid poison it must, under all conditions, produce identity of results. I do not believe if you inoculate small-pox in a patient that you can produce a chancre; I do not believe if you inoculate a chancre in a patient that you can produce hydrophobia; I believe you can certainly produce identity of result from identity of cause in the animal body as you do in the vegetable. If you sow a grain at the proper season in a fruitful soil the seed will germinate; if you sow a grain of wheat you do not get barley or oats. The seed germinates, and you get the same variety of vegetable produce. It is the same, I believe, with animal poisons. If you sow a seed of hydrophobia, or a seed of syphilis, or a seed of small-pox, in a patient, you get a crop of small-pox, a crop of syphilis, a crop of vaccine, or a crop of erysipelas, according to the poison you have sown. It is the same with medicine; if you give a dose of castor oil, you do not send the patient to sleep; if you give a dose of opium, you do not produce purging. All these poisons produce the same result. So with puerperal fever; if you suppose that in puerperal fever you have a specific disease different from any other fever, or from any other condition which we meet in surgical or medical practice, you must show us some cause which will, under all conditions, produce the disease just as certainly as you produce small-pox by inoculating small-pox, or scarlatina by exposing a patient to poison of scarlatina. That carries me to the question which Dr. West started, as to what share bacteria or some other form of vegetable or animal life in its lowest form may have in producing these diseases, or carrying the poisons to produce them. I agree with Dr. West that we are only on the threshold of this inquiry, and the question which I put before the Society was simply what relation have bacteria and allied organic forms to the pyæmic process in the puerperal state, in other words, to puerperal fever? I put that question in hopes that Dr. Burdon-Sanderson, or some other gentlemen who have lately made such important investigations on this subject, who have investigated the subject of splenic fever, sheep-pox, relapsing fever, diphtheria, and erysipelas, would have come here and given us the benefit of their experience. The great use of this discussion has been that it has brought here, not only the ordinary fellows of the Society, but others from distant parts—a professor from Glasgow (whose candour and ability excited universal admiration amongst us, and a hope that some day he may occupy a still more important post than that which he now fills so creditably), some of our past presidents, several of our honorary fellows, gentlemen from the provinces practising obstetrics very largely. It has also brought a distinguished physiologist, who is among us to-night, and who I was in hopes would have spoken, who has done more perhaps to prevent disease in the country than any other man—Dr. William Farr; who, by making known the incidence of diseases and showing their causes, has done more perhaps to check preventable disease than anyone else. I hope that at some future time he will favour the Society with some statistical account of the prevalence of this fever in different localities. We have been favoured by a promise from Dr. Farr of another paper on the subject, so that, at any rate, the discussion has not been fruitless in good to the Society, and I trust that it will be beneficial to the profession at large. We have also been favoured by Dr. Farr with an account of a recent epidemic of puerperal fever in a district in the south of London. It is only for the week ending the 19th of June. In the printed returns of deaths it was stated that the cause of death was given as peritonitis and fever, which were presumably cases of childbed fever. There were three cases in the week and one in the preceding week, which, it was found on investigation, were all attended by one medical man. Between the first case and the other three he attended two cases without a fatal result, so that the first case was probably the cause. It has not yet been quite ascertained how the first case began—whether it was a case of ordinary peritonitis or not. The investigation is still being carried on. Scarlatina is still prevalent in the district. In the same week there were nine or ten deaths registered. An interesting question arises, and is being investigated, whether the two women who escaped from childbed fever between the first and third cases by this gentleman were protected by previous attacks of scarlatina. That is a most important matter. It is still being investigated, and I hope Dr. Farr will let us know the results. I have one or two letters here showing the very close connexion of scarlatina with puerperal fever, which it will, perhaps, be interesting to the Society to read. One is from Dr. Jackson, of Notting-hill. He gives the particulars of a case that occurred in September, 1864. The husband, about thirty, had a severe attack of scarlet fever, from which he recovered. The wife, who had some years previously had the fever, and who was in the end of her eighth month of pregnancy, waited upon and attended her husband day and night. In about fourteen days from the date of her husband's illness she began to feel ill, shivering and feverish, but had neither sore-throat nor eruption. Labour suddenly and sharply set in. The child was born alive, well developed and strong, but covered with the distinct and characteristic scarlatina rash. From birth it was restless and uneasy, and died on the third day. The mother progressed most satisfactorily, and the feverish symptoms abated. Milk and lochia were well established. Some slight apparently dyspeptic symptoms were complained of at the end of a fortnight, but these gradually disappeared. The cuticle on both hands desquamated, and at the end of the fifth week she was quite well, and left town for the country." I have several other letters giving instances of the close connexion which Dr. Barker has alluded to between erysipelas and puerperal fever. One is a letter from Mr. Freer, of Stourbridge:—"Some years since I left home for a few days' holiday, leaving two patients expecting their confinements. The evening before I started my father was thrown from his horse upon the front and right olecranon. The next morning the arm was red and swollen. Two days afterwards he attended both my patients, who had easy, natural labours, not requiring any assistance, and my father was not half an hour with either of them. Upon my return on the fifth day I found both my patients dying, and my father's arm so much inflamed that I had to make incisions from the elbow to the wrist. Each case had rigors in twenty-four hours. Ten years since I was engaged to attend the wife of a clergyman in her first confinement. She was a very fine, healthy lady, aged twenty-six. Upon entering the bedroom I found a nurse in attendance with an erysipelatous blush and swelling upon the side of the face. Upon inquiry she told me that two days before she had been in a Liverpool hospital to have the nasal duct opened. My patient was seized with rigors at the end of thirty hours, and died of puerperal fever on the eighth day. The nurse died of rapid erysipelas of the head and neck on the twelfth day." I have also a letter from Mr. Pemberton, of Banbury, which I need not read through. It goes to show that in a house where there is typhoid fever a woman being confined may get puerperal fever, but then I do not think at all that it follows from that that the cause was the same; for you may from drains get a variety of poisons, a variety of chemical and organic products thrown out, and one patient may get one and another another. You may get sulphuretted hydrogen, phosphoretted hydrogen, and a variety of chemical substances, and vegetable or animal organisms of a low form, and one may affect one patient and another another. Showing how this bears upon surgical practice, and somewhat in answer to the question which Dr. Playfair started, I will read a letter from Dr. Keith, of Edinburgh, giving me an account of a most remarkable series of cases, in which erysipelas, puerperal fever, and septicæmia after ovariotomy seem to have been in close association. "On the 19th of May my friend who assists me at my operations became uneasy for the first time about a puerperal case. The patient died on the 26th. On the 24th he helped me at an ovariotomy, but did not see his puerperal patient till after the operation. Next morning my patient was in a typhoid state, and had bad bedsores, with all sorts of eruptions and superficial abscesses, and recovered after this pyæmic condition had lasted a month. There was no suppuration in the pelvis. On the 30th, he assisted me at a tedious ovariotomy. The patient was quite well for six days, the pulse and temperature natural. She then suddenly shivered, the pulse rose to 170 and the temperature to 106° within a few hours, and she died five days afterwards. On the same day he opened a small superficial abscess in a lady's neck. She went after this to the country, was quite well for five days, then shivered and died five or six days after of erysipelas of the head. On the 6th June he attended a simple case of natural labour in a healthy woman. She shivered next day, and died on the 10th of septicæmia. As he went home from this confinement he himself shivered, and was laid up with erysipelas of the face, from which he recovered. The medical man who attended the last puerperal case during the few days she lived examined for an instant a patient in the first stage of labour, four days after the death of the last case, but declined to attend her. This patient had metritis, and is now recovering, the veins of the left limb being all plugged up." I have seen this kind of thing myself in surgical practice, and this led me to be extremely careful in getting the gentleman who attends the operations at the Samaritan Hospital to sign a paper before going into the room that he has not attended an infectious case for seven days, and has not attended a post-mortem examination during that time. I believe that a precaution of this sort would really very much protect puerperal women from many of the infectious diseases to which they are subject, and which, I believe, are, as scarlet fever, or as measles, or as small-pox, or as erysipelas, confounded together under the name of puerperal fever. I hope the end of this discussion will be to give more accurate names to the different conditions which have been confounded together under that one name. I should like to say a single word as to the great question of what is called homicide by infection, and the attempt that has been made, I think unfortunately, to enlist the sympathies of this Society in the protection of careless and ignorant women who deserve the punishment they have got. I think if a woman is cautioned by her medical man, who tells her that she has attended a woman in her confinement who has died of puerperal fever, and that if she attends other women she is liable to poison them, and if she goes on in defiance of this caution to attend other women, and says, "Well, if this one dies, I will give up," such a woman is not deserving of the sympathy or help of the Society. I think we should do good service if we rather stimulated the fellows of the Society and the midwives that they employ, not to carelessness, but to additional caution, teaching them not only to wash their hands, but to use disinfectants, and above all things to avoid any possibility of doing damage to patients who employ them. Only this day I heard of a case which shows that a practitioner would do well to err on the side of over-caution. I was asking about a gentleman whom I knew some twenty years ago, who had settled down in practice in a large town. He was an able man, a gentleman in every sense of the word, a person of good character and great ability. I was told that he did not get on. I asked why, and it appeared that in early life in that town he was introduced to two families. He attended a lady in one of those families, who died of puerperal fever through no fault of his; he attended another lady shortly afterwards, and people blamed him and said that, having attended one woman with puerperal fever he ought not to have attended the second, and he never got over it. I will not say that he deserved his fate, but certainly if he had shown a little more caution, he would have proved the truth of the old maxim that "honesty is the best policy." I believe the fellows of the Society will do great good not only to themselves but to all whom they influence if they inculcate, not carelessness, not the protection of ignorant midwives, but instruction to those midwives that they must be over-cautious, and that if they find themselves in danger of propagating or carrying about disease, they must err on the safe side and say, "For a time I will give up practice. I will not run the risk of damaging the patient who has entrusted her life to my care."

SANITARY NOTES AND REPORTS.

THE second annual report of Dr. Alfred Hill, medical officer of health and analyst for Birmingham, has recently been issued, the chief feature of which relates to the epidemic of small-pox, from which the town has been suffering since the winter of 1871. During the past year it occupied the second place in the order of fatality, 637 deaths having occurred out of 3791 cases, 3367 of which are described as vaccinated, 396, or 10·45 per cent., not vaccinated, and 28 doubtful cases. So that the death-rate was 176·5 per 100,000 of the population, had since 1873 increased fivefold, and was of course enormously higher than that of any other town in the kingdom. The analyses of well-waters show much contamination with sewage-matters of excrementitious origin, derived from drains, middens, cesspools, and surface-filth; and Dr. Hill reports also, as regards the waterworks water, that the "organic impurities are much too high, and very probably productive of diarrhœa." A borough hospital was commenced some eight months ago, and the buildings have recently been increased so as to provide two distinct wards for the treatment of scarlet fever. As regards sewage and refuse disposal, it appears that there are in the borough 190 miles of streets, only about 130 miles of sewers, and four miles of paving. Indeed, it would seem, from the summary of information given in the report, that Birmingham is even more behindhand as to sanitary matters than is generally supposed, and, as we take it, no place in the kingdom more requires the services of an able and energetic health officer. Dr. Hill has included in his useful report a large array of well-tabulated statistics and some simple formulæ of advice on the prevention and management of scarlet fever.

Dr. C. E. Saunders, health officer for the combined districts of Middlesex and Herts, exercises sanitary control over a considerable extent of country, forming, as he reports, "a compact right-angled triangle, the sides of which measure twenty-one, twenty-four, and thirty miles respectively," including a total area of 150,585 acres, and a population of 108,120 persons. The report is very ably prefaced by a summarised description of the geology and natural drainage of the district and the chief industries of the inhabitants. The water-supply and disposal of sewage are then attacked, and the author gives to each and every authority for whom he works a brief account of the year's labour, with a table of mortality returns, and a list of the nuisances dealt with in each district. There is nothing in the report that calls for special comment, but its plan of arrangement is commendable, and worthy of imitation by the few who have charge of large combined and, as we should think, unmanageable districts.

Reports of the condition of Rotherham Urban and Spilsby Rural districts are before us. The former, compiled by Dr. Junius Hardwicke, describes the geography and geology of the district, present water-supply, &c., and concludes with some very diffuse recommendations, among which we find the following:—"9th. That a heavy fine be inflicted on those who are found throwing excrement or other filth into the streets." From this and other notes we infer that Rotherham somewhat needs sanitary supervision.

Dr. West Walker, health officer of the Spilsby district, ambitiously endeavours "to account for every death which has occurred in the district during the past year," and gives a fairly popular description of the sanitary condition of his district, which is essentially rural, the population being employed almost exclusively in agriculture.

Most of these reports contain caligraphic errors, that, with ordinarily careful supervision of the authors, ought to be avoided.

THE MEDICAL COUNCIL AND THE REGISTRATION TAX.

To the Editor of THE LANCET.

SIR,—I, in common with a large number of the profession, agree with your correspondent "Non Placet" in thinking that the answer of the Medical Council to applicants for aid is sufficient to raise strong feelings of indignation in those who are taxed so heavily to keep up the Medical Council. How can it be otherwise when young men entering the profession are called upon, at a time when frequently they can least afford it, to pay the sum of £5, in return for which they receive no apparent advantage? I believe that very few compelled to pay this fine (for it is nothing less) could give any statement of the benefits that they will derive from it; and it is undoubtedly the general opinion that the Medical Council does as little work as it is possible to do, and gets a large sum of money for doing that little. What can be more unseemly than the long and wordy speeches which occupy the greater part of the sittings of the Council? and how small is the benefit that the profession at large derive from them. In the really important work of protecting the profession from the inroads of unqualified practitioners the Council does its best to maintain its policy of "masterly inactivity."

There is another point to which I have referred in a previous letter (May 3rd, 1873), and that is, the grievance of having to pay additional fees for registering additional qualifications. This is a gross injustice to those compelled to register as soon as qualified. Surely it is enough to be mulcted in so large a sum as £5, without being obliged to pay a fee for registering *each* additional qualification that may be obtained afterwards.

I have not the statistics of 1874, but in 1872 nearly 400 (397) additional fees were received, amounting to £100, and the income of the Council for that year was nearly £9000.

If the profession were to express their firm determination to obtain some benefits for this large taxation, there would assuredly be some means of obtaining it.

I am, Sir, yours truly,
LEONARD CANE, M.D. and B.S. Lond.

Peterborough, July 12th, 1875.

THE annual meeting of the friends of the Chelsea Hospital for Women was held at the London Tavern last week, under the presidency of Lord Wharncliffe. The chairman, in congratulating the meeting on the increased prosperity of the institution, as shown in the augmented funds and the larger number of patients relieved during the year, expressed the opinion that more good would result from increasing the number of out-patients than by adding to the number of in-patients.

THE LANCET.

LONDON: SATURDAY, JULY 17, 1875.

ALTHOUGH the accumulated experience of many surgeons during many years has done much to determine the respective merits of the two operative procedures—lithotomy and lithotrity—for the removal of vesical calculus, it can scarcely be said that the data we have hitherto possessed have been sufficiently numerous or unequivocal to ensure a unanimity of opinion or uniformity of action. It is true that there has been for many years a general agreement concerning the two operations among some of the leading authorities; but to many good surgeons lithotrity is, even in the present day, practically little known, while lithotomy is regarded as the only safe and legitimate mode of treating stone in the bladder. This state of things is, perhaps, only natural. Until within the last few years no reliable statistics of lithotrity existed, whereas lithotomy from the earliest times has been deemed the triumph and glory of surgery. In the statistics of lithotomy cases have been dealt with by the thousand, and very trustworthy information has been obtained respecting the relative mortality at all ages, for all kinds of stones, and for all sizes; but the statistics of lithotrity have for the most part been drawn up by friends or by foes, by whom the operation has been either unduly applauded or too severely denounced. CIVIALE, for instance, defended the procedure with all the ardour of a partisan, and did not hesitate to allege that a fatal termination after the crushing operation was almost impossible. If the patient died, the cause of death was attributed to some extraneous cause—never to the operation. This indiscriminate praise, when compared with the less favourable experience of others, could scarcely fail to produce considerable distrust in the minds of impartial observers, and for a time the operation fell into disrepute with many of the best surgeons in this country. Happily, however, the operation has been rescued, in this country at least, from both the unreasonable adulation of its advocates and the wholesale condemnation of its opponents by the honest and judicial representations of Sir BENJAMIN BRODIE, Sir WILLIAM FERGUSSON, Sir HENRY THOMPSON, and others; and may be said, at last, to have assumed its proper place in operative surgery.

It is a truth now very widely accepted, that neither lithotomy nor lithotrity is suitable for every case of stone in the bladder; but that, under certain circumstances, each has its special and peculiar advantages. The conditions that justify the performance of one or the other operation are generally readily recognisable, and there is usually very little difficulty in deciding which procedure offers in a given case the best prospect of success. Indeed, all experience has tended to show the paramount importance of ascertaining what these conditions are; for on a just appreciation of them will the ultimate results very materially depend.

Safe and efficient as lithotrity has been shown to be, it is, nevertheless, true that there are states of health and conditions of kidneys, bladder, and urethra, or of stone, that absolutely preclude it. Lithotrity is, in fact, so much an operation of election that the general results will depend more on the care and attention bestowed on the selection of the cases than on the manual dexterity of the operator; and, unless this fact be kept prominently in view, lithotrity may in the long run be made more disastrous and fatal than lithotomy.

It is not our province now to enter into all the details of the operation of lithotrity, nor even to consider all the conditions likely to ensure a successful result or those calculated to militate against it. We shall for the present base our remarks on the broad question of comparative mortality.

By an analysis of more than 1800 well-authenticated cases Sir HENRY THOMPSON showed that the average mortality of lithotomy at all ages was about 1 in 8; but that by excluding all the cases under sixteen years of age, in which the mortality was 1 in 15·5, the proportion of deaths rose to 1 in 5 for all ages beyond sixteen, the increased mortality being in direct ratio to the age of the patient. The results obtained by Sir WILLIAM FERGUSSON, and set forth in his lectures delivered at the Royal College of Surgeons in 1864 and 1865, were similar. In 110 cases in which lithotomy was performed in the adult there were 33 deaths, or 1 in 3·5.

If we now compare these results with those obtained by lithotrity, always premising that the cases have been properly selected, the advantages of the crushing operation will at once be apparent. In 115 cases, in about 100 individuals, recorded by Sir BENJAMIN BRODIE, there were 9 deaths, or about 1 in 12. In 204 cases, in 185 individuals, the mean age of whom was sixty-one, recorded by Sir H. THOMPSON up to 1870, there were 13 deaths, or about 1 in 15·5; and in the 87 cases of lithotrity recorded by Sir HENRY in our columns (April 3rd), and the subsequent progress of which we published on the 3rd inst., there were 4 deaths, or about 1 in 22, the mean age of these individuals being sixty-three years and a half. Sir W. FERGUSSON's results recorded in 1865 gave 12 deaths in 109 cases, or 1 in 9. These facts, which cannot be gainsaid, argue most convincingly in favour of lithotrity; but they should not be made to weigh unfairly against lithotomy, for which many of the worse cases, obviously unfit for the crushing operation, are reserved.

An important question respecting lithotrity still, however, remained practically unanswered—namely, the condition of patients a year or two after the accident. An impression very generally prevailed that recurrence of stone was more common after lithotrity than after lithotomy. This impression was doubtless to some extent true, but the difference in the immunity afforded by the two operations had evidently been exaggerated. We need only refer to the answer to this question published in our columns by Sir H. THOMPSON a fortnight back in confirmation of this statement. In that article not only was the average mortality shown to be lower than that of lithotomy, but a large number of persons (28 out of 45) were stated to be "in good health and active existence."

There is another point, incidentally referred to by Sir HENRY THOMPSON, which has not yet received the attention it deserves—namely, the value of the lithotrite for the removal of recurrent phosphatic calculus. It is manifestly impracticable to repeat lithotomy every time a phosphatic calculus forms; whereas by means of lithotrity these accumulations may be removed with comparative impunity several times a year. In such cases the patients are actually kept alive and well by lithotrity. Valuable as lithotrity has been and is, it may be doubted whether its full powers have yet been developed. The notion that lithotomy for the removal of stone from the adult bladder will some day be a rare if not an obsolete operation is not perhaps so utopian as we sometimes imagine. As the pathogenesis of calculus becomes more accurately worked out, as the methods of constitutional treatment become more scientific and the modes of physical examination and diagnosis more exact, it may well be that, though the formation of calculus may not be altogether prevented, the cases of stone in the bladder may all be detected while in that stage in which lithotrity has been demonstrated to give the best results.

We notice with much pleasure that the President of the General Medical Council has intimated that it may be a future duty of that body to institute inquiries into the character and extent of the various examinations in Arts which now form the portal to our profession, and we have no doubt that the result of a few visitations during these examinations will be even more valuable than those which must ensue from the visitations of the examining bodies whilst the professional examinations were in progress. The fact that a candidate for the M.D. of the University of Durham (who seems to have already had the M.A. degree of the same University conferred upon him) was quite ignorant of composition and spelling appears to have stirred up the virtuous indignation of several of the members of the Council; but we venture to suggest that this is by no means an isolated case, and that the above University is not the only sinner. We have frequently met with both students and practitioners of modern date who are quite as illiterate, even in these days of superior educational advantages. The reason is not far to seek. The standard of general education at most of our qualifying bodies is by no means a high one; indeed, many are satisfied with lower attainments than are expected at the Cambridge and Oxford local examinations for junior boys and girls, and faults in writing on professional subjects scarcely justify medical examiners in plucking the candidate afterwards. We will not touch on the much-debated question of the necessity of Greek in these examinations, although such a slight knowledge as will explain some of our medical terminology is a very valuable acquisition, and one requiring but little time and application on the part of schoolboys. We urge more particularly the necessity of an average English education and the testing of candidates in such subjects as composition and writing from dictation. Although these form parts of elementary education at every national school, they are much neglected at many higher-class ones, and do not enter into the examinations in Arts of several of our qualifying bodies. Were these to be insisted on, we should not be scandalised by seeing "ware" for "where," "linament" for "liniment," and "or*k*itis" for "orchitis," as we have noticed within a very few weeks. Again, the system of continually giving extracts from the same portions of a Latin author is greatly to be deprecated. At one examination the first two books of Cæsar's Gallic War have been set since the initiation of the Preliminary in Arts fourteen or fifteen years ago. Of course, by dint of coaching and cramming, a most inferior man must ultimately pass therein, even if he fails at his three or four early trials. The time and energy required to pass the later examinations, and to gain an average knowledge of the subjects of the medical curriculum, are a sufficient tax on a well-educated student, so that medical teachers are fairly entitled to demand that those who cannot pass an average standard should be prevented from entering our medical schools.

It might have been the wiser course to have looked into these examinations in Arts even before the professional ones, for the effect of the recent suggestions must make it a still more difficult task for an ill-trained and illiterate student to obtain his diploma, and it is no hardship to stop such an one at the very commencement of his attempts to enter the profession, whereas repeated failure becomes a very serious consideration to him and his family when he has spent two or three years in medical study. It is then frequently too late for him to turn his attention to some other occupation, and he strives on and on, a continual worry to teachers and examiners, until he passes, through some lucky chance, or, more generally, has to swell the list of unqualified assistants.

The general culture of the mass of the profession is infinitely superior to that which existed previously to the introduction of these preliminary examinations, but there is still room for improvement, in order that they may keep pace with the educational advantages of to-day, and the rapid reforms of the professional examinations.

In his valuable paper in the scientific reports of the Medical Officer of the Privy Council, Dr. Creighton has dealt with the question of the origin of cancer from another side to that taken in the discussion at the Pathological Society last year. In that discussion, enriched as it was by the speeches of so many of the foremost men in the school of English pathologists, the question was dealt with in great measure upon clinical grounds alone; the result being that opinions were equally divided between the view of a purely local origin of the disease and a constitutional one. Dr. Creighton, carrying on his researches at the Brown Institution, has studied carefully the histological features of the disease, and the results of his inquiry not only go far to upset the doctrines of Virchow on this head, but also lead to some highly suggestive hypotheses as to the origin of primary malignant tumours. Using the term "cancer" in its widest sense so as to include not only those malignant growths which arise primarily from epithelial surfaces, but also the vast group of the sarcomata whose origin lies in the connective tissues, Dr. Creighton commences by stating the results of his examination of growths in the liver secondary to those arising in the skin, bones, uterus, spleen, &c. The study of the formation of these secondary formations throws light upon the probable mode of origin of at any rate one great class of malignant tumours—the true cancers.

The mode of origin of secondary tumours is still a matter of debate. Many hold that they arise by the direct transference of the cells of the primary growths to the seats of the secondary formations; while others, including VIRCHOW, maintain that there is a transformation of the pre-existing elements of the part into cells similar to those forming the primary tumour. VIRCHOW, however, holds that it is only the cells of the connective-tissue framework that are so transformed, the highly specialised epithelial elements of the infected organs undergoing no change. Here, indeed, is the great point of divergence between the views of VIRCHOW and those held by Dr. MOXON in this country, and confirmed by the author of this paper. Reinstating "vacuolation" into the place from which Dr. BEALE, two years ago, had removed it, Dr. CREIGHTON avers that this is the first change undergone by a liver-cell on its way to be transformed into cells similar to those composing the tumour, be this myxomatous, lymphomatous, epitheliomatous, or what not. Vacuolation is, in fact, the first stage of endogenous cell-formation—a mode of cell-multiplication which has received far less attention than it merits. Briefly, the process consists in the conversion of the greater part of the protoplasm of the gland-cell (in this instance of the liver) into a highly refractive material, probably of fatty nature, the remainder of the protoplasmic contents being either displaced to the periphery of the cell, or remaining free in the centre of the cavity formed by vacuolation. It is from this protoplasm, the vital properties of which are manifested by its deep colouration with staining reagents, that, by an endogenous process, new cells are formed, at first round and "indifferent," later assuming the specific forms characterising the cells of the primary tumour. Of this process, with various modifications, Dr. CREIGHTON has traced the progress in all its stages by examining growths in the liver of various size and development. All growing tumours in this organ are surrounded by a zone of indifferent cell-growth and by columns of liver-cell in the stage of vacuolation. The process is then a truly metaplastic (or heteroplastic) one, taking place in the protoplasm of the liver-cell under the influence of the primary growth—an influence which he terms "spermatic," the changes that occur in the liver-cell being strictly comparable with the metaplastic changes that occur in the ovum after impregnation. It will be seen by this that the connective-tissue framework of the infected organ plays no part in the process, nor does it even in the formation of a stroma, which is so frequent a character of some tumours, this also being formed from the remnants of vacuolated cells.

So far, then, for the formation of secondary tumours. There can be little doubt that there is a true genetic relation between them and the primary growths. But what light does this throw upon the nature and origin of the latter? To clear up this, which, in truth, is the point of most importance both clinically and pathologically, Dr. CREIGHTON points out that vacuolation is a natural process. The products of secretory glands are all probably formed by some such process taking place in the gland-cells themselves. The secreting cell becomes filled with its peculiar product by undergoing a process of vacuolation; and the product—be it mucus, milk-globule, or spermatozoon—is distinctly a new formation, differing from the primary protoplasmic contents of the parent cell. Should the process of cell-transformation be arrested (it may be naturally, as in the involution of the mammary gland) or perverted, the resulting products are different; the solid or protoplasmic part of the cell gives rise to new cell-forms, and in some such way a new heteroplastic growth—as cancer—may arise. Here we have, then, yet another example of morbid products resulting from perverted natural processes, and, we may add, one other link in the chain of evidence in favour of the local origin of cancer. There yet remains unsolved, however, the question as to the exciting cause of this change. Dr. CREIGHTON proposes to follow up these researches with others bearing upon the development of mammary cancer, with special reference to the processes of involution and evolution of the gland; and, when completed, they cannot fail to be of the highest value, and are calculated to throw yet more light upon one of the most obscure points in pathology.

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WE are glad to take an early opportunity of referring again to the subject of Charity Voting Reform, inasmuch as it appears that since the last annual meeting of subscribers to the Royal Medical Benevolent College the position of the reform party has been considerably strengthened. It is reported that no less than 2101 names now appear on the memorial in favour of abolishing the present objectionable system of voting and canvassing; so that, as it appears, only about 300 remain who desire the continuance of things as they are. If this be the case, we counsel those interested in this question (and they are many) to take steps to call a special general meeting of the subscribers, as the matter is now ripe for final decision. It is eminently proper that this College should be in the van of reform, and should set an example that will, as we believe, be speedily followed by larger charities, both in London and the provinces. It is not necessary to recapitulate the evils of the present system, for they have been described and summarised over and over again in these pages. But we have received lately a copy of a letter on the subject addressed to the Board of Management of the Governesses' Benevolent Institution by Lord SHAFTESBURY, Justice JAMES, and the Recorder of London. These gentlemen represent on this occasion the Charity Voting Reform Association, and the letter indicates, as regards the Governesses' Institution, that, although the number of subscribers in favour of reform is as eight to one, the Board of Management decline absolutely to entertain the question of change in the present system of election. As the letter fitly puts it, this is a singular position to be taken by a representative committee. The Board is indeed a permanent and self-elected body, filling up its vacancies without being subject to any election by the subscribers at large. But if its representative character be acknowledged, a direct reference to the entire constituency of the charity should be made by it, and action taken on the result. It is evident that the cause of charity voting reform is, perhaps slowly, but surely gaining ground, and it will always receive at our hands hearty support.

Annotations.

"Ne quid nimis."

THE PUBLIC MEDICAL SERVICES.

The time is fast approaching for the competitive examinations to be held for the Medical Services of the British and Indian armies and that of the navy. The first-named service is scarcely likely to attract any number of candidates with the large amount of discontent existing in it at the present time, and the utterly uncertain character of the remedies, if any, which Mr. Hardy is to introduce when he has definitely made up his mind. Medical officers complain bitterly of the treatment they received from the last Government. They allege that the spirit and letter of the contract which was made with their service have been violated, that they were summarily deprived of their regimental appointments and of certain privileges in a way that would not have been attempted with the officers of any other branch of the service, and that so far nothing has been done to expedite promotion or otherwise improve their position. On the other hand, a great deal has been effected in the Naval Medical Department, which is now, in our opinion, far in advance of the Military Service, and we would strongly advise intending candidates to make themselves acquainted with the terms proffered to young medical men by the Admiralty. Lastly, there are the Indian Medical Service appointments, which are not by any means so highly esteemed as they once were. Still this service attracts a good class of men, and, spite of many well-grounded sources of discontent, it offers, in our opinion, many advantages over the Medical Department of the British army.

"PASS" AND "PLUCK" AT THE COLLEGE OF SURGEONS.

In another column will be found the report from the Court of Examiners of the number of candidates who have presented themselves for the Primary and Pass Examinations for the diploma of Member of the College of Surgeons during the collegiate year 1874–75, showing the number passed and rejected from each medical school during that period.

The general results are better than those of last year, but not so good as those for the year 1872–73. During the past year, of 727 candidates who presented themselves at the Primary Examination, 223 were rejected, or 30·5 per cent. In the previous year at the same examination there were 683 candidates and 242 rejections, or 35 4 per cent.; whereas in the year 1872–73 there were 702 candidates, with 199 rejections, or 28·3 per cent. For the Pass Examination last year there were 518 candidates, of whom 126, or 20·4 per cent., were rejected. In the year 1873–74 there were 456 candidates, with 124 rejections, or 27·2 per cent.; and in the year 1872–73 there were 461 candidates, of whom 85, or 18·4 per cent., were rejected.

It is impossible to accurately compare the merits of the different schools from these statistics, as the numbers of candidates vary greatly. To take, for instance, the medical school at Cork. There were no rejections in the primary examination, but then there was only one candidate. On the other hand, the Kingston School showed the highest percentage of rejections—namely, 100. Here, again, there was only one candidate, and he was unfortunate. Several schools each sent ·50 candidates, and as ·50 were successful the percentage of rejections was 0.

For the primary examination, Guy's has the fewest rejections—15·3 per cent. out of 78 candidates. Charing-cross stands next, with 18·5 rejections, but there were only 13·50 candidates. The rate appears to have been very high at St. Thomas's—56·7 per cent.,—and with the Westminster candidates it even reached 80 per cent. This is certainly very unsatisfactory, considering that only 10 candidates presented themselves from the latter school. Surely either teachers or students have cause for complaint.

Of the Provincial Schools, Manchester, with the greatest number of candidates (33·5) has the smallest number of rejections (16·4 per cent.) Cambridge is next; while Sheffield has once more the unenviable position of being the highest on the scale, having 70 per cent. of rejections. No conclusions can be drawn from the Irish schools, as the numbers are too small and unequal. With the exception of Edinburgh, which has 17·05 per cent. of rejections in 28·3 candidates, the Scotch schools stand low, Glasgow having a percentage of rejections of 61; and Aberdeen of 47·05.

In the Pass Examination, University College bears the palm, with 69·16 candidates, and only 10·8 per cent. of rejections. St. Bartholomew's comes next, with a percentage of 17·9 out of 61·3 candidates. The three highest percentages of rejections in the metropolitan schools are St. George's, with 30 999 per cent. out of 27·50 candidates; King's College, with 44·06 per cent. out of 29 50 candidates; and Charing-cross, which rises to 55·5 per cent. with 4·50 candidates. Manchester is, in the second examination, again at the head of the provincial schools, having only 10·7 per cent. of rejections; Cambridge is second; while Birmingham has 58·3 per cent.

THE ROMAN ACADEMY OF MEDICINE.

The first meeting of this scientific body took place in the hall of the University of the Sapienza on the 27th June. Besides thirty-three ordinary Fellows, there were present the Minister of Public Instruction (by deputy), the Rector of the University, and a considerable number of physicians, medical students, and the non-professional public. Prof. Maggiorani, one of the most distinguished teachers of the Roman Medical School, presided and delivered an address, wherein he stated the objects for which the Academy had been instituted. He pointed to the ceaseless march of medical induction, and vindicated the value of free discussion in guiding and steadying its steps. Medicine, he argued, is rapidly becoming coextensive with the science of humanity, and its investigations are acquiring the most living interest for the legislator. Society, moral as well as physical, must rely, in the last resort, on the guidance of medicine in that enlarged sense in which the physician's art is now studied and practised. Take, for instance, the notorious case of Louise Lateau. Millions of people were being deluded into the belief that the woman was the subject of miracles, and superstition was pointing triumphantly to her symptoms as evidence of the visible working of the "spirit," till the Belgian Academy of Medicine brought science to bear on the phenomena, and reduced her periodically bleeding stigmata, her ecstatic fits, her somnambulism, and her hearing of voices, to physio-psychological law. No institution but an Academy of Medicine could have investigated the case so thoroughly or pronounced on it so authoritatively. But this is only one use of Academies. The physician in daily practice benefits by them in maintaining the "scientific attitude" so apt to be lost in the distractions of extra-professional detail, while the investigator comes to them from his laboratory to profit by the criticism his conclusions evoke from the practical mind. Useful in all great centres of life, such an Academy is peculiarly so in Rome, where prescriptive authority has so long impeded the movements of a professional class pre-eminently fitted for scientific research. The discussion that followed Prof. Maggiorani's able address gave ample proof of the interest with which medicine, theoretical and practical, is prosecuted in the city of Galileo and Lancisi, and we may anticipate from the Medical Academy of Rome the best of all assurances that biological science maintains its rightful place in the second Renaissance which Italy is passing through.

A SECOND OCCUPATION.

Another authoritative voice in the profession speaks out in favour of the view that society is suffering, not from overwork, but from underwork. Dr. Wilks, in his paper on Overwork, in The Lancet of June 26th, which should be carefully read, says that in his experience more ailments arise from want of occupation than from overwork, and, "taking the various kinds of nervous and dyspeptic ailments which we are constantly treating, I find at least six due to idleness to one from overwork." The question is a very serious one, and one that will well repay the attention of medical men. Our own opinion is strongly in favour of Dr. Wilks's view, that the healthiest people—i.e., people with the *mens sana in corpore sano*—are the men and women whose time is most fully occupied, those who have what Dr. Wilks happily calls a second occupation to fall back upon when the main occupation does not press. Our own profession is rich in men who have second occupations, and have even distinguished themselves in them, and our present House of Commons would supply some good examples. Lord Palmerston, one of the most hard-working of men, found his rest not only in sleep, which with him was sound at nights, but in acquainting himself with the latest indications and discoveries of science. Dr. Wilks goes so far as to say that even the occupations of fashion and frivolity are better than none, and no doubt he is right; but woe to those who find their main employment in these, greatly for this reason, that they render the mind indisposed for a second occupation, which ought to be one engaging the intellect and the senses, though in ways different from those of ordinary work.

HOMICIDE BY INFECTION.

Whether Elizabeth Marsden, in the course of imprisonment for conveying puerperal fever, and in it death to several of her patients, is a martyr or a justly punished criminal, is a question on which opinion in the profession is divided. It is evidently part of a much larger question involving issues of considerable consequence to the profession. On any view, good will arise from the prominence given to the culpability of continuing obstetric practice after it is clearly apparent, or even probable, that the poison of puerperal fever attaches to the practitioner. The Forfarshire Medical Association has petitioned the Home Secretary for Marsden's release, on the ground that in the present state of medical doctrine as to the numerous questions connected with puerperal fever the charge of homicide by puerperal infection cannot be scientifically proved, and that it is without precedent in criminal jurisprudence. The Association admits that she acted at variance with ordinary prudence. This is too mild a way of expressing her culpability. She disregarded the best advice, and a series of facts which should have impressed even an ignorant woman. Though, as we have already pointed out, we think the process of dealing with this new offence in law admits of abuse and misapplication, we cannot acquit Marsden of most serious blame. Mr. Wells, it will be seen, in his summing up of the late discussion at the Obstetrical Society, strongly deprecated the attempt that had been made to enlist the sympathy of the Society on behalf of such cases, and inculcated even extra precautions, so that the life of not one puerperal woman may be endangered. This is the right note to strike on this serious question, and we may feel pretty well assured that no practice honestly and carefully conducted will come within the notice of the law. We are far yet from being in any danger of overdoing the precautions of cleansing, disinfection, &c., necessary to avoid the chance of conveying disease. Let us err in the direction of excessive caution. It is lamentable to hear, as we have very lately heard, that in Vienna, where the connexion between the dissecting room and puerperal fever has been long apparent, remarkable recklessness on the subject still exists, and as a consequence great puerperal mortality.

MR. TEALE'S CASE OF HIGH TEMPERATURE.

Although five months have elapsed since notes of a remarkable case of high temperature were read before the Clinical Society by Mr. G. Teale, yet the case was in itself so subversive of all current ideas on the subject that we doubt not it is still fresh in the memory of our readers. With commendable candour the author of that paper has just addressed a letter to a contemporary in which he replies *seriatim* to several very natural queries that have been put to him concerning the facts of the case, and the possibilities of any artificial means within reach of the patient of raising the index of the thermometer. From this it would appear that observations were taken in mouth and rectum as well as in the axillæ, with the result of showing the same high level (110° to 120°); that the rise in the thermometer was sometimes noticed at the time; that no hot bottles or blankets were in contact with the patient by which she could have artificially warmed the thermometer; and that the instruments used had been tested and found correct, and had during the recovery of the patient registered normal as well as abnormal temperatures. As we ventured at the time to question the possibility of the maintenance of life at such a high rate of temperature (unaccompanied as it was by any extreme variation in pulse and respiration frequency), so do we now cheerfully accept Mr. Teale's further explanations, which seem to leave nothing to be desired in testimony of the faithfulness and accuracy of the record; while at the same time it leaves the *modus operandi* in as mysterious a condition as ever, and goes far to expand our hitherto too narrow notions. Exceptional and full of mystery the case must remain, and that another of like nature will occur is to be hoped, lest we may have to consign it to that limbo of "exceptions" which go to prove the rule, the rule in this instance being the incompatibility of animal life with a body heat of 120°.

THE CLINICAL STUDY OF INSANITY.

A document having the form of a petition, to which are attached the signatures of seventeen teachers of psychological medicine, has been forwarded to the various examining boards of the kingdom, praying them so to modify the existing regulations as to the amount of clinical study required from their candidates, that they may resemble the regulations of the University of London, which are as follows:—"Attendance during three months in the wards of a lunatic asylum may be substituted for a like period of attendance on medical hospital practice. The Senate regard it as highly desirable that candidates for the degree of M.B. should practically acquaint themselves with the different forms of insanity by attendance in a lunatic asylum." We heartily concur with the "petitioners" in their "prayer," and we doubt not that if the option were given to students of doing some of their hospital work in lunatic asylums, many would avail themselves of it. In a lunatic asylum, although a student would learn a great deal that was special, he would at the same time come across very much which appertains to general medicine and surgery, so that this short time devoted to lunacy could not be considered as wholly deducted from the ordinary curriculum. The only drawback to the plan at present is the fact that asylums are not very conveniently situated for students, and we can hardly concur in the statement of the petitioners that "there is at least one contiguous to evèry medical school in the kingdom," unless the interpretation which they place on the word *contiguous* be very different from that which is usually applied to it. We must demur also to the statement that "paralysis, softening and tumours of the brain, chorea, hysteria, hypochondriasis, and others" are diseases not *usually seen* in general hospitals. Those specified are perfectly common in all general hospitals, and as for the "others" we may infer that they also are to be met with. Notwithstanding this slight overstatement, we are sure that those who have signed this document have right on their side, and we trust it will receive the serious consideration of the bodies to whom it is addressed.

THE ARTISANS' DWELLINGS BILL.

A scheme which (notwithstanding that it is somewhat informal and not in accordance with the letter of the Act) seems to us a plausible and a good scheme, has been laid before the Board of Works for the Holborn district by their surveyor, Mr. Lewis H. Isaacs, having for its purpose the improvement of that miserable district adjoining the Gray's-inn-road, of which the notorious St. Alban's Church is the centre. The plans accompanying the scheme—which at present, be it remembered, is merely the suggestion of one man, and has not been sanctioned by any authority—are seductive to look at, and are not at all unlikely to go far in convincing those interested that the adoption of this or a similar plan is strongly advisable. Between Gray's-inn-lane and Leather-lane is a labyrinth of foul courts, which is the chosen home of every form of physical and moral depravity. Mr. Isaacs wishes to sweep about twenty of these close courts, which shelter nearly 4000 persons, entirely away, and in their place he proposes to build, grouped round St. Alban's church as a centre, five large blocks of artisans' dwellings. The plan further involves the making of two new streets and the widening of Leather-lane and of the narrow part of Gray's-inn-lane, as well as of other less-known thoroughfares. The scheme at present is crude in the extreme, and in the absence of estimates as to cost and the probable return on outlay, it is impossible to say more than that, from a hygienic point of view, it appears admirable, and if it be carried out there must to a certainty be a dividend in the shape of improved health.

ACTION OF ACONITINA UPON THE HEART.

Lewin, operating on frogs, finds that aconitina, in doses of ·0025 to ·0015 gramme, lowers the frequency of the cardiac beats and this occurs most rapidly when injected into the veins, more slowly when subcutaneously injected, and most slowly when injected into the stomach. The duration of the action varies from one to two hours. It is succeeded by a period of increased frequency of the heart's beats, which is soon followed by irregularity, and, finally, ends in arrest in diastole. At the close of almost all the experiments an arhythmia of the cardiac actions occurred, due to the rapid pulsation of the auricles or to their beating alone. The peripheral nerves, when the poison was administered in moderate doses, exhibited considerable diminution of excitability, and with larger doses paralysis occurred. The heart after death did not always respond to electrical excitation. In experiments on warm-blooded animals, he found that the first symptom observable was marked dyspnœa, and this augmented till death occurred; but by the application of artificial respiration for nine hours and a half continously he was able to save the life of a rabbit to which a fatal dose had been given. The dyspnœa is due to the direct action of the poison on the respiratory centre in the medulla oblongata. In regard to the heart, he obtained results of a double nature, partly conformable to those produced by digitalis (corresponding therefore to primary irritation and subsequent paralysis of the vagus), partly consisting in a diminution of the force of the heart and a rapid sinking of the frequency of the pulse. The cause of this was the action of the poison on the ganglionic centres in the heart, at one time with integrity of the vagi, and then with paralysis of the vagi.

THE HEALTH OF THE POPE.

On Monday, the 5th inst., Pio Nono held a long and fatiguing Consistory, after which he gave thirty distinct audiences, and yet at the close of the day his lightness of step and conversational vivacity were something remarkable. Without attributing this bodily and mental vigour (as the *Osservatore Romano* does) to a miracle, the phenomenon is interesting enough to deserve comment. Pio Nono's physicians have recently prescribed him daily baths of sulphur-water, brought all the way from Civita Vecchia for the purpose. A large bathing contrivance, something like a diminutive reservoir in size, has been expressly constructed for him, and into this he descends by a little staircase, and then takes his seat in a chair, while the water gradually rises around him. Thus he sits for half an hour, the Fra Salvatore carefully manipulating the open issues in his Holiness's lower extremities, and another member of the Pontifical household attending to his wants. On coming out of this artificial sulphur-spring, or *bulicame*, as the Italians call it, the Pope is served with some strong soup in which a capon has been boiled down, and with this he takes a glass of Johannisberg cabinet, or Romanée Conti. Under this treatment he braves the excessive heat with comparative impunity, and can often dispense with his staff in walking. The issues continue open, but probably on that very account he has for many weeks been free from those epileptoid seizures to which he is constitutionally prone.

NOXIOUS FUMES FROM FACTORIES.

It is earnestly to be hoped that the Public Health Bill which will shortly become law will provide an efficient remedy for the abominable nuisance now caused in many populous districts by the noxious emanations from chemical manufactories. Three great associations, the South-Eastern of London, the Northumberland and Durham, and the Lancashire and Cheshire, have worked in unison with the utmost zeal to induce the Government to incorporate in the measure a sufficient remedy for the evils complained of. Some few of the amendments suggested by the associations have been adopted, but others have been ignored, so that the actual working value of the new enactments must remain for the present a matter of doubt. An uncertain and expensive remedy exists, of course, at the present time. An injunction in Chancery may be sought, and is generally granted if the fact of a nuisance is clearly established. It is not necessary to prove injury to health, or even injury to property. The Lords Justices hold that a man has no more right to pour foul air over your premises than he would have to pour foul water, and several recent decisions have affirmed this view. But it is only those who are rich as well as brave who venture on proceedings in Chancery, and meantime the grievance is widely felt. No doubt the three associations to which we have referred will take care that the powers of the new law shall soon be thoroughly tested, and we await their action with interest. Urban authorities, at any rate, will now have the power to act, and it is possible that they may prove equal to the occasion.

If they grapple with the evil, and succeed in suppressing it with the machinery they will soon be able to command, they will give a powerful illustration of the value of local government, and will quiet the fears of those who think that the new measure will prove to be another piece of sham legislation.

HAMPSTEAD FEVER HOSPITAL.

THE Select Committee of the House of Commons, appointed to inquire into the action of the Metropolitan Asylums Board with reference to the Hampstead Hospital, held its first meeting on Friday, the 9th inst. The committee consists of Mr. Sclater-Booth, chairman, and Messrs. Coope, Collins, Goldney, Hayter, Locke, A. Reed, Pell, Pemberton, Ralli, and Ritchie. The first witness examined was Mr. Wyatt, the chairman of the Hampstead Hospital, who read a long statement prepared by the Asylums Board in defence of their conduct in the matter, and giving a detailed account of the action of the board with reference to the provision of accommodation for epidemic diseases since its constitution. Mr. Wyatt's evidence did not disclose any new facts or arguments, with the exception of an admission that the main objection to the last proposed alternative site was the outcry raised about the possible contamination of water-supply from its nearness to the reservoir. Dr. Sibson, who was a member of the Asylums Board from its formation until 1868, and to whom the general plan of arrangement of the situation of the hospitals was due, was also examined, and gave an account of that plan, which consisted in having three hospitals at the corners of a triangle, each of which was to be within three miles of the locality from which the patients were drawn. He stated that the sites were chosen on account of their being away from the population. His opinion was opposed to the idea of any danger existing from the neighbourhood of a hospital to a reservoir, if the latter were on a higher level. Dr. Bridges, of the Local Government Board, who was afterwards examined, pronounced in favour of the Hampstead site. The committee have decided not to hear counsel; but the inquiry is likely to last some time.

THE BIRMINGHAM CORONERSHIP.

MUNICIPAL government, although an admirable system in theory, occasionally commits some egregious blunders, and makes itself appear ridiculous. Seldom has a more striking proof of its failure been afforded than in the recent election of a coroner at Birmingham. For a very long period Dr. Birt Davies had filled that office with credit, and on his retirement the Corporation testified its appreciation of Dr. Davies' services by giving him a very handsome vote of thanks. We should have thought that a medical man would have been regarded as his most natural and most probable successor, as the Corporation attached unequivocal importance to the special medical attainments which their late coroner possessed in so eminent a degree.

A very different policy has, however, been pursued. After advertising for candidates for the vacant office, a considerable section of the Town Council met and drew up a memorial to Mr. Hawkes, an elderly solicitor, asking him to become a candidate, and promising him their support. On the day of election Mr. Hawkes was allowed to walk over the course, all the medical candidates who might have filled the office with advantage to the town having retired. After this one may reasonably doubt whether corporations ought to be trusted with such important functions as the election of coroners.

SANITARY CONDITION OF BAGSHOT.

NOT long ago we alluded in strong terms to the disgusting condition of the village of Bagshot. Though situated in one of the healthiest spots in England, this unfortunate village has long remained in a state that would scarcely be tolerated even in an Oriental country. The only water-supply of many of the cottages is derived from a stream which is little better than a common sewer, and the few wells that we saw are exposed to an almost equally direct pollution. The Local Government Board has now taken the matter in hand, and something is at last to be done. Cesspools and drains are to be constructed; sewage is to be kept from the stream, and the latter then left "open to the public." Whether this reform will be a real one remains to be seen; but we are inclined to fear that such a stream, liable to all kinds of accidental and wilful pollutions, can never be a safe or satisfactory water-supply. It is something, however, that any kind of action has been induced.

THE KENT MEDICAL BENEVOLENT SOCIETY.

THIS Society celebrated its eighty-eighth anniversary at Maidstone on Thursday week, W. Hoar, Esq., presiding, supported by Drs. Lowry, Price, Carr, and Moncton, and Messrs. George Rigden, Wood, Joy, Hallowes, Hubbard, &c. &c. The report stated that the number of members exceeded that of any previous year, being 164; the deaths and withdrawals, 6; whilst the new members were 9. The income of the Society from subscriptions, donations, and the interest of funded property amounted to £403 13*s*. Two new applicants for assistance were placed on the list, making, with the annuitants of the previous year, ten in the receipt of grants, the amount given being £410. The largest sum granted to an annuitant was £80, the smallest £10. The death of the treasurer, Henry Denne, Esq., was announced; his successor, George Rigden, Esq., being elected to fill the post. The expenses of management are about £30 annually; the subscription £1 1*s*. a year. Its claims being purely philanthropic, and based on the principle of self-help, this Society ought to embrace every medical man in the county.

M. RICORD.

WE understand that M. Ricord is about to pay a visit of longer duration than usual to England and Scotland; and that he is likely to be the guest of Mr. Acton, in Harley-street, for a few days in the early part of August. Our illustrious and venerable *confrère* has sustained a heavy loss by the death of his bosom friend, Demarquay; and he seeks consolation in change and travel.

PEPTONES AS A FOOD.

IN a communication made to Pflüger's *Archiv*, MM. Plósz and Gyergyai, from a series of experiments recently performed, state they have ascertained that an animal fed on peptones can increase in weight, and, secondly, that nitrogenous compounds are laid down or deposited in the body. There is hence no absolute necessity that albumen should be absorbed in an unaltered condition, though this is by no means impossible. They have further shown that when peptone is absorbed it quickly undergoes change in the organism, though it cannot be positively stated whether it undergoes conversion into albumen, or whether it undergoes other changes, the albumen in the body proceeding by the action of cells from the products of its disintegration combined with other constituents of the body. They are unable to state when this change occurs. It does not appear that oxygenation plays an important part in the process.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

The special meeting of governors, held on the 9th inst., for the purpose of considering the advisability of adopting the free system, with registration, inquiry, &c., after hearing the objections of the delegates from the working men's meeting held at the Committee-room of the Town Hall, and presided over by Mr. Gamgee, and also the arguments adduced in favour of the free system by the present and late chairman of the hospital, Dr. Heslop, and others, decided, on the recommendation of Mr. Muntz, to adjourn the discussion of the subject until November next, so as not to endanger the Hospital Sunday collection, which this year falls to the lot of the Queen's Hospital, and to give further time to the governors to consider the importance and value of the proposed changes in the administration of the hospital.

ELIMINATION OF ALCOHOL BY THE RESPIRATION.

Aug. Schmidt (*Centralblatt*, 1875, p. 371) states that, having read Henbach's late observations showing that little or no alcohol appeared in the urine of febrile patients to whom it had been freely administered, he resolved to submit the expired air to renewed investigation, and the result of his experiments is, that when 50 ccm. of absolute alcohol have been consumed, at most only a trace can be discovered in the expired air. This is in full accordance with the statements of Anstie and Dupré.

The Guardians of the Keighley Union have applied to the Local Government Board to defer proceedings in the matter of the *mandamus* to compel them to carry out the Vaccination Acts. We are glad to learn that the application was unsuccessful. The Central Authority, after refusing to concede to the request, advised the guardians to comply without delay with the requirements of the law, and thus render unnecessary any further proceedings on the writ, which could only result in increased cost and trouble to the local representatives. On the receipt of this communication a resolution was proposed, to the effect that the board accepted the decision of the judges, and pledged itself to give the necessary instructions for enforcing vaccination. The obstructive members, we regret to say, carried the day, and the resolution was lost, six voting for and nine against it. In the meantime small-pox is epidemic in the district.

The arrangements in connexion with the meeting of the Social Science Congress, to be held at Brighton, are now completed. Under the section of Health Department we find that the following questions will be discussed:—1. To what causes are to be attributed the ill-construction and want of sanitary provisions which exist in the dwellings of the upper and middle classes, and what is the best method which should be adopted to remedy and rectify the same? 2. What are the advantages or disadvantages of water-supply being lodged in the hands of local authorities? 3. What are the advantages of English, as compared with foreign, watering-places and health resorts? What are the best means for rendering the English watering-places more efficient, for obviating the dangers arising from the occasional introduction of infectious diseases, and for determining the annual rate of mortality in each district?

The Manchester and Salford Sanitary Association have forwarded a petition to Lord Derby for presentation in the House of Lords making various suggestions with reference to the Public Health Bill. It is recommended that clauses be inserted specifying certain fevers and other infectious diseases which shall be within the compass of the Act, and providing that such cases shall be speedily brought under the notice of the sanitary authority having jurisdiction over the area in which they occur, medical men to report immediately the appearance of infectious disease. Also that every local sanitary authority shall make monthly returns to the Local Government Board.

A Parliamentary return has just been issued, showing the cases in which the Local Government Board in Ireland have interfered in revising the salaries of sanitary officers appointed under the Act of last session. By this it appears that the authorities of thirty unions and of three boroughs fixed the salaries of these unfortunate officers at so low a figure that they raised at head-quarters in most cases as much as, and in some cases more than, 50 per cent., and even now seem to be but pittances.

In our notice last week of the election of Mr. Brudenell Carter to the Professorship of Surgery and Pathology at the College of Surgeons, we inadvertently referred to him as having been the only applicant for the office. This is an error. Mr. Carter was appointed to the chair, without solicitation on his part, on the nomination of a very distinguished member of the Council, on which circumstance Mr. Carter has our hearty congratulation.

The deaths in London last week amounted to 1400; and included 27 from measles, 58 from scarlet fever, 3 from diphtheria, 53 from whooping-cough, 15 from different forms of fever, 179 from diarrhœa, and 171 referred to diseases of the respiratory organs. Five deaths from puerperal fever were recorded in the period.

On Monday the Prince and Princess of Wales opened the new Children's Home at Norbiton, in connexion with the Metropolitan Convalescent Institution. The new Home will accommodate 150 children. We understand that the ventilating and sanitary arrangements of the building are excellent.

The presiding magistrate at the Greenwich Police Court has announced his intention not to impose fines in cases of adulteration of milk with water when it is not over 10 per cent. This determination cannot be said to be in strict accordance with the terms of the Act, and we shall probably hear more of the matter.

Mr. William Craig, of Maryport, Cumberland, formerly of Strathaven, Lanarkshire, who was admitted a Licentiate of the Faculty of Physicians and Surgeons of Glasgow in the year 1814, died on the 4th instant at the advanced age of ninety years.

In the House of Commons this week Mr. Hardy, in reply to Mr. Lyon Playfair, said he hoped to be able at an early date to publish the new regulations in regard to militia medical officers.

H.R.H. the Duke of Edinburgh has consented to become President of the Seamen's Hospital Society at Greenwich, and has presented the institution with a donation of thirty guineas.

A vessel has arrived in the West India Docks, from Mauritius, with several cases of scurvy on board.

THE Hospital Sunday Fund continues to receive valuable contributions. Not the worst Christians in this matter this year are the Jews, who have contributed in all £991 14*s.* 4*d.*, as against £950 14*s.* 11*d.* in 1874. We shall reserve our comments on the collection for 1875 till it is nearer completion.

WE understand that Dr. R. Beveridge, of Aberdeen, is a candidate for the vacant chair of Medicine in the University of that town. Dr. Beveridge appears to have strong claims for the appointment.

IN the House of Commons on Monday night the Medical Acts Amendment (College of Surgeons) Bill was read a third time and passed.

REPORT
OF
The Lancet Sanitary Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

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INTRODUCTORY—(*Continued.*)

HAVING reviewed the various circumstances that influence the health of schools, either from insanitary conditions of the neighbourhood in which they are situate, or from defective sanitary and domestic arrangements in the schools themselves, we pass on to a consideration of the nature and extent of the medical supervision that ought to be exercised over the boys.

Medical Supervision of Schools.

Generally speaking, one of the leading practitioners of the town or neighbourhood in which the school is situate is the ordinary school attendant. At Eton, Winchester, and Harrow the house master employs his own medical man to attend the boarders in his house. At Marlborough and Rugby there is a special medical man attached to the school, who not only attends to the boys when ill at all the houses, but advises on all matters connected with sanitary management. Whatever arrangement may be made, however, with regard to individual attendance on boys when sick, we think that one medical man should be specially attached to every school, whose duty it should be to constantly overlook the school arrangements and to make himself acquainted with the habits and constitutions of the boys. In small schools, or in places where it is difficult to meet with medical men having the necessary sanitary knowledge, the medical officer of health of the district, or nearest large town, should be invited to make a periodical visitation and report on the sanitary arrangements, and see that everything is in an efficient and satisfactory condition.

The system of medical supervision is most completely carried out at Marlborough and Rugby; and from what we saw at these schools, and at one or two others, we have been able to draw up a series of recommendations which we think might be adopted in every educational establishment. In the first place, on a boy's entering the school, the parent should be obliged to furnish correct information whether the lad has had any contagious disease, and if so of what nature, and the date of its occurrence; and whether there is any peculiarity of constitution that ought to be noticed. The boy should then be carefully examined by the school medical attendant, and his name, age, weight, height, and girth round the chest entered, together with the foregoing particulars, in a register. On leaving school for the vacation he should again be seen by the medical attendant, and his increase in height, weight, and girth carefully recorded. A certificate stating the condition of the boy's health during the past half-year should be sent to the parents, who should be obliged to furnish another on the boy's return, stating if the boy has been ill or not during the vacation, and if so it should be countersigned by the family attendant, certifying the nature of the disease. Dr. Frederick Smith, of Lewisham, has drawn up a useful Register of Health in which most of the foregoing particulars can be noted, and which will be found very convenient. We have been told that many of the above suggestions are not practicable, but we can only say that most of them are enforced at Marlborough and Rugby, and that the personal inspection of the boys at the beginning and end of each half is carried out at some of the naval schools. The advantages to be gained by attention to these details are manifest. Supposing scarlet fever or measles break out in a school, the medical attendant at once learns what boys have had the complaint by looking over his register, and can then judge how many boys there are who are liable to the disease, and make provision accordingly. By examining a boy on his return from the vacation the medical man would have a chance of detecting any contagious complaint which may have been overlooked at home. We have already shown that such oversights are not uncommon, especially with respect to mild cases of scarlet fever. The half-yearly record of the boys' increase in height, weight, and girth would be invaluable, and the medical attendants of our schools would soon be able from such observations to furnish us with important information with regard to the development at this epoch of life, besides being able at once to detect any changes in an adverse direction, and by timely treatment to arrest the mischief. Dr. Fergus, of Marlborough, tells us that, in many cases, "great benefit has resulted from sending delicate boys away for the spring term, and allowing them to return for the summer and autumn terms. This causes no loss of time, as it so much promotes the general health as to enable a boy whose constitution is weak to go through his school career and end his time successfully; whereas, if he had been exposed to the cold and trying weather of spring at school, he would probably have had some acute attacks which would shatter him for years." Again, heart affections not uncommonly gradually supervene in delicate and rapidly-growing boys when exposed to undue strain and excitement. Only an intimate acquaintance with the physical condition of each boy would enable the medical attendant to detect the mischief at an early stage, and to regulate the school-life accordingly, or to send the boy away for a term, or longer period, until his health and strength allow him to return. Lastly, every boy who is not in school ought to be in the sick house. This rule is strictly enforced at Marlborough, and Dr. Fergus finds that not only is all malingering checked, but, when needful, prompt treatment and immediate isolation can be secured if the case prove an infectious one.

We cannot leave this part of our subject without referring to the influence the school work and sports have upon the health of the boys. This is a point on which we think the masters might more frequently consult with the medical attendants. With respect to the work, we did not find at the large public schools that the amount required was excessive, or that any undue pressure was put on the boys. At many of the smaller schools and proprietory colleges, however, the system of cramming is unmercifully employed. These places, not having the prestige of the older schools, endeavour to secure public patronage by forcing on candidates for successful competition in every kind of examination. It is at these schóols the breakdowns are most frequent, and the cases that have been brought under our notice have been especially sad. The remedy lies with the parents. Schools having such reputations ought to be carefully avoided, for if a boy be clever he will be worked out to the last ounce, and if stupid it is probable that he will be altogether neglected. We think that the ordinary school work ought not to exceed more than six hours on whole school days, or more than four on half-holidays; before an examination, a senior boy might be allowed to extend the time to eight hours. We must condemn the practice, permitted at some schools, of allowing boys to sit up till ten or eleven o'clock in their studies or sitting-rooms; all work should be finished by nine o'clock, and none permitted after that hour, and the boys should be in bed before ten o'clock. With regard to the school sports, we find that, with the exception of Marlborough and Rugby, little or no supervision is exercised over the boys: the weak and the strong are allowed to engage in the same sports without any regard being paid to their physical capabilities. At Marlborough and Rugby the medical officer receives with each boy a statement from the parents of their son's previous medical history, with an account of any peculiarity of constitution. If the boy is considered weak and delicate, it is settled what games he may be permitted to join in, and to what extent he may follow them. Dr. Dukes, of Rugby, tells us that the Natural History Society established at that school engages the attention of those who are unable to join in the games, and gives them sufficient exercise in the pursuit of practical geology, zoology, and botany.

We have been asked to say a few words with respect to school punishment. The subject is both difficult and delicate. There can be little doubt that corporeal punishment often has an injurious effect on boys of a highly nervous temperament, and we think the master ought always to consider what the probable effect may be before resorting to it in any individual case. We think it ought only to be administered for immoral offences, indecent conduct, or for bullying. It ought never to be used for default in school work; at all events not till the diagnosis between idleness, natural stupidity, and ill-health is made a little more certain. No master should be allowed to box a boy's ears, or rap his head with his knuckles; very serious and even fatal results have frequently followed this punishment, and its practice has been generally abandoned at all the larger and better class of schools. Giving impositions for boys to learn or write out in their play-hours we think injurious, as it confines the boy to the school-house and prevents his taking proper exercise; punishment drill would be far preferable, as far as health is concerned, and we believe would be quite as effectual. Few boys would care to spend their half-holidays in marching up and down a flagged court-yard, and going through that monotonous exercise known as extension drill. Indeed, from our own remembrance of the drill-sergeant, we think boys, if they had their choice, would prefer the imposition, over which they can dawdle at their own discretion.

THE COMPARATIVE ANATOMY OF THE PLACENTA.

By PROFESSOR TURNER.

In his third lecture (June 16th) Professor Turner described the formation of the zonular placenta which is met with in carnivora, in the seals, and in the hyrax and elephant. As but little is known concerning its minute structure in the two last-mentioned animals, the lecturer limited himself to the carnivora and seals, premising that this form of placentation was far more complex than either the diffuse or the cotyledonary form, and required much careful study to make its anatomical analysis.

The gravid uterus of the carnivora is bicornuate; each horn containing two or more fœtuses, each of which again is enclosed within a separate compartment of the uterus, and is provided with its own membranes. Professor Turner has examined the placentation of the cat at different periods of gestation with the following results:—A few days after impregnation, when each compartment measures about eight-tenths of an inch in length, the series of compartments looking like a string of beads, the chorion, with its still simple or but slightly branched villi, is readily detached from the mucous membrane. Already, however, the uterine mucous membrane is seen to have a different character at each pole (for about one-tenth of an inch) of the compartment from that which it presents between these parts, being smooth at the poles, but elevated, thick, and spongy, and studded with the minute apertures of the crypts in the intermediate part.

Speaking of the relation of the utricular glands to these crypts, Prof. Turner stated that there was no question that a large number of the latter, if not all, were new-formed structures, as shown in those animals with diffuse placentation. The glands lie immediately subjacent to the crypts, and may either have independent apertures, as in the ruminants, pig, and mare, or some may open into the crypts; but there is much difficulty in the investigation of this point, owing to the modified condition of the surface of the mucous membrane. The crypts, however, far outnumber the glands; and each of them is lined by a layer of epithelium supported by a vascular sub-epithelial connective tissue, as in those animals previously described.

Passing now to a later stage—namely, when a uterine compartment measures about 1½″ in its long diameter,—the chorionic villi are found to be more restricted in their distribution, and the crypts also are limited to a narrower middle segment of the compartment. There has been a recession from the poles towards the centre. So far, however, it has still been possible to detach the villi from the mucous membrane. Later still, there is a very considerable portion of the pole of each chorion free from villi, which now come to be limited to the middle third of that structure; the altered mucous membrane being similarly limited; and in this later stage the separation of the fœtal from the maternal part of the placenta becomes impossible.

Vertical sections through the fully-formed placenta show a complete interlocking of the branched villi with plates of the maternal tissue, representing the walls of the crypts, the villi reaching nearly to the surface of the mucous membrane, and the intervillous laminæ passing up to the surface of the chorion. On horizontal section, each villus is now seen to be much branched and sinuous, and to be bounded accurately by the modified crypt walls. Hence there comes to be a mechanical difficulty in the separation of the fœtal villi from the walls of the crypts, and it is this which has caused these animals to be placed among the Deciduata. The maternal laminæ consist of a basis of connective tissue freely supplied with vessels, in part capillary (as in the mare, cow, sheep, &c.), in part composed of larger trunks twice or three times the diameter of the fœtal capillaries. It is, in fact, the first indication of a sinus system in the maternal placenta. The epithelium of the crypts is columnar or irregularly polygonal in shape, the cells in the cat being peculiar in having a highly refractive nucleus.

The placenta of the cat when shed presents a perfectly smooth appearance on its uterine surface—a character due to the fact that the whole or a great part of the mucous membrane is cast with the placenta.

The placenta of the bitch resembles that of the cat in its general characters. However, the whole of the mucous membrane is not shed, and a ragged flocculent surface is left from the tearing across of the intervillous processes.

In the fox the formation of the placenta follows the same plan as in the bitch, but here the maternal vessels are more dilated, and are of colossal size as compared with those of the dog. All the epithelial cells of the crypts in the fox are columnar and of great size.

Passing to the placentation of the seal, which was illustrated by a very fine specimen from the College Museum, Prof. Turner showed that the uterine surface of the placenta in this animal was very ragged and irregular, owing to a very large amount of mucous membrane being left on the uterus when the placenta is detached. In this respect, then, the seal resembles the dog rather than the cat. The placenta is divided by means of deep fissures into convolutions, each of which is subdivided by smaller fissures into lobules. The processes of maternal tissue are here greatly modified, passing up as thick vascular bands in the fissures into the substance of the placenta, where they surround the groups of ramified villi. There is further a remarkable anastomosis of the chorionic villi with each other at the periphery of the lobuli, so as to enclose the finest processes of the maternal tissue. This arrangement is almost ordinal in its peculiarity.

Prof. Turner then formulated the following general conclusions:—1. That in studying the placenta its compound nature (fœtal and maternal) must be kept in mind. 2. That the maternal part is nothing but the modified mucous membrane of the uterus, but is of more complex nature to start with than the simple chorionic villi of the fœtal portion. 3. That a whole series of crypts is developed in the mucous membrane for the reception of the villi; these crypts being simple, or branched, as in the pig, mare, cetacean, and ruminants; or sinuous (as in the cat), or (as in the seal) subdivided into primary, secondary, and tertiary structures, till the whole mucosa is split up into a microscopic network. 4. That the crypts are not developed from the utricular glands, but are new interglandular formations. 5. That the "decidua serotina" (or that portion of the maternal mucous membrane between the placenta and the uterine wall) exists in all these more simple forms of placentation; in the diffuse form it is the whole mucous surface; in the cotyledonary it is the "cups"; in the zonular, the mucous membrane with its laminar outgrowths; so that it follows that the large granular cells of the decidua serotina of the human uterus are no other than the modified cells of the crypts. 6. That in the zonular variety there are indications of the commencement of a sinus system in the maternal placenta.

As to the general morphology of the placenta, Prof. Turner remarked that mammalia were divided into two great groups, the *non-deciduata* and the *deciduata*; in the former (represented by the pig, mare, and cetaceans) no portion of the maternal tissues comes away at birth, while in the latter the maternal mucosa is more or less wholly detached (as in carnivora, quadrumana, and man). The usual definition of a deciduate placenta was that in which *vascular* maternal structures were brought away. Such a definition was too limited, and the term should be extended to include all those animals in which *any* part of the maternal structures was shed; for there are definite grades of deciduation, and Prof. Turner has recently found abundance of the epithelial lining of the cotyledonary crypts on the shed membranes of lambs and calves, showing that the ruminants should properly be classed as deciduata, and not among the non-deciduata. Then there are differences in the true deciduata themselves—e.g., in the cat the shedding is almost as complete as in the human female, the whole or great part of the mucous membrane in the placental zone coming away.

Lastly, as to the general physiology of the subject, the fœtus must be regarded as a parasite living on the juices of the mother. Doubtless in some animals the utricular glands play an important part in the nutrition of the fœtus; but in the seal and carnivora their epithelium is degenerated; and in the human female these glands disappear at the third or fourth month of pregnancy. The process of nutrition is then chiefly carried on by the new-formed crypts, which have all the characters and structures of glands, being lined by an epithelium and highly vascular, as is well seen in the diffused, cotyledonary, and zonular placenta. Harvey described a secretion in the cotyledons of ruminants which he termed "uterine milk," the product of the crypts in these structures. There are certain difficulties to be met with in applying these conclusions to the placentation of the higher mammalia, but the consideration of these Professor Turner said he would leave to another occasion.

The lectures were abundantly illustrated by several excellent specimens and histological preparations; and Professor Turner's lucid descriptions were aided by a series of well-executed diagrams.

Obituary.

J. F. CLARKE, M.R.C.S.

Those of our readers, and they are now few and far between, who can remember the establishment of The Lancet under the late Mr. Wakley, and its early career, will naturally associate therewith the name of the man whose death we have now to record. Mr. Clarke was probably one of the best known medical journalists in London. He commenced work for The Lancet (on the recommendation of Liston, who had a warm regard for him) shortly after its establishment, and was an eminently useful member of the staff for many years. For his line and mode of action were in consonance with the tone and feeling of the time some forty years ago, when close corporations existed, abuses abounded, and active purgations were sorely needed in our profession. Mr. Clarke was physically as well as mentally active. He was ingenious, too, in carrying out for himself ways and means of obtaining information, if that information were not procurable through the ordinary channels. Having passed through, seen, and observed closely several phases or turning points of the profession and their representatives, he had a fund of anecdote possessed probably by no other man of his own cloth in London, and his jokes were mostly good, and sometimes pungent. He was, in fact, a peripatetic encyclopædia of the past generation of doctors, commencing at a time when private schools of medicine flourished, and the Apothecaries' Society reigned supreme. He took his first diploma in 1837, and practised in Gerrard-street for many years, where he died on the 6th of July last.

JAMES BRYDGES SAYERS.

Frequenters of the Royal Dublin Society house will miss henceforth a familiar face. "Old Doctor Sayers," whose marked features and bent form have for more than twenty-five years been so well known at all the meetings of the Society, will appear there no more. He died at the advanced age of eighty-three on April 20th. He deserves, however, somewhat more than this passing mention. His family, which originally bore the name of Brydges, were of English origin. The name of Sayers was assumed with a property bequeathed with that condition.

James Brydges Sayers was born in the year 1792 in Limerick, near which place his father owned some property. He early showed an unusual capacity for knowledge, so that he became at the age of fourteen a student at the University of Edinburgh. During the following ten years he studied not only there, but in London and Dublin, and from all three cities he obtained diplomas and certificates in medicine, surgery, and midwifery. At the end of this period he appears to have had some intention of visiting Italy, in order to study at Padua and elsewhere the practice of the Italian schools of medicine and surgery; but at this time his elder brother, William Brydges Sayers, who was in extensive practice as a physician in Limerick, died, and James was summoned home to take his place. He continued to practise there for nearly thirty years, during which time he earned the affectionate regard of many whose lives he was the means of prolonging and whose sufferings he alleviated. About the year 1846 his health began to fail, and in 1848 he finally retired from practice, and removed to Dublin.

During all his active life as a physician, and even before, when only a student, Dr. Sayers had taken a deep interest in scientific pursuits, for his attainments in which he earned the respect of many whose names are now deservedly eminent in the world of science. His removal to Dublin enabled him to indulge his tastes more fully in the congenial atmosphere of the Royal Irish Academy and the Royal Dublin Society, of which last he was, as we have said, a prominent member.

Medical News.

Royal College of Surgeons of England.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Court of Examiners on Monday, Tuesday, and Wednesday last:—

I. B. Noble and I. H. Callender, Newcastle-on-Tyne; F. Le M. Grosett, Toronto and Edinburgh; K. R. Kirtikar, University Coll. and Bombay; J. Peake, Glasgow; W. E. Margetson, Leeds; F. J. Spranger, G. F. Harris, and C. Winterbottom, St. George's Hospital; C. E. Shelly, Cambridge; A. R. M'Dougall, Edinburgh; W. Rhodes, Birmingham; F. F. Folkes, J. E. Pilkington, and J. Newton, Manchester; E. L. M'Ardle, R. Jones, W. Huey, and R. F. Owen, Liverpool; J. A. Irwin, L. R. Wilkin, and W. F. Jones, Dublin; R. Edmunds, E. S. Bontein, W. T. Jackman, J. S. Lambert, T. W. Fagg, W. M. Burgess, R. Lyddon, T. V. Nicoll, A. G. P. Gipps, W. Kay, F. A. Trevan, D. A. Sugden, A. S. Bradford, F. C. Craddock, A. G. Bernard, and J. Rhys, St. Bartholomew's Hospital; A. A. Wolff, St. Thomas's Hosp.; H. W. J. Liebstein, L. M. B. Jones, J. A. Masters, A. F. Stevens, and J. F. Dell, Guy's Hospital; R. T. Richardson, London Hospital; G. S. Robertson, Westminster; J. V. Continho, Bombay and University College; C. C. Jewell, C. C. Claremont, J. W. Bond, W. Gristock, and T. B. Green, University College Hospital; R. W. Collett, St. George's and Westminster Hospitals; H. C. Jee, Birmingham and Guy's Hospital; J. C. Gardner, Newcastle and University College; W. Pratt, Aberdeen; C. F. Goode, St. Mary's Hospital.

For the Pass Examination for the Membership of the College, which commenced on the 16th, there are over 170 candidates.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on July 8th :—

Batterbury, Richard Legg, Haverstock-hill.
Blake, Andrew Henry, Castle-street, Berners-street.
Blake, Henry, Bedford.
Burton, Harry, Greenheys, Manchester.
Cooper, John Neild, Hyde, near Manchester.
Jones, Cyril Lloyd, Blackfriars-road.

The following gentleman passed the Primary Professional Examination on the same day :—

Inman, Robert Edward, London Hospital.

A **fatal** case of heat apoplexy, in a boy aged ten years, occurred last week at Upton.

John Reid, Esq., R.N., Largan Dunoon, has been placed on the Commission of the Peace for the county of Argyll.

Recent advices from Constantinople state that vessels arriving there from Syrian ports are now required to perform ten days' quarantine in the Dardanelles.

A **warder** in Greenock Lunatic Asylum has been charged with causing the death of a lunatic by throwing him down and kicking him. The insane patient was violent and first attacked the warder.

Dr. Samuel Rooth, of Dronfield, has been awarded by the Local Government Board a gratuity of £18 10s. for efficient vaccination in his district (Dronfield District of the hesterfield Union). This is the third time in succession that he has received it.

Presentation.—On the 6th inst., at Southport, near Liverpool, Mr. George Coombe, having fulfilled the period of his engagement as house-surgeon of the infirmary of that town, received from the governors of the institution a very handsome recognition of the services he had rendered. The first gift was a copy of a resolution of the Board of Governors, embodying a very warm expression of their thanks, beautifully illuminated on vellum; the second gift was a chronograph watch of the value of 40 guineas; and lastly, a purse containing £100.

Bequests, &c., to Medical Charities.—Miss Julia Ann Scott Webb, of Cadogen-place, bequeathed £5000 each (less duty) to the Metropolitan Convalescent Institution, Walton-on-Thames, and the Royal Hospital for Incurables, Putney. The Brighton and Hove Dispensary has received £5000 under the will of Mr. John Paine. The Hospital for Sick Children, Great Ormond-street, has received £1000 anonymously for the support of one cot in perpetuity in the new hospital. Mr. Peter Hardy bequeathed £1000 to the Worcester Infirmary, and £500 to the Worcester Dispensary. Mr. Wm. Henry Gore Langton, of Prince's-gate, Hyde-park, bequeathed £500 each to the Bristol Royal Infirmary and the Bristol General Hospital.

Medical Appointments.

Archer, E. G., M.R.C.S.E., has been appointed Medical Officer to the Ancient Order of Foresters, Diss, vice Button, resigned.

Barker, W. L., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Convict Prison, Chatham, vice Burns, transferred.

Bell, J. H., M.D., M.R.C.S.E., has been appointed a Medical Officer to the Bradford, Yorkshire, Infirmary and Dispensary.

Betts, N. P., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Ashby-de-la-Zouch, vice Dicken, deceased.

Butler, E. Fitz Garret, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Boston District and the Workhouse of the Boston Union, vice Radley, resigned.

Cobbold, C. S. W., M.D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Medical Officer at the Metropolitan Asylums District Asylum for Lunatics, Leavesden.

Crawford, J., M.D., C.M., has been appointed Medical Officer for the Manningham District of the Bradford Union, Yorkshire, vice Sugden, deceased.

Davies, J., M.D., has been appointed Medical Officer and Public Vaccinator for the Ebbw-vale District of the Bedwellty Union, vice Brewer, resigned.

Drapes, J. B., M.B., C.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Keadue Dispensary District of the Boyle Union, Co. Roscommon, vice Smith, appointed to the Durrow Dispensary District of the Abbeyleix Union, Queen's County.

Dudley, J. G., M.D., has been elected a Consulting Physician to the North London Consumption Hospital.

Duncan, A., M.B., M.R.C.S.E., has been appointed Medical Registrar to the Charing-cross Hospital, vice Creighton, resigned.

Godson, C., M.D, C.M., M.R.C.P.L., has been appointed Assistant Physician-Accoucheur to St. Bartholomew's Hospital.

Goyder, D., M.D., L.R.C.S.Ed., has been appointed a Medical Officer to the Bradford, Yorkshire, Infirmary and Dispensary.

Greenfield, W. S., M.D., M.R.C.P.L., has been appointed a Physician to the Royal Hospital for Diseases of the Chest, City-road, vice Donkin, resigned.

Gregory, G., M.D., L.R.C.P.L., M.R.C.S.E., has been reappointed Medical Officer of Health for the Westhoughton Urban Sanitary District: £30 per annum.

Harrison, H. B., M.R.C.S.E., has been appointed Second Assistant Medical Officer to the Metropolitan Asylum District Asylum for Imbeciles, Caterham.

Hayman, F. D., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Metropolitan Free Hospital, Devonshire-square, vice Harrison, resigned.

Johnston, W. W., M.R.C.P., has been elected a Consulting Physician to the North London Consumption Hospital.

Leacroft, J. W., M.B., has been appointed a Public Vaccinator to the Alcester Union, vice Hiron, resigned.

Meade, H., M.R.C.S.E., has been reappointed a Medical Officer to the Bradford, Yorkshire, Infirmary and Dispensary, upon the expiration of his term of office under the rules.

Pettinger, Mr. G. W., has been appointed a Factory Surgeon for Manchester, vice Dr. Pettinger, who has resigned from ill-health.

Powell, J., M.R.C.S.E., has been appointed Medical Officer for the Penbryn District of the Newcastle-Emlyn Union, Carmarthenshire, vice Evans, deceased.

Rose, W., F.R.C.S.E., has been appointed an Honorary Surgeon to the Royal Free Hospital, vice Hill, deceased.

Ruckley, H. R., L.R.C.P.Ed., L.R.C.S.I., has been appointed Certifying Factory Surgeon for the District of High Wycombe, vice Bowstead.

Shone, W. J., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Great Marlow.

Smith, G., M.D., M.R.C.P.L., has been appointed a Physician to the Royal Hospital for Diseases of the Chest, City-road, vice Dobell, appointed a Consulting Physician.

Stafford, J. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 4, or Windlesham District of the Chertsey Union, Surrey, vice Kough, resigned.

Stone, V., F.R.C.S.Ed., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Fettercairn, vice Stephen, resigned.

Williams, J., M.D., has been appointed Medical Officer to the Penrhyn Quarry Benefit Club and Hospital, vice Roberts, resigned.

Wilson, C. W., M.R.C.S.E., has been appointed a Surgeon to the Convalescent Society and Prudhoe Memorial Convalescent Home, Whitley, vice Forster, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Berton.—On the 4th inst., at Sydenham, the wife of Edwin D. Berton, M.B., of a daughter.

Duckworth.—On the 10th inst., at Grafton-street, Piccadilly, the wife of Dyce Duckworth, M.D., of a son.

Glen.—On the 6th inst., at South-bank, Yorkshire, the wife of James Glen, M.D., of a son.

Hewlett.—On the 14th inst., the wife of John C. Hewlett, Esq., of The Ferns, Hornsey, and Cree Church-lane, Leadenhall-street, of a daughter.

Macfarlane.—On the 8th inst., at Walmer, Kilmarnock, N.B., the wife of Alex. W. Macfarlane, M.D., of a daughter.

Miller.—On the 9th inst., at Church-road, Upper Norwood, the wife of R. M. Miller, M.D., of a daughter.

Sutcliffe.—On the 5th inst., at Denmark-hill, the wife of John Sutcliffe, M.R.C.S.E., of a daughter.

MARRIAGES.

Fletcher—Portchett.—On the 7th inst., at St. John's, Tottenham, John Corbet Fletcher, M.D., to Martha Parker, daughter of J. S. Portchett, Esq.

Phillips—Anderson.—On the 7th inst., at Edinburgh, Robert Edward Phillips, B.A., M.B., of Bromley, Kent, eldest son of the late Edward Phillips, M.D., to Christian Gibson, second daughter of Major-General Anderson, C.B., late Royal Artillery.

DEATHS.

Bell.—On the 24th ult., at The Scores, St. Andrews, Oswald H. Bell, M.D., aged 38.

Birt.—On the 10th inst., at Harcourt-terrace, West Brompton, Hugh Birt, F.R.C.S.E., aged 61.

Burnett.—On the 4th inst., at Tullow, Co. Carlow, R. Burnett, L.K.Q.C.P.I., aged 67.

Crozier.—On the 9th inst., at Arundel-street, Strand, H. Acheson Crozier, M.R.C.S.E., aged 74.

Hopkinson.—On the 24th ult., at St. Martin's, Stamford, Wm. Lander Hopkinson, M.D., aged 77.

Menzies.—On the 7th inst., at Westbourne-park-road, Duncan Menzies, M.R.C.P.L., Deputy Inspector-General Army, aged 72.

Mitchell.—On the 2nd inst., at Ladykirk House, Monkton, Ayrshire, Alex. Mitchell, M.D., R.N.

Moir.—On the 8th inst., at Dicconson-street, Wigan, Lancashire, Julie Marie, the dearly beloved wife of G. C. Algernon Moir, M.R.C.S.E., L.R.C.P.L., in her 25th year.

Olive.—On the 4th inst., at Buxted, Sussex, Edward Olive, M.R.C.S.E., aged 37.

Taplin.—On the 10th inst., at Lansdowne House, Coventry-road, Smallheath, Birmingham, Edith, the infant daughter of J. F. Taplin, M.D., aged 13 months.

Workman.—On the 29th ult., at Basingstoke, Geo. Workman, M.R.C.S.E., aged 71.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Report from the Court of Examiners of the Number of Candidates who have presented themselves for the Primary and Pass Examinations for the Diploma of Member of the College during the Collegiate Year 1874–75, showing the number who have passed and have been rejected from each Medical School during that period.

PRIMARY EXAMINATIONS.—1874–75.

Medical School.	Totals.	Number passed.	Number rejected.	Percentage of rejections.
University College	87	61·50	25·50	29·3
St. Bartholomew's	80·83	61·3	19·50	24·1
Guy's	78	66	12	15·3
St. Thomas's	64·3	27·83	36·50	56·7
King's College	47	33	14	29·7
London	41·83	26	15·83	37·8
St. George's	31·50	22·50	9	28·5
Middlesex	26·50	16·50	10	37·7
St. Mary's	25·50	20·50	5	19·6
Charing-cross	13·50	11	2·50	18·5
Westminster	10	2	8	80
Manchester	33·50	28	5·50	16·4
Birmingham	28·83	20	8·83	30·6
Liverpool	25	17	8	32
Leeds	23·3	17·50	5·83	25
Bristol	16	11	5	31·25
Cambridge	15	11·50	3·50	23·3
Newcastle	8	5·50	2·50	31·25
Sheffield	3·3	1	2·3	70
Dublin	13·50	6·50	7	51·851
Belfast	1·50	1·50	0	0
Cork	1	1	0	0
Galway	·50	·50	0	0
Edinburgh	28·3	23·50	4·83	17·05
Glasgow	9	3·50	5·50	61·1
Aberdeen	2·83	1·50	1·3	47·05
Calcutta	1	1	0	0
Montreal	3·83	3·83	0	0
Toronto	3	1	2	66·6
Kingston	1	0	1	100
Halifax	·50	·50	0	0
Heidelberg	·50	·50	0	0
Vienna	·50	·50	0	0
Totals	727	504	223	30·5

PASS EXAMINATIONS.—1874–75.

Medical School.	Totals.	Number passed.	Number rejected.	Percentage of rejections.
Guy's	96·83	73·83	23	23·7
University College	69·16	61·6	7·50	10·8
St. Bartholomew's	61·3	50·3	11	17·9
St. Thomas's	49·50	40	9·50	19·19
King's College	29·50	16·50	13	44·06
London	28	22	6	21·4
St. George's	27·50	19	8·50	30·909
St. Mary's	14·3	11·50	2·83	19·7
Middlesex	10·16	7·16	3	29·5
Charing-cross	4·50	2	2·50	55·5
Westminster	3·50	2·50	1	28·5
Leeds	15·83	10·83	5	31·5
Manchester	14	12·50	1·50	10·7
Birmingham	12	5	7	58·3
Liverpool	11·50	7·50	4	34·7
Bristol	10	6	4	40
Cambridge	6·83	5·3	1·50	21·9
Newcastle	6	4	2	33·3
Sheffield	5·3	3	2·3	43·75
Hull	1	1	0	0
Dublin	9·83	5	4·83	49·1
Belfast	1	1	0	0
Galway	·50	·50	0	0
Edinburgh	10·50	8	2·50	23·8
Aberdeen	1·50	1·50	0	0
Glasgow	9·3	6·83	2·50	26·7
Montreal	2	2	0	0
Toronto	2	1·50	50	25
New York	2	2	0	0
Philadelphia	1	1	0	0
Paris	·50	0	·50	100
Vienna	·50	·50	0	0
Heidelberg	·50	·50	0	0
Totals	518	392	126	20·4

20th May, 1875. F. Le Gros Clark, President.

Notes, Short Comments, and Answers to Correspondents.

Hospitalism.

The *Continental Herald* states that Dr. Lefort, surgeon of the Beaujon Hospital, has just placed in the grounds of the institution a vast tent, to which he has removed all his patients. The object of Dr. Lefort is to try whether the open-air system would not affect favourably the amount of mortality following surgical operations, and thus help to solve the question of hospital ventilation.

M. Tholozan's Views on Cholera.

M. Tholozan is physician to the Shah of Persia, and has been so for many years. He may be considered to have enjoyed special opportunities of studying diseases of Eastern origin. His opinions, therefore, on cholera are entitled to particular attention. Being at the present time in Paris, M. Tholozan has laid his views before the Academy of Medicine, and we here offer an abstract of them. The starting-point of the epidemics of 1831, '47, '52, '56, and '65 had in former communications been settled by the author, he having shown that most of the epidemics which have been observed in Europe for the last thirty years have not been imported from India, but have arisen from the germs left by preceding epidemics. He wished to ground his opinion upon facts alone, especially as to the nature of the original manifestations of cholera, and the manner in which it has spread. M. Tholozan endeavours to prove that in India as well as Europe the epidemics of one period spring from incompletely extinguished former epidemics. Cholera reigns in Europe in the same manner as on the banks of the Ganges. It incontestably travelled first from Asia to Europe; but it is equally sure that for the last sixty years it has settled amongst us, continues so, lies dormant, and sometimes breaks out, just as happens in India. Those who think that every cholera epidemic in Europe is imported from India are in error, no facts supporting the theory. The truth is, according to the author, that the scourge has a wonderful power of spreading, and exhibits variable intensity and symptoms. But although the effects, the manifestations, and the contagious properties present modifications, although the danger may increase or diminish, the morbid entity remains the same, and those who make a distinction between Asiatic cholera and the sporadic form of the disease (cholera nostras) are grievously mistaken. M. Tholozan is a supporter of quarantine and sanitary restrictions, on account of certain advantageous results which have accrued from them.

The letter of *Mr. Cripps Lawrence* shall be kept in mind.

Swimming as a Convivial Entertainment.

To the Editor of The Lancet.

Sir,—If feats in swimming are to become matters of competitive examination, I think some rules should be issued for the performances.

The great danger the swimmer is exposed to is the benumbing effect of cold, and the man who can best endure it is the man capable of remaining uninjured the longest period in the water; but a swimmer who is assisted by "goes" of brandy while he is in the water does not prove how long he can remain in the water trusting *only* to his own strength, but rather what effect spirits have in enabling a man to resist cold. There are plenty of men in England who would think little of swimming twenty miles with the tide running four knots in their favour; but I do not think there are many who could do it comfortably or without suffering if unassisted by refreshments or stimulant of some kind. An experiment might be tried in the interests of science by testing a man's endurance of cold in the water under the effect of different diet. Twenty miles on a teetotal system *versus* the same distance supported by fermented drinks would form a splendid competitive examination, and draw an enormous concourse of publicans and Permissive Bill people as spectators; but of course, so far as swimming pure and simple goes, the trial would prove nothing at all. As a general rule, shipwrecked people or persons falling overboard, or those who jump after them to rescue them, have no kind friends to administer stimulants while boats are being lowered to pick them up. At any swimming competition I should say nothing should be taken when once the swimmer has entered the water until he comes out again. It would be rather curious to ascertain if the loss of heat would be greatest in a long swim if the man before commencing took—first, brandy; secondly, tea; or thirdly, merely rubbed his body well with oil.

Yours &c.,

July, 1875. A Porpoise.

W. M. B.—Under the circumstances mentioned, it would be best to apply at the Fever Hospital. It is not desirable that the general hospitals should admit such cases, unless they are provided with special wards completely detached.

Dr. T. J. Denton.—Hypophosphite of calcium.

Leprosy in Bombay.

A correspondent of the *Standard* writes from Bombay as follows:—

> "There are more than 200 lepers in Bombay; but I little expected to see Europeans among them, and to learn that it was by no means an uncommon thing. One of these unfortunates had been a clerk, one a sailor, and one a railway *employé*. The whole subject is one to which I desire to call special attention. Some days afterwards I went over the Jamsejee Dharmsála, or almshouse, where the great mass of the lepers congregate. Here I saw nearly 200 persons—men, women, and children—suffering from this frightful disease, and occupying rooms which, when vacated by them, are taken by other persons free from the disease. Is it any wonder that under such circumstances the disease should spread? I had the advantage of going over the place with Dr. Vandyke Carter, the greatest living authority on the malady, and his decided opinion is that the only way to stamp it out is to seclude the sufferers. In face of this, how is it that Government allows the lepers to live in a public almshouse, open to all comers, and to mix daily with the crowds that throng the streets of Bombay? No wonder that our unfortunate fellow-countrymen are among the victims of such a system. I may add that some beggarly economy of the Calcutta people bids fair to put a stop to Dr. Carter's researches. He is a man wholly devoted to the study of how to relieve mankind of this scourge. He has visited other countries to prosecute his inquiries. He has undertaken the loathsome task—made glorious indeed by the spirit that animates him—of dissecting the bodies of those who die of the disease, and has by the microscope made important discoveries. One would have thought that gold could not purchase devotion to such a cause, and is it all to be thrown away in order to save a small sum which will probably be immediately wasted in building some useless outhouse?"

Late Messages to Doctors.

SOME patients are peculiarly orderly in regard to their habit of sending for the doctor. They seem always to be taken ill at the proper time, and to send a message that can be considered before their medical officer leaves his house in the morning. And some patients are just the reverse. Their ailments happen at the most inconvenient hours, or rather their messages arrive then—just when the doctor is going to dine, or just after he has come in from a long round, in the course of which he passed the unmethodical patient's door. The Forfarshire Medical Association has properly resolved to try the effect of a remedy for this unmethodical style of patient. According to the report of the proceedings at the seventeenth annual meeting, the resolution unanimously adopted at the last year's meeting, "that all visits sent for at 10 A.M. and requiring to be attended to the same day, should be charged at an extra rate," was again confirmed, and ordered to be advertised in all the papers published in the county. We commend this resolution to the attention of other Societies.

Dr. Ramskill's lecture shall be published.

The New Fever Department of the Sussex County Hospital.

To the Editor of THE LANCET.

SIR,—If you had been acquainted with all the circumstances attending the proposed erection of a new building for infectious disorders in connexion with the Sussex County Hospital, and respecting which there has been a good deal of misrepresentation in the town, I am very much mistaken if you would not have come to a different conclusion as to the desirability of transferring the new building to a site beyond the boundaries of the town rather than placing it where it is now proposed, inside the hospital grounds, and within a few yards of the main building. The fact is that this addition to the hospital originated, not with the fever department, but with the difficulty of knowing what do with our erysipelas cases. Everybody acquainted with hospital practice knows how very important it is that all cases of erysipelas should be immediately removed from the surgical wards, and kept separate from the rest of the patients, with a separate staff of nurses, dressers, &c. &c. This accommodation the Sussex County Hospital does not at present possess, and for the want of it we have not unfrequently been put to very great inconvenience. It was thought accordingly by the medical staff that Miss Poore's beneficent donation could not be better spent than in providing a building for the above object, and, as the funds were sufficient, that it would conduce still further to the convenience and security of the hospital and neighbourhood if the fever wards were also removed, and made part of the new and detached building. Hence the origin of the proposed so-called new fever hospital, of which so much has been said. All general hospitals must have some amount of accommodation for fever and other infectious disorders, for cases which not unfrequently originate within the institution, as well as for the use of the subscribers. Besides, cases of fever are constantly occurring which, either from the weakness of the patients or the unwillingness of the parents and friends, do not admit of being sent long distances out of town. As we do not intend to increase the accommodation for infectious disorders by a single bed, and the new building will enable us to take extra precautions to prevent the spread of infection, both as regards the institution itself and the neighbourhood, it puzzles me to know what possible objection there can be to it.

As regards extra-mural fever hospitals, my impression is, though all medical men readily admit the great importance of isolation in all infectious disorders, that under present circumstances little real good would be derived from them. Setting aside the difficulty which would very often be experienced in getting a suitable site for such institutions, which is now the case with the proposed fever hospital for the metropolis, the cost of the buildings and their subsequent maintenance would be very considerable, and, after all, they would be very little used. People, as a rule, have a great objection to sending their children and relations a long distance into the country. Such institutions might certainly come into use during serious and extensive epidemics; but as regards Brighton there are fever wards at the infirmary which might be made available on such occasions. Granted that one source of infection, both as regards the atmosphere and drains, would be removed from the town centres, yet scores of others would still remain from the private houses where illness existed, so that but very infinitesimal results would be produced. Besides, there is no reason why the evacuations of hospital fever patients should be allowed to go into the street drains at all. They might be disposed of in some other way, or they might be disinfected before passing into the drains, and I hope that some such precautions will be taken in the new fever department of the Sussex County Hospital. I admit that if Government should ever give local authorities the power of enforcing isolation in infectious diseases, extra-mural fever hospitals would become a necessary adjunct to all large towns, and that under such circumstances great good would doubtless result from them. But I fear that the public at present are very far from being willing to submit to any such useful legislation.

I am, Sir, your obedient servant,

WILLIAM KEBBELL, M.D.,

July 2nd, 1875. Senior Physician to the Sussex County Hospital.

Mushroom Poisoning.

THE house-surgeons of the Charité Hospital at Lyons partook a short time ago of a piece of pastry (vol-au-vent), which, among other ingredients, contains mushrooms. Two of the young gentlemen ate of these mushrooms—one moderately, the other more freely. Severe symptoms of poisoning soon occurred; they were slight with one of them, but so severe with the one who had eaten freely that he had a narrow escape of his life.

German Medical Literature.

To the Editor of THE LANCET.

SIR,—If "Fatherland" likes to avail himself of any aid I can give him, it shall willingly be afforded him, as I long lived in Germany.

Yours &c.,

Ipswich, July 9th, 1875. HENRY P. DRUMMOND, M.D.

Alcohol in Naval Hospitals.

IT is stated that the Admiralty has decided that patients in the naval hospitals who may be total abstainers, and do not consume the amount of beer or wine prescribed for them, shall in future be paid the value of such liquors. This arrangement, if really contemplated, whilst probably owing its origin to a philanthropic desire to encourage temperance in the navy, appears to us open to question with regard to its consistency. The stimulants are either needful to the patients or they are not. If the former, money cannot properly be substituted for them; if not necessary, they should not be ordered, and a money equivalent is out of the question.

Mr. R. Harrington.—We regret we cannot oblige our correspondent.

Section-Cutters.

To the Editor of THE LANCET.

SIR,—I regret that my description of my modification of the freezing section-cutter was in your hands before I saw Mr. Lawson Tait's valuable article on the subject in the last number of the *Journal of Anatomy and Physiology*. In your issue of the 3rd inst. he expresses an opinion that the great objection to my instrument is the constant attention it requires, and the difficulty this will occasion to observers whose time is interrupted. It seems to me that his instrument requires more constant attention, and attention of a much more skilled kind, during the process of freezing than does mine, and that the advantage of keeping the tissue frozen for a great length of time is very slight. By reducing the outflow from my instrument after the freezing is complete, it can easily be kept in good condition for a considerable period; and it seems to me that as the great advantage of the process consists in the facility it affords for completing the cutting of sections at once, little is to be gained by the prolongation of the time during which the object is in a fit condition for the purpose. Having once got everything working, as many sections can be cut in a few minutes as can be desired, and, once cut, they can be kept in suitable solutions for any time. An immense saving of trouble is effected by the avoidance of the fine division of the ice which Mr. Tait advocates. A coarse pounding suffices for use with my process, as a large vessel can be used to contain it. As to fixing the instrument to the table or keeping it free, of course this is a detail which each worker can have arranged to suit himself. I may mention that I am having an instrument constructed almost entirely of vulcanite, which I hope will give great lightness, and do away with the necessity of cork or other coverings to keep out heat.

I am, Sir, yours &c.,

Glasgow, July, 1875. WM. JAS. FLEMING.

F. W. N. (Reading) should consult Dr. Schultze's recently published pamphlet (Heidelberg: Winter) on the Results of the Cold-water Treatment in Abdominal Typhus. The exposition is clear and impartial. Out of 648 cases in the Heidelberg Infirmary between the years 1864—73, Dr. Schultze found that in nearly all the treatment was favourable in its effect on the nervous system; that it was contra-indicated in those where neuralgia or hyperæsthesia existed; that it did good in lung complications; but that in intestinal hæmorrhages it was mischievous.

Mr. Schindler, (Kennington.)—The MS. shall have our early attention. We should be glad, however, to have an opportunity of inspecting the work in question.

American Degrees.

To the Editor of THE LANCET.

SIR,—In your journal of June 5th, page 811, I notice what may be the very just censure of a medical (?) man claiming to possess an American qualification. But will you kindly inform me what is meant by the "wretched character of that (degree) of Pennsylvania"?

There are in Philadelphia two medical schools, known respectively as the "Jefferson" and the "University of Pennsylvania," offering advantages for acquiring a first-class medical education, nearly equal to any school in the world, the honourable professors of which, I beg leave to say, are highly respected in England as well as in America.

Some time since an unprincipled charlatan advertised to sell diplomas of the "University of Philadelphia," and some unfortunate Englishmen and others were induced to buy them. No regular physician or surgeon has ever been connected with this so-called "University of Philadelphia," which you must have confounded with the regular "University of Pennsylvania," *located* at Philadelphia, thereby creating a prejudice against institutions worthily enjoying great honour and confidence.

It is but justice to the medical profession of the United States to assure you that it is quite impossible to purchase or otherwise fraudulently obtain the degree of M.D. from any regular medical school in the State of Pennsylvania, or any other State of the American Union. The English medical profession is certainly too much indebted to American medical enterprise in pharmacy, medicine, and surgery to condemn in such a sweeping term the very centre of American medical education.

I am, Sir, yours &c.,

Ventnor, I.W., June 19th, 1875. NOT AN AMERICAN GRADUATE.

⁂ We do not confound the University of Philadelphia with that of Pennsylvania, though perhaps our expression was open to misunderstanding. Our correspondent does not overstate the respectability of the true University of Pennsylvania, though he passes too lightly over the case and the crimes of the "University of Philadelphia," whatever that may mean, and over the evil of innumerable degree- and diploma-granting bodies in the States.—ED. L.

The Professorship at the College of Surgeons.

A PRINTER'S error occurred in our article last week on the recent changes in the College of Surgeons. It is made to appear that Mr. Flower will be associated in the ensuing year with Mr. Turner, of Edinburgh. It should be with Mr. Parker (in the Chair of Comparative Anatomy and Physiology).

Mr. T. W. Watkins (Leipzig) is thanked. We are afraid we cannot avail ourselves of the offer.

PROFESSIONAL REMUNERATION.

AT a time when there is a strong feeling among the consulting members of the profession that the fee of a guinea (representing so much less now than formerly) should be increased, it is interesting to learn that veterinary surgeons are raising their scale of charges. We believe we are right in stating that several of the leading veterinary surgeons have recently increased the fee for examining a horse from half a guinea to a guinea. The initiation taken by Mr. Mavor will, doubtless, be accepted with acclamation by the whole veterinary profession, from the gentleman who examines a race-horse, whose value is reckoned by thousands of pounds, down to the village farrier, who drenches the horses, and their humble congener, the mule. Is it not full time that the position of the hard-worked and ill-paid general practitioner should be ameliorated?

Alpha.—No.

INCONTINENCE OF URINE.

To the Editor of THE LANCET.

SIR,—One of your correspondents in THE LANCET of Jan. 23rd asks for information as to the treatment of incontinence of urine, and in your issue of the 30th of the same month half a dozen responses are made. A little more careful perusal of the admirably conducted department of THE LANCET devoted to "Notes, Short Comments, and Answers to Correspondents," would have caused some consideration of the note on "Ritual Circumcision" in the issue of Jan. 9th, where Dr. A. Mayer says, "It is also a known fact that circumcision cures enuresis nocturna when caused by a prepuce with a narrow opening." The fact that of the six respondents, two recommend belladonna, and the other four as many different modes of managing the difficulty, would show that the *cause* had not been looked after. My own experience, which has been extensive, has convinced me that enuresis in youth and in adult life is frequently due to a contraction either of the preputial orifice or of the meatus urinarius, and that sedatives and narcotics may palliate, but do not cure. Circumcision or division of the preputial orifice, when the prepuce alone is at fault, will give prompt and permanent relief; when this does *not* give relief, the meatus urinarius will often be found constricted, and a relief of this constriction will give the desired result. Let me cite a case or two.

G. H——, a lad of ten, had been troubled with nocturnal incontinence two or three times in the night and also often during the day for two years. Belladonna in quarter-grain doses relieved him temporarily, but on cessation of the drug would return. He was found to have redundant prepuce with contracted orifice. I circumcised him in October, 1874, found some adherence of prepuce to glans, and also a very small meatus urinarius. This I enlarged to 22 Fr. From date of operation he was completely relieved for four weeks, when the difficulty reappeared. I then made another examination, and found the meatus recontracted to 16 Fr. I then redivided it to 24 Fr. Since then he has had not the slightest trouble, and, furthermore, has been in better health than for several years.

I have just received a letter from Dr. C. H. Mastin, of Mobile, La., which I desire to add to this statement, and let your correspondents judge of its value. Dr. M. is one of the leading surgeons of the South-West: "Following I furnish you the brief notes of a case which I fancy will interest you, as it bears so strongly on your theory of reflex irritation, which I, for one, believe is ere long destined to become a fixed surgical truth. On the 29th of last month (November, 1874) I was requested to see a little boy, eighteen months old, the son of a gentleman of this city. The child was very delicate, pale, fretful, no appetite, languid, complained of pain whenever he passed his water. He was wakeful at night, and in the nightly habit of wetting his bed during sleep. From the description given me I was led to believe that the child had stone. Upon examination, however, I failed to discover stone, but found that the child had an elongated prepuce, the orifice of which was very small, congenitally contracted, so small, indeed, that there was difficulty in passing an ordinary silver probe. I was satisfied that the case was one of reflex irritation from narrowing of the preputial orifice. The physician with whom I saw the case in consultation laughed at this diagnosis; but, inasmuch as there was an evident obstruction to urination, consented to a free division of the preputial orifice. The results of this simple operation proved the correctness of your views and of my diagnosis established thereon. The very next day my little patient was decidedly improved, ate well, slept quietly, had no incontinence of urine, and up to to-day (one month from the date of operation) he has remained perfectly well in this respect, and his father says he has gained eight to ten pounds of flesh, and is in better health than ever before."

I remain, Sir, yours faithfully,
New York, June 9th, 1875. F. N. OTIS, M.D.

A Constant Reader has forgotten to authenticate his communication with his card. If he will do so we shall be happy to refer to the matter. Any further information obtainable about the outbreak should be forwarded without delay.

Dr. R. H. Pierson, (Dresden.)—We have not as yet noticed the meeting, but shall be glad to receive a very short report of the proceedings this year, if of interest to British practitioners. The other matter has not been forgotten.

DOUBLE DISLOCATION OF THE SHOULDER.

To the Editor of THE LANCET.

SIR,—A rather unusual case was admitted into the Birkenhead Borough Hospital some weeks since, under the care of Dr. Spratly. I was called into the surgery to see a patient, and found on examination that he had sustained dislocation of both shoulders into the axillæ. It appeared that the man, who is a carpenter, while working upon some scaffolding, lost his footing and fell, striking the ground with both elbows at the same time, and thus causing the injury. I easily reduced the dislocation by means of my heel in the axillæ, and the patient has since left the hospital cured.

I am, Sir, your obedient servant,
D. CHARLES DAVIDSON,
Senior House-Surgeon, Birkenhead Borough Hospital.
Birkenhead, July 3rd, 1875.

CHEMISTS BEWARE!

A CHEMIST, Mr. Adam Lawton, of Price's-end, Dudley, has just been fined £20 for practising and acting as an apothecary. It would be difficult to find a chemist nowadays who does not do so. If the Apothecaries' Society were frequently to take such action as that pursued so successfully against Mr. Lawton, they would help chemists to keep themselves within reasonable bounds, and to leave the practice of medicine and surgery to those duly qualified for it.

Mr. S. Jacobs, (Birmingham.)—We would advise our correspondent to speak to a medical man in his own neighbourhood.

THE APOTHECARIES' SOCIETY.

To the Editor of THE LANCET.

SIR,—As regards the annual dinner, termed "herbarising," given to the members of the Apothecaries' Society once a year, and paid for principally, if not entirely, as I understand, by the proprietors of the first-class stock, the real grievance of the business lies, I apprehend, in the fact that of late years the dividends on this stock have considerably decreased from their former proportion, and consequently, while the expenses of the entertainment remain the same, or may even have augmented in these dear times, these latter, therefore, are certain to fall heavily on the purses of some of the gentlemen who have for the time being to "pay the piper," and who probably, having looked to this investment as an additional source of income, find possibly their whole dividend for the current year swamped. On former occasions this was not so, and a handsome balance would still be left. I would ask the question of some member better informed than myself, whether there does not exist a bye-law to the effect that the expense of the herbarising dinner shall not exceed 2*s*. 6*d*. per head? Now, should the members (on whose unhappy shoulders it falls to provide these annual dinners) elect to abide by this arrangement, I imagine the number of guests would not be overwhelming, and, as Paddy said, "the coort was cleared." The law, if this be so, would be carried out in its integrity, and an onerous tax removed from that section of the proprietary who, it is well known, can ill-afford the outlay involved in these annual banquets.

I remain, Sir, yours &c.,
London, July 10th, 1875. ANOTHER MEMBER OF THE SECOND CLASS.

To the Editor of THE LANCET.

SIR,—I have made up my mind to follow the example of Mr. Bury (see last week's LANCET)—viz., in the interest of the stewards of the "general herbarising dinner," to decline the invitation sent me by the Master and Wardens. If those who wish to put an end to these unnecessary feasts will do the same, or if they have accepted they will withdraw their names, they will give a valuable practical hint to the Master and Wardens, and save the pockets of the stewards.

I am, Sir, yours faithfully,
July, 1875. M. S. A.

Registered Practitioner.—1. Immediately after the erasure of a name or names from the Medical Register for infamous conduct in a professional respect, the Registrar of the Medical Council sends notice thereof to the nineteen licensing bodies, to which notice is added a copy of the following resolution:—"That the Council recommend that any person whose name has been once removed from the Register shall not be admitted to examination for any new qualification without the consent of the General Medical Council."—2. The General Medical Council only, sitting in conclave, can undertake so important and serious a matter as the removal of a name from the Medical Register, which precludes the practitioner from afterwards legally following his profession.

POOR-LAW RELIEF.

To the Editor of THE LANCET.

SIR,—I shall feel obliged by advice from some of your readers on the following matter, perhaps trivial, but, to my mind, important.

W. is parish doctor in this district. I am a duly registered practitioner in the same parish. R. is a patient in my club, totally disabled, and with no means of support, he not being entitled to sick pay from the said club. At his request I furnish him with a certificate, stating that he is incapable of doing any work. On his presenting it to the relieving officer, he is told that my certificate is of no legal effect, and that unless he engages the services of W. for the future, he may "lie there and clog and die" before he shall receive parish relief.

My object, Sir, in writing is to ascertain whether or no the relieving officer can ignore my certificate, and compel the man R. to be attended by W., and give up his own medical man, before granting him assistance.

I am, Sir, yours &c.,
July, 1875. JUSTICE.

Microscopist.—A good Hartnack with immersion lenses costs, we believe, some £12. An old Ross's quarter may sometimes be purchased second-hand for £1 or £2 (a new one costs £7 10*s*.), and with a high eye-piece will be nearly all that an ordinary practitioner requires, unless he is pursuing some special investigation, in which case we recommend the Hartnack. There would be no difficulty in making the adaptation our correspondent suggests.

THE VALUE OF BROMIDE OF POTASSIUM IN PUERPERAL CONVULSIONS.

To the Editor of THE LANCET.

SIR,—For some years past I have found the bromide of potassium so valuable in the treatment of puerperal convulsions that I feel justified in bringing it under the notice of your readers. It appears as useful when the fits have come on before labour as after, and I consider it of equal value whether albumen is present in the urine or not. I give fifteen grains in mint water every two hours, and I have observed an improvement after the third dose.

Yours faithfully,
Hurstpierpoint, July, 1875. M. MONCKTON.

Lucina, (York.)—Two distinguished Saxon physicians, one of whom holds high office in the University of Leipzig, have jointly produced a text-book for midwives which strikes us as well deserving translation. Its title is "Lehrbuch der Hebammenkunst"; its authors are Drs. Crede and Winckel; its publisher is Hirzel, of Leipzig; and its price is 4s. 6d. Sound judgment is shown, not only in stating clearly and succinctly what midwives ought to know, but also in withholding knowledge which can only tempt them to go beyond their sphere.

Major-General Shaw, (Portsoy, Banffshire.)—Our correspondent's communication is acknowledged with thanks.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—As there were no signs of the publication of the new Militia Medical Regulations, the following question was put to Mr. Hardy by Dr. Lyon Playfair last night:—"Whether, if he was unable to fix a date for their issue, he would state if it was intended under them to retain the services of the militia surgeons with the same pay and allowances as at present, or to dispense with them altogether?" The answer is given in *The Times* of to-day, as follows:—"The Regulations relating to yeomanry and volunteers are actually settled; but difficulties have arisen with regard to the militia medical officers, through their being brought into contact with the brigade depôts. He hoped the regulations would be published at no distant date." By this it will be seen that the real pith of the question is not answered. Can they, or can they not, retain our services? If they can, it must not be with *less* pay and allowances, because we shall be liable to the same contingencies as at present—viz., forced absence from home at camp or training centre, and interference with private interests. If they cannot, they must be prepared to meet demands for compensation, and to find qualified men to take charge of the one hundred and thirty regiments during the annual training at camp or training centre; for no present militia surgeon will retain his commission for this one month's pay alone. There is no doubt it is a hard nut to crack for the War Office, and hence the delay in issuing these new Regulations. Your obedient servant,

July 14th, 1875. MILITIA SURGEON.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. G. Johnson, London; Mr. Berkeley Hill, London; Dr. Spencer, India; Mr. Morgan, London; Major-General Shaw; Dr. Henderson, London; Dr. B. Foster, Birmingham; Surgeon-Major Ringer, Oudh; Mr. Harrington, London; Mr. Maunder, London; Mr. Bullen, Kennington; Mr. Baker, London; Mr. Braden, Lewes; Dr. Lawson, London; Dr. Carter, Birmingham; Mr. Kershaw, London; Mr. Chapman, London; Dr. Duncan, London; Dr. Parkes, Chatham; Mr. Anderson, Newtown; Mr. Pettinger, Manchester; Mr. Arthur, Diss; Dr. Cane, Peterborough; Mr. Hastings, London; Dr. Rhind, Torquay; Mr. Bolton, Nenthead; Mr. Gramshaw, Walton-on-the-Naze; Dr. Reoch, Newcastle-on-Tyne; Dr. Worthington, Benson; Dr. Langley, London; Mr. Philp, Stirling; Dr. D. Duckworth, London; Messrs. Robertson and Scott, Edinburgh; Mr. Coombe, Southport; Messrs. A. and C. Black, Edinburgh; Mr. Markby, Tyfield; Mr. Lucas, Hitchin; Mr. Kerbey, London; Mrs. Harrison, Camden-road; Dr. Pierson, Dresden; Mr. Dixon, Manchester; Messrs. Calvert and Co., Manchester; Mr. Little, Woolton; Dr. Fleming, Glasgow; Mr. Schendler, Kennington; Mr. Winter, Leamington; Mr. Hole, Tiverton; Mr. Hall, London; Mr. Mason, Carlisle; Mr. Roberts, London; Mr. Bailey, London; Mr. Godfray, Jersey; Dr. Davies, Wrexham; Mr. Blount, London; Mr. Strang, Penge; Dr. Gordon, London; Mr. R. Richardson, Oundle; Mr. Marsden, Huddersfield; Mr. Colegate, Dunoon; Mr. Kemp, London; Mr. Haviland, Bridgwater; Mr. Harris, Bournemouth; Mr. Greene, London; Dr. Hardwicke, Rotherham; Mr. Fife, Norwich; Mr. Horton, Coleford; Mr. Collins, Huntingdon; Mr. Wharton, Sunderland; Mr. Ellis, Sutton; Mr. Denne, Wolverhampton; Medicus, Sherborne; W. A. B., Barrow; W. M. B.; M.D.; Z.; M. S. A.; A Constant Reader; Progressus; Dido; A Porpoise; Militia Surgeon; H. C. L.; M.R.C.S.; W. S. Y., London; Justice; A. M. D.; G. R. R.; Alpha, Bristol; The Wanderer; X.; C. H. L.; &c. &.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Woodcock, Bradford; Mr. Carruthers, Kirkpatrick-Fleming; Mr. Potts, Walsall; Mr. Palmer, Warwick; Mr. Wilmshurst Woodville; Dr. Macfarlane, Walmer; Mr. Forward, Axminster; Dr. Blytham, Swinton; Mr. Parsons, Portland; Messrs. Oliver and Boyd, Edinburgh; Mr. Haydon, London; Mr. Brodribb, Caterham; Mr. Sykes, Wakefield; Mr. Aspinall, Darwen; Mr. Jones, Bishop Auckland; Mr. Hardman, Blackpool; Mr. Watts, Kingstown; Mr. Moore, Brackley; Mr. Moreton, London; Mr. Lascelles London; Mr. Richardson, Edinburgh; Mr. Birt, London; Dr. Taplin, Birmingham; Mr. Legge, Aberdeen; Mr. Jackson, London; Mr. Davies, St. Asaph; Mr. Seymour, Coventry; Messrs. Jolly, Norwich; Mr. Hines, Sunderland; Mr. Deane, Heckmondwike; Mr. S. Jacobs, Birmingham; Mr. Holmes, Maidstone; Mr. Fox, London; Mr. G. C. Algernon, Wigan; Dr. Dickson, Buxton; Mr. Lucas; Dr. Dick, London; Mr. Pugh, Brighouse; Dr. Mason, Sheffield; M. R.; M.R.C.S., London; W. M. E., Cerne-Abbas; C. O., Edinburgh; Delta, Tunbridge; A. B., Brackley; Zeta; B. A., Bicester; L. M., London; F. R. S.; W. K., London; F. W., Sutton; B. A. J.; Z., Liskeard; G. R., Kirkdale; Dispenser, Dover.

Leeds Mercury, Bradford Observer, Newcastle Daily Chronicle, Cork Constitution, Western Morning News, Surrey Advertiser, Huddersfield Chronicle, Manchester Guardian, Welshman, Local Government Chronicle, Methodist Recorder, Isle of Man Times, Macclesfield Courier, Derbyshire Times, Scotsman, and *Chester Courant* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

THE LANCET OFFICE, JULY 15TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
July 9	29·72	W.	57	59	75	62	53	...	Overcast
" 10	29·60	N N W	54	59	109	68	53	0·22	Cloudy
" 11	29·52	N.W.	53	60	99	63	49	0 09	Cloudy
" 12	29·98	N.W.	51	57	101	66	51	0·13	Cloudy
" 13	30·23	N.W.	51	55	103	70	48	...	Cloudy
" 14	30·02	S.	53	59	82	65	52	...	Overcast
" 15	29·65	S.E.	56	57	...	...	55	0·91	Raining

Medical Diary for the ensuing Week.

Monday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ST. PETER'S HOSPITAL.—3½ P.M. Expected Operations: Lithotomy; Subcutaneous Urethrotomy.

Tuesday, July 20.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 21.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, July 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, July 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M.—Annual General Meeting.

Saturday, July 24.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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Clinical Lectures

ON THE

RECTUM AND ANUS IN THEIR RELATIONS TO UTERINE, OVARIAN, AND PERIMETRIC DISEASES.

By ROBERT BARNES, M.D.,

OBSTETRIC PHYSICIAN TO ST. GEORGE'S HOSPITAL;
EXAMINER IN OBSTETRICS TO THE ROYAL COLLEGE OF SURGEONS.

LECTURE IV.

Effects of Pregnancy and Labour; Incontinence of Fæces; Constipation; Obstruction; Effects of Displacements of the Uterus; Diagnosis of Rectal from Uterine Disease; General Paralysis; Retention of Fæces, its effects; Malignant Disease; Perimetritis; Ovarian Disease; Blood, Pus, Bones, Hairs, &c., in Fæces.

Although the uterus is not in such intimate relation to the rectum as it is to the bladder, it is still so close to it in position that disorder or distress referred to the rectum is an extremely frequent complication of uterine disease or displacement. The unity of the pelvic vascular system is such that engorgement or inflammation of the uterus cannot fail to cause increased afflux of blood and hæmostasis in the other pelvic organs. To this increased flow of blood, determined by inflammation or congestion of the uterus, there is necessarily added the mechanical effect of increased weight and bulk. Thus two conditions already combine to cause accumulation of blood in the hæmorrhoidal vessels. A third condition is rarely wanting long. This is displacement of the uterus. The prolapsus consequent upon increased weight of the uterus, and the relaxation of its supporting structures, brings a further aggravation of pressure to bear upon the rectum just above the anus, increasing the difficulty under which the hæmorrhoidal vessels labour in unloading themselves.

To these mechanical influences in producing local vascular stagnation other remote and secondary causes bring a contingent of trouble. The gradual impairment of digestion and other nutritive functions, the enforced inactivity, consequent on uterine disease, entail constipation and loss of sphincteric tone. Hence the disposition of the hæmorrhoidal vessels to dilate, to become varicose, and to favour the formation of piles and thrombi, is enforced in a variety of concurrent ways.

The foundation of rectal and anal distress is often laid in pregnancy. The active developmental nisus, bringing to the pelvic vessels a large quantity of blood, leads to distension, to venectasis, which does not always subside after labour. The dilatation of the vascular plexuses around the lower part of the vagina and vulva arising during pregnancy has been already described. A similar condition is found around the anus; during labour, the extreme compression to which this part is subjected may retard the circulation in the vessels for several hours, and then, during the final act of expulsion, the tissues in which the vessels are embedded, being inordinately stretched, perhaps even lacerated, the vessels themselves undergo serious injury, from which they may never recover. At this stage there is often absolute eversion of the lower part of the bowel; the mucous membrane is exposed, swollen and livid from intense congestion; and sphincteric power is more or less impaired.

Pregnancy and labour form the frequent starting-point of hæmorrhoids in women. The same act of distension, whilst the parts are turgid with blood, sometimes causes small lacerations of the edge of the anus, which, not healing, become fissures or ulcers. In some cases, again, the sphincter is found to have lost something of its contractile power. This loss is complete, or nearly so, when the sphincter has been torn through, as in many cases of laceration of the perineum. In these cases, the want of power to retain the fæces—incontinence,—observed after labour, is usually enough to suggest the true nature of the case, and, examination being made, the injury is revealed. In whatever way these lesions may have arisen, they are apt to be kept up by uterine disease, the two conditions exerting a mutually vicious influence. On the other hand, hæmorrhoids, fissures, and ulcers of the rectum and anus may be primary, or at least exist independently of uterine disease or displacement. The symptoms they give rise to may be taken by the patient, and in the first instance by the medical attendant, as evidence of uterine disease. And disease of the rectum, if involving much congestion and pain and difficulty in the performance of its function, by the consequent accumulations and straining, may induce congestion and prolapse of the uterus. Here, as in the converse case, the morbid condition of each organ exerts a vicious influence upon the other.

The displacements of the uterus almost always induce some rectal complication. In prolapsus simple, or with the usual attendant retroversion, the uterus falls into the lower part of the sacral hollow, and therefore projects more or less into the anterior wall of the rectum. It induces some degree of obstruction, to overcome which increased bearing-down efforts are excited. This increases the evil. The progressive prolapsus causing inversion of the vagina, the retro-uterine peritoneal sac is dragged down, and then the anterior wall of the rectum is drawn into a pouch, constituting vaginal rectocele. It is a matter of observation that the reduction of the displacement is frequently followed by the return of healthy peristaltic action.

In anteversion, the vaginal portion of the uterus is tilted up and back, so as to form a conical projection into the rectal cavity, easily felt by rectal digital touch. If, as often happens, the vaginal portion is congested or inflamed, exquisite pain is experienced when a stool is being passed. In some cases this pain on defecation is felt only, or at least is felt with especial severity, at the menstrual epochs.

In retroversion and retroflexion, the body of the uterus, most probably enlarged and painful, presses into the anterior wall of the rectum, encroaching upon its calibre, acting as a ball-valve, causing a degree of obstruction, paralysis, dyschezia, and retrograde or ascending disorder of the intestinal canal. Sometimes, in retroversion of the gravid womb, the strain upon the rectum is so great that actual tenesmus is induced.

The diagnosis of rectal from uterine or vaginal disease can be made by direct examination. Symptoms such as pain on defecation, pain when the sphincter acts, discharges of mucus or blood from the anus, will of course point to the seat of disease. But direct inspection is necessary to determine not only what is the exact morbid condition, but also what is to be done. I have insisted upon the importance of rectal exploration as a means of making a correct diagnosis of uterine disease. Thus in the course of examining for uterine disease we often discover rectal complications. But apart from this incidental exploration, when symptoms referred to the anus are complained of, special examination of this part should be made. I have several times in this way detected a fistula which had not been suspected by the patient. The rectum and anus may be examined, first, by the touch. The finger, oiled, is passed into the rectum and made to explore the cavity as far as it will fairly reach. In this way a polypus may be felt, or any tumour or constriction in the cavity; and we may judge how far the intrusion of the displaced uterus may be a cause of distress. Secondly, we may bring the lower edge of the rectum inside the sphincter into view by the following manœuvre: pass the forefinger (having well pared down its nail) into the vagina above the perineum, so as to get its tip as fairly over the seat of the anus as possible; then by depressing this strongly, the lower part of the rectum is everted and made to protrude through the anus. In this way hæmorrhoids, fissures, or ulcers, and the state of the mucous membrane, can be seen. Or, thirdly, the anal speculum may be used. By this aid we obtain inspection of the mucous membrane higher up, and can see a polypus or other morbid condition that may exist.

It is almost superfluous to say that constant irritation of the bowel, and especially the loss of power to retain the motions, is motive enough for suspecting the existence of laceration of the sphincter and perineum. It may indicate general paralysis. In this case, however, other signs of nervous disease will probably be detected. But incontinence of urine and fæces may be the earliest manifestation. Thus

I have had patients brought to me principally on this account, the grave disease of the nervous centres being not yet suspected by the patient or her friends.

Diarrhœa is frequent at the menstrual epochs, due no doubt to the increased irritation of the mucous membrane and the hyperæmia induced.

If we follow a similar order to that observed in the case of the bladder, we shall first study the *significance of retention of fæces.* This will lead us to the investigation of the causes of *obstruction.* Now, the need of defecation is far less imperious than that of micturition. If the bladder is not relieved within twenty-four hours such urgent distress ensues as to compel attention. But accumulation may go on in the bowel for many days. There is a further difference. If we except the case of strangulated hernia, it is comparatively rare for complete obstruction of the bowel to come on suddenly, as does obstruction of the urethra. These two conditions render the approach and existence of bowel-obstruction more insidious and more difficult to realise. In the majority of cases bowel-obstruction from pelvic disease comes on very gradually. As the obstruction increases, defecation is more and more difficult and scanty. Retrograde dilatation of the intestine above the obstruction takes place, which, by giving more room for the lodgment of fæces, affords some compensation for the want of outlet; the absorption of the watery constituent of the fæces, and the more scanty food taken, further tend to postpone the climax and to prolong the delusion that we have to deal simply with obstinate constipation. The climax is at length determined by the distension of the belly—partly by flatus, partly by fæces; by the abdominal pain; by the sense of distress that never fails to attend the non-fulfilment of a necessary function; perhaps vomiting; surely loss of appetite; earthy, dirty, yellow tinge of skin, due to empoisonment from absorption of fæcal elements and bile—a condition analogous to urinæmia, and for which I have proposed the name "copræmia"; and by the failure of purgatives and enemata to bring away fæcal matter. When things have come to this pass, a strict examination is imperative. If exploration of the abdomen discover no sufficient cause, we must explore the pelvis. This is done by the vagina and rectum. The instruments needed are the finger, the sound or a whalebone probang, the aspirator-trocar, and the enema-syringe.

Retention may be incomplete or complete. The retention caused by retroversion of the gravid womb is rarely complete; and the distress arising being of quite minor importance to the attendant retention of urine, the subject need not detain us. But there are cases of incomplete fæcal retention caused by retroflexion of the enlarged uterus in which there may be no serious retention of urine. In these cases the enlarged body of the uterus, rolled back into the sacral hollow, compresses the anterior wall of the rectum against the posterior wall, acting like a ball-valve. To some degree this difficulty and its retrograde consequences attend most cases of retroversion or retroflexion of the uterus. It is sometimes more pronounced when there is impaction of the uterus enlarged by fibroid tumours. Examination by vagina and rectum will reveal the true nature of the obstruction; the uterine sound will lift the mass out of its false position, and then a suitable pessary will keep it from falling back. Thus complete relief to the bowel is often attained. Obstruction from pelvic cellulitis or peritonitis is diagnosed by the signs described in the second lecture.* But something more is required. The patient under chloroform, the finger is passed as high as possible into the rectum, and, following its course, we come to the constriction caused by the fibrinous deposit nearly encircling the bowel, and nearly closing it by concentric contraction. I saw a case in which things had gone to such extremes that death seemed imminent. The stricture barely admitted a bougie. The pelvic brim was occupied by a dense mass matting all the organs together. It was difficult to decide whether this was due to malignant disease or to simple inflammatory effusion. I suggested as the only apparent prospect of relief the resort to colotomy. Whilst this was being debated, suddenly an immense gush of pus took place, the bowel was liberated, and recovery ensued. Such a lesson could not be forgotten. In several cases which have since come under my care I have penetrated the mass by the aspirator-trocar, and have thus drawn off pus with manifest relief. The marks of irritative fever will aid in raising the suspicion of imprisoned pus. But this kind of evidence is not wanted to justify the puncture. The operation, as far as I may judge from a considerable number of observations, is quite harmless, and its value in diagnosis and treatment is so great that I think it should be resorted to in every instance where local or systemic distress is manifest. I have even seen reason to believe that punctures thus made for diagnostic purposes have had a curative action by stimulating absorption of the effused material.

It is necessary to be provided with special trocars. The ordinary ones supplied are not available for intra-pelvic use. Messrs. Weiss have made for me trocars eight or nine inches long, supported on a firm stem, which answer well. They can be adapted, like the ordinary needles, to the same mount of the aspirator-tube.

Another disease which may proceed in a similar manner, and lead up to the same result, is cancer. Whenever this dire disease invades the mucous outlets or canals, it tends to close them by gradual concentric contraction. We see this in the œsophagus, in the anus, the vagina, and the urethra. So when it extends from the uterus, invading the neighbouring structures, it not seldom seizes the rectum about the sigmoid flexure, surrounds it, and, gradually closing in, the tube is reduced to the smallest bore, so small as to be quite inadequate to the function of defecation. In this way cancer occasionally proves fatal. All the signs of copræmia and starvation precede. In such a case the only hope of reprieve lies in colotomy. We may puncture by the aspirator-trocar; but nothing beyond diagnostic satisfaction will be gained.

Ovarian tumours have caused death by obstructing the bowel. Dr. Parker* relates a case. Rokitansky describes fatal constriction caused by the rotation of an ovarian tumour. When symptoms of dangerous bowel-obstruction supervene in connexion with ovarian tumour the expediency of immediately proceeding to extirpation must be earnestly discussed.

I have recently seen with Dr. Risdon Bennett and Mr. Berry a case of suspended action of the bowels, instructive as illustrating a considerable class of cases. A muscular tube depends for its healthy work on the freedom of its muscular action. This action is liable to be arrested or paralysed if the tube be encroached upon by inflammatory or other deposit in such a manner as to interfere with its mobility, or to lessen its calibre. Nay, the mere proximity to an inflamed or enlarged organ seems often to be enough. Whenever a function can only be exercised at the cost of pain, the system instinctively tries to avoid pain by suppressing the function. And there may be other causes of nervous diversion leading to this induced local paralysis.

In the case to which I am now referring, a lady, aged fifty-two, had ceased menstruating for two years, when suddenly metrorrhagia set in, and on one occasion amounted to flooding. At the end of two months constipation supervened, resisting for fourteen days the frequent use of enemata and opium. There was vomiting, but never of stercoraceous quality. We detected a tumour, in all probability of recent formation, in the right broad ligament fixing the uterus. It was presumed to be a blood-tumour or hæmatocele resulting from the rupture of vessels of the ovary or in the broad ligament. Examining by rectum, I could not find that there was any marked closure of the bowel. The arrest of action of the bowel admits of explanation on the theory just enunciated. It is analogous to the paralysis of the intestines attended by tympanites, and to the bladder-paralysis of puerperal peritonitis.

As in the case of the bladder, so in that of the bowel, we have to consider the significance of abnormal matters in the excretion. In both cases these may or may not be indications of disease of the organ from which they flow. Thus, blood, mucus, pus, may be the manifestations of dysentery and ulceration of the intestine or of hæmorrhoids. But they may spring from quite different causes. For instance, blood in considerable quantity is sometimes discharged in pregnancy, and in some forms of disordered menstruation. Whenever blood comes from the bowel apart from the obvious conditions of fever, dysentery, or liver disease, the possibility of pregnancy should be considered, and the pelvic portion of the bowel, with its relations, should be carefully examined.

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* THE LANCET, Feb. 6th, 1875.

* Edin. Med. Journ., 1863.

Blood may come from a pelvic hæmatocele. It may issue from a dermoid or cystoid tumour. So may pus, hair, or bones, or teeth. Indeed, the rectum is the often elected channel for the voidance of the contents of most of the pelvic tumours. Abscesses resulting from pelvic inflammations most frequently empty themselves by this road; and this is also the favourite channel for the elimination of the fœtal elements of extra-uterine gestation cysts. Intrapelvic examination is essential for the recognition or the exclusion of these conditions. And this examination must be thorough. In urgent cases it may even be necessary to pass the whole hand into the rectum—of course whilst the patient is in a state of anæsthesia.

One lesson will be drawn from the clinical deductions made in these studies of the relations of bladder and bowel distress to disease of the neighbouring structures. You will see how impossible it is to pretermit close examination of the surrounding organs without serious risk of overlooking conditions that may be fatal if neglected, and which may be remedied if discovered. Whilst we are looking at the kidneys or the intestine, because they are disturbed in their functions, it may be the uterus or the ovaries that are in fault. We thus see how dangerous it is to practise in the spirit of pure specialism; how absurd it is to map out the body, and assign particular territories to particular classes of practitioners. You will see how intimately, how indissolubly that part of medicine which takes for its basis the particular study of the generative system in woman, is linked with the disorders of the alimentary, vascular, and nervous systems: that is, a pure specialty cannot exist. A more monstrous thing cannot be conceived.

Hunterian Lectures

ON

SYPHILIS,

AND ON

SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

BY HENRY LEE, F.R.C.S.,
PROFESSOR OF SURGERY AND PATHOLOGY TO THE COLLEGE.

INTRODUCTION: INOCULATION OF SYPHILITIC BLOOD.

IN the previous lecture we considered Hunter's idea of the life of the blood, the way in which that ministered to the growth of every part; and, as illustrated by one disease, the way in which the nutrition of every part might be interfered with when that life was touched. In the present lecture we will consider the morbid processes by means of which it is so influenced.

The results produced in the human body by the syphilitic poison are so various, affect a patient's constitution at such different periods, and are apparently so dissimilar in different cases, that it is necessary in studying this disease to distinguish accurately if possible between the essential actions which belong to the disease itself, and the various complications which may arise from lapse of time, from weakness of constitution, from the differences in the manifestations in its earlier and later stages, and especially from effects of accidental complications, or from the modifications produced by its recurrence.

Hunter prefaces his treatise on the venereal disease by the description of four morbid processes or actions, to which he constantly refers in his subsequent remarks. Since his day the nomenclature of these actions has been much varied and altered; but, as conveying any distinct and definite ideas, I do not think that it has been improved. These actions he calls the adhesive inflammation, the suppurative inflammation, ulceration, and mortification.

But in order to make his description of these processes available for our present purpose we must also consider how these actions are modified by the structures in which they occur.

An animal body, Hunter observes, is composed of a variety of substances, and we have an opportunity of observing the comparative progress of disease in them, and their comparative powers of restoration, and we find that they differ very much from each other in those respects. The healthy and morbid processes in growth, decay, and repair are, however, regulated by the same living principles, or, if we please, guided by the same hand, in all living beings and in all diseases. In diseases arising from accident, a great difference in the degree of action takes place, according to the nature of the parts implicated: thus bone, tendon, ligament, and cellular membrane go through their morbid actions more slowly than muscle or skin. This principle is also abundantly illustrated in the different morbid processes produced by venereal diseases.

The same kind of action which produces an effusion of lymph upon the iris may, if it attacks the skin, be followed by a variety of modifications in the growth and development of the cutis or its coverings. If the cellular membrane be affected, an indolent tumour may result, which goes comparatively slowly through its stages, and may terminate in mortification, or perish by a still slower process of molecular necrosis. In the bones the same disease produces an increased development of bone, ulceration, or necrosis. In the lymphatic glands an enlargement is produced, confined strictly to those glands themselves, and not involving—at least, in the first instance, in any degree—the surrounding structures.

In internal organs the same disease may produce deposits, such as are illustrated in this preparation of syphilitic disease of the lung, and in this of syphilitic deposit in the liver. These deposits may be more or less perfectly absorbed, or more or less perfectly transformed, in the processes of nutrition and growth into tissue, resembling that of the organ in which they occur.

CASE 12.—A gentleman has a secondary syphilitic eruption and symptoms of disease of the lung. For the latter disease he consulted a number of medical men, and was for a long time under treatment. The symptoms, however, persisted. As he wished to go abroad, I was requested by Dr. Tuke to see him for his secondary symptoms before he went, and he was accordingly placed under treatment, which he had not time fully to carry out, but the eruption almost entirely disappeared, and with it all his lung symptoms. These had not returned two years afterwards.

CASE 13.—A patient in the Lock Hospital, many years ago, was pronounced by the physicians of the hospital to have one lung in great part consolidated. I did not know at the time what the disease might be, but I thought I would, at all events, treat his secondary symptoms. These disappeared, and with them the lung affection, and he was seen some months afterwards in apparently perfect health, following his occupation as an omnibus conductor.

The most important modification of increased action, as far as our present subject is concerned, is that which is observed in mucous membranes as compared with other structures in the body.

Hunter showed that a mucous membrane under violent irritation would, like a serous membrane, produce lymph; but, generally speaking, inflammation of a mucous membrane terminates either in resolution, an increased secretion of mucus, or in suppuration. But although the secretion from the surface of a mucous membrane differs in general from that of a serous membrane, yet the membranes themselves may be affected in a similar way. Effusion of new material may take place in their structures, and in the cellular tissue in contact with them. They may both become infiltrated, thickened, and permanently altered. With regard to the serous membranes, we often see an example of this, as in the case of old omental herniæ; and with regard to the mucous membranes, most interesting examples are afforded, in illustration of our present subject, in the formation of mucous tubercles, and in the more or less permanent thickening of the mucous membrane of the urethra. These will hereafter occupy our attention particularly. I will only at present note that the mucous membrane of the urethra may be thickened by the syphilitic poison, as shown by cases similar to the following, which in practice are not very uncommon.

CASE 14.—A young gentleman contracted syphilis, followed by secondary symptoms. He had never had gonorrhœa. In the course of the manifestation of the secondary affection the stream of water gradually diminished. He had apparently an ordinary stricture, which was cured by the specific treatment, without the use of instruments. There was no urethral discharge in this case.

When the venereal poison, Hunter observes, is applied to the skin, its effects are generally manifested first in a pimple, which is commonly allowed to scab. The scab is generally pushed off or rubbed off, and one larger than the first forms. Hunter defines this process of scabbing as the first mode of healing a wound or sore in which inflammation may be greater than where union can be effected, but not nearly so great as where suppuration takes place. We shall, I think, understand Hunter's idea in this respect by considering what he says with regard to the constitutional forms of the disease. "When the poison has got into the blood it there irritates to action. There are produced from that irritation many *local* diseases, as blotches on the skin or thickening of the periosteum and bones." These forms of disease he calls compound or constitutional; yet he says they are not strictly so, for every complaint, in consequence of the malady, is truly local, and is produced by the simple application of the poison to the parts. Now if this be true, as I believe under given conditions I shall demonstrate it to be, the distinction between what we have been in the habit of calling primary and secondary syphilitic affections in a great measure disappears; and in truth, in uncomplicated cases and in a healthy constitution, where there is no accidental cause of irritation, the local and the constitutional manifestations very much resemble each other, and are in fact of the same nature. One of the first cases of syphilis which I recollect affords an illustration of this.

CASE 15.—A boy, scarcely arrived at puberty, had a small, circular, slightly elevated induration on the skin of the penis. This soon became covered by a thin scale. In due course a scaly eruption appeared on the body, and the appearances of these very accurately resembled the primary affection. The disease ran its course without ulceration or suppuration of any part.

CASE 16.—A gentleman had a small crack on the middle of the lower part of the prepuce, which had often caused him some annoyance. On one occasion, after a suspicious intercourse, the edges of the crack became indurated. The induration was to a very limited extent, perfectly circumscribed, and was accompanied by enlarged glands in the groin. He could hardly believe that it was of any consequence. It was, however, followed by a specific eruption, which continued, on and off, for about three years; but none of the secondary manifestations ulcerated or suppurated.

CASE 17.—A gentleman had a very slight induration on the skin on the right side of the penis. It was quite unattended by any irritation or ulceration, and so slight that I doubted at first as to its nature. It however persisted, was accompanied by slightly enlarged glands in the groin, and remained accurately circumscribed. I then told him my opinion. He, however, did not think it could be syphilitic, so trifling was it in appearance. In due time, however, a scaly eruption appeared on the body, and continued on and off slightly for several years. This patient had never had gonorrhœa, but as the successive secondary manifestations of syphilis developed themselves he had occasionally a thin discharge from the urethra, unaccompanied by any ardor urinæ. It had the appearance of thin gruel, and left a stain upon the linen. I have no doubt but that it arose from a secondary inflammation of the mucous membrane of the urethra. Now these, and many more which I could mention, afford illustrations of adhesive inflammation only. In both the primary and the secondary affections an attempt was made to heal by scabbing, but in this disease the attempt does not succeed, and successive scabs or scales are formed. These are all modifications of the adhesive inflammation, which would terminate in resolution if its cause were not persistent. Many drawings of my own and of others demonstrate the fact that what we call the primary disease may go through its stages without any suppuration and without ulceration; and here I would observe that it is a characteristic of both the primary and secondary affections of this disease that in uncomplicated cases they leave no scars on the body. They are attended with no loss of substance, and, as we shall hereafter see, the artificial inoculations from these affections follow the same rule. It is quite true that it comparatively seldom happens that the syphilitic poison runs its course without some accidental causes of irritation. This may depend upon some other irritating fluid being applied at the time of inoculation, upon want of power in the patient's system, or upon the changes which occur in the original products of the adhesive inflammation. The true characters of this inflammation in primary syphilis are given by Hunter with comprehensive clearness and brevity. The process results in a peculiar thickening, very circumscribed, not diffusing itself gradually and imperceptibly into the surrounding parts, but terminating rather abruptly. This description is perfectly true, whether the induration be scarcely thicker than a layer of cuticle, or whether it involve the whole thickness of the skin. It retains these characters through all its stages, though they may be obscured by accidental circumstances. The secondary affections also maintain this circumscribed character, but are unattended with the peculiar defined induration, for a reason which will hereafter be more fully considered. This induration, according to the Hunterian doctrine, depends upon the effusion of lymph, the product of adhesive inflammation. If the lymph were produced from a non-specific cause, it would be organised and converted into a tissue similar to that of the surrounding part, and ultimately anything that was redundant would be absorbed. But the life of this lymph is touched with the same disease as the blood, or the products of the blood from which it is derived. It has a vitiated existence, and tends soon to pass, except in very vigorous constitutions, into a state of degeneration. This may manifest itself in various ways: (1) by an unhealthy formation of epithelium, producing various kinds of scabs and scales; (2) by unhealthy growth of the hair, nails, or teeth; (3) or by the effusive matter itself undergoing a kind of molecular necrosis, suppuration, or ulceration. These latter processes, although they may occur in all stages of the disease, are most marked when the poison is first received, because then acting on a virgin constitution. Accordingly, we find that the adhesive inflammation first produced, in the majority of cases passes from the adhesive stage to some other form. The product is no longer fit for the life of the part, and is thrown off in one of the forms above mentioned. A double action then goes on, one of adhesive inflammation, accompanied by induration, another of the throwing off of diseased cuticle, or suppuration or death of the newly formed tissue.

These two consequences, the induration and the destruction of the newly-formed tissue, as Babington has observed, seem to be distinct and independent actions, since, although they generally exist in conjunction, they are sometimes found separate, one or the other of them being in some cases wanting. These two processes may sometimes be witnessed in the same case at different times under the influence of treatment. A patient may have a well-marked primary induration, and under the action of mercury the induration will disappear, and a soft sore will only for a time present itself, but after an interval the induration will reappear with its specific characters.

Now, all the cases which I have given in the previous and in the present lectures are instances in which the poison of syphilis produced at first the adhesive action only, by means of which the nutrition of parts was more or less perverted, both in the primary and secondary manifestations of the disease. Coinciding with and confirming these practical observations are the results of direct experiment.

CASE 18.—A patient, under the care of M. Puche, in the Hôpital du Midi, was inoculated on the abdomen on the 29th of January, 1861. The inoculated matter was taken from an indurated chancre, which had existed six weeks, and which was followed by secondary symptoms. On the 19th of February, as no result had appeared, the patient was inoculated from another indurated chancre. On the 8th of March, thirty-nine days after the first inoculation and seventeen after the second, two little pimples appeared on the inoculated spots. The first became excoriated after the lapse of some days, but the second presented on its summit a small point of suppuration. Both presented the specific induration of primary chancres. On the 10th of April this patient had a general eruption of roseola.

CASE 19.—Rinecker records the following:—On the 13th February, 1852, an inoculation was made on Dr. Warnery. This was effected by means of a blister. The blistered surface soon healed. On the 9th of March, however, it became inflamed. Infiltration had taken place in the skin, which was hard and thickened. On the 21st of March, thirty-five days after the inoculation, and thirteen after the appearance of the specific primary symptoms, the blistered surface was covered by a mass of tubercular excrescences. These were copper-coloured, raised above the surface, and in some places confluent. They were covered for the most part with brown crust, slightly adherent, or with thin grey scales. Eleven weeks after the inoculation he had severe pain in the head, followed by a syphilitic eruption on the head and face. This was succeeded by inflammation of the soft palate and neighbouring parts, with a superficial exudation of lymph. Ultimately mucous tubercles appeared on the scrotum, the perineum, and on the inside of the thighs.

CASE 20. (Related by Baerensprung.)—M. C—— had never had syphilis. She was inoculated on the right thigh from an indurated chancre in three places. The inoculation was made on the 28th of May, 1859. On the 1st of June the inoculated spots appeared as little red points, without any surrounding inflammation. On the 6th of June it was impossible to distinguish them. On the 25th, however, three little red tubercles appeared on the inoculated parts. On the 5th of July the corresponding glands in the groin were enlarged. The tubercles were also considerably increased in size, and ulcerated on their surface. On the 12th, two of the tubercles had united, and presented a raised, accurately defined induration. The inguinal glands were very hard, and not painful. On the 20th this ulceration was the size of a franc piece, with a base almost as hard as cartilage. There was no suppuration, but the surface was covered by an adhesive secretion. On the 29th there was an eruption of roseola and mucous tubercles.

CASE 21. (Recorded by Lindwurm.)—M—— had never, as far as could be ascertained, had syphilis. She was inoculated with the secretion of two indurated chancres of a patient who at the same time had secondary symptoms. No immediate results followed. Fifteen days after the inoculated points reappeared as two little red stains, which insensibly became transformed into little reddish-brown tubercles. On the 28th there was superficial erosion of these little tubercles, followed by excoriations covered by thin brown crusts. On July 8th these so-called ulcerations had increased and were surrounded by slight induration. The corresponding inguinal glands now became enlarged, and subsequently the glands in the opposite groin. A papular eruption followed, especially upon the organs of generation.

CASE 22. (Also recorded by Lindwurm.)—A young woman was inoculated with the secretions of the chancres of the previous case on the 10th of July, and again on the 12th. Some small pustules followed these inoculations, and became covered by small scabs. The whole of these inoculations were healed in seven days—namely, on the 17th of July. On the 29th of July, however, although all traces of the inoculations had previously disappeared, five red tubercles, corresponding with the inoculated points, showed themselves. These tubercles became covered by thin crusts, and converted into indurated chancres. In the middle of September the manifestations of constitutional syphilis were developed.

CASE 23. (Recorded by M. Rollet.)—A patient was inoculated from an indurated chancre. Eighteen days afterwards a papule was developed, which became ulcerated on its surface. This, as M. Rollet believes, was prevented from being developed into a regular indurated chancre by antisyphilitic treatment.

The examples of artificial inoculation hitherto given are cases in which the inoculated matter was taken from primary syphilitic sores. The following are instances in which the inoculated secretion was taken from some secondary affections.

CASE 24. (Reported by Gibert.)—A patient, affected with lupus of the face, was inoculated on the left arm, by means of a blister, with the secretion of mucous papules from the anus of another syphilitic patient. Five days afterwards there was no trace of the effects of the inoculation, and at the expiration of nine days a little redness only was left on the blistered surface. On the eighteenth day of the inoculation a raised copper-coloured papule appeared on the inoculated spot. On the twenty-second day a little exudation appeared on the surface of the papule, which was enlarged. On the twenty-ninth day there was an enlarged gland in the corresponding axilla. On the thirty-second day a crust was detached from the surface of the papule, which was superficially excoriated. On the fifty-fifth day the papule had become converted into a tubercle, which was superficially raised and indurated. Some red spots now appeared on the body. These soon showed themselves also on the anterior surface of the arms, the inside of the thighs, and the inguinal regions.

In another instance (Case 25) mentioned by Gibert, the period of incubation between the inoculation and the appearance of the first local symptoms was twenty-five days. A little redness then appeared, followed first by a dry papule, which subsequently became moist and excoriated. It then became covered by a crust and indurated, and ultimately became a tubercle, which ulcerated on its surface, as in the preceding case. A corresponding lymphatic gland became enlarged, and thirty-seven days after the inoculation a rash of roseola manifested itself on the patient's body.

CASE 26. (Reported by Lindwurm.)—A patient affected with lupus had a small blister applied to the neck. On the blistered surface a small piece of the mucous membrane of a syphilitic tubercle on the lip was applied. The wound in the neck appeared to heal in five days, but three weeks later the wound again inflamed, and an ulcerated papule appeared. This was followed by enlargement of the cervical glands and copper-coloured blotches.

CASE 27. (Reported by Wallace.)—A young man was inoculated in three places on each thigh from the syphilitic pustules of another patient. In this case the punctures were first made, and the secretions of the pustules applied to them. The punctured spots did not inflame. Thirty days afterwards the patient complained of heat on the inoculated spots. Two of the spots on the left thigh, and all three on the right, presented little raised pimples of a reddish-brown colour, with faint scales on their surface. One of these scales became a scab, and when raised exposed a superficial ulceration. The corresponding inguinal glands were enlarged. The pimples soon became converted into ulcerated tubercles, which were round, slightly depressed in the centre, and of a dirty white colour, like condylomata. A scaly eruption on the body followed.

CASE 28. (Reported by Vidal.) — M. Boudeville was inoculated on the 1st of November with the secretion of a pustule from a syphilitic patient. A papule appeared on the 3rd; this became covered by a crust, under which some pus formed. This continued until the 15th, when the local inflammation subsided. Thirty-five days afterwards, however, a fresh action commenced. Two fresh pustules made their appearance at the inoculated points, and were very long in healing. Flat lenticular pustules on the head, loss of hair, enlargement of the cervical glands, sore-throat, mucous tubercles, and an eruption of roseola followed.

CASE 29. (Reported by Rinicker.)—On the 9th of January, 1852, a young physician was inoculated on a small blistered surface with the secretion of a syphilitic eruption of a child. On the 10th no visible effects had followed the inoculation. On the 20th there was a papular eruption around the inoculated spot. This soon disappeared. On the 2nd of February a fresh action commenced. The surface which had been blistered was red, itching, and scaly. Twenty-nine days after the inoculation this surface was of a deep red-copper colour, the skin was hard and infiltrated, and presented several papular elevations. On the 10th of February the whole surface which had been blistered was covered with reddish brown, hard tubercles, covered with scales. In spite of the use of mercurial ointment, these local affections were followed by ulceration of the palate, of the lower lip, and of the left side of the frænum of the tongue, and later by mucous tubercles on the scrotum.

CASE 30. (Reported by Waller.)—A boy of twelve years of age was inoculated with the matter from a syphilitic patient on the 6th of August, 1850. The matter was placed by means of a small piece of wood and lint on wounds made by a scarificator. At the end of four days the wounds made by the scarificator had healed. On the 15th of August there were some red spots on the inoculated parts, and on the 30th fourteen tubercles presented themselves in the same situation. These were of a dirty red colour, hard to the touch, and almost exactly circular. Some of them presented a slight desquamation. The following days the tubercles increased in size, and all became confluent. When the crust was removed, the tubercles appeared slightly excoriated, raised, and flat. They soon again became covered by fresh thin scales, which were of a grey colour and dry. Twenty-seven days after the appearance of these tubercles, and fifty days after the inoculation, a syphilitic eruption appeared, which soon covered the whole body.

A SECOND SERIES OF

CASES ILLUSTRATING THE TREATMENT OF HÆMORRHOIDS AND PROLAPSUS BY THE CLAMP AND CAUTERY.

By HENRY SMITH, F.R.C.S.,
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(*Concluded from p.* 90.)

Now I have spoken of pyæmia, I am happy to state, as before, that I have not met with a case after this series of operations; at least, fortunately, I have not been able to verify it as such. But in November last I was very anxious about the condition of a distinguished member of our profession, who, somewhat like Dr. Frank's patient, had long suffered from severe hæmorrhoids and chest symptoms, and had been advised not to submit to any operation. Wearied at last by his complaint, he submitted. The operation was a severe one, and was followed, as is most unusual, by much constitutional disturbance, great depression, quick pulse, anxious countenance, and unhealthy discharge from the wound. For some days I was anxious about him, and thought I was going to have, what I had never seen after this operation, a case of pyæmia. Very careful attention to his nourishment, however, the use of opiates, and washing out the bowel with warm water, gradually removed the symptoms, and I had the gratification of seeing my patient, who is an ornament to our profession, entirely recover, having been immensely benefited by the operation. I have before stated, and I think so now, that pyæmia after the use of the cautery is most unlikely to occur; it is odd, however, that I have not met with any cases, for it is often necessary to make extensive wounds in the integument, to which the cautery of course is not applied.

Erysipelas is the next complication of which I must speak. In the 300 cases I had not one instance; but, curiously enough, in the last 100 I have had two—at least one of the cases was decidedly a well-marked instance of the disease, spread over the whole of the buttocks and back, and nearly killed my patient. I may mention, however, that he had been terribly reduced by his disease, consisting of a huge prolapsus, and that I had to make extensive incisions for removing external tumours. Erysipelas was, moreover, very rife in my practice at this period. At this very time, and in the same neighbourhood, another gentleman got rigors, fever, and a large abscess in the buttock, from which he recovered, although he was seventy-eight years old. I believe I took the erysipelas from my other patient to this. It has been a matter of surprise and congratulation to myself that I have not much more frequently met with erysipelas after this operation. I believe that the immunity is due in great measure to the action of the cautery—an explanation similar to what holds good in instances of burns; however extensive these are, it is a comparatively rare thing to find erysipelas attack such a wound.

I come now to the consideration of hæmorrhage—the most important matter in connexion with the operation of the clamp and cautery. Important in two senses: first, because it is in reality the only objection to the operation; and, second, it is the result against which the surgeon has most to guard, and unless he takes very great care it is an occurrence very likely to take place. I find, moreover, from what has been written, and from conversation with my professional brethren, that surgeons dread the performance of the operation from fear of this taking place. But I have no hesitation in saying that the bleeding which is most likely to be serious—viz., that which may take place immediately after the operation—ought not to occur, and that if it does happen it is either from the fault of the operator or from the use of defective instruments or an inefficient use of the cautery. As to my own results, I may state that in the whole of my 400 cases, which have included many of the severest kind and of huge size, I have never met with bleeding sufficient to necessitate plugging of the rectum; and not one of the house-surgeons of King's College Hospital have ever had to resort to that measure. In fact, I have been astonished that a case has never occurred to me where this measure has been needful, as, especially in hospital cases, I have frequently been very sparing with the cautery, and have become emboldened by success from paying as much attention as I ought to prevent its occurrence. I have met with eight cases in which bleeding, either immediately on the operation or that which may be termed secondary hæmorrhage, has taken place to such an extent as to demand very active measures short of plugging the rectum; and, curiously enough, at least six of these have occurred in my last series. I account for this—and glad I am, in one respect, to be able to say this—from my previous immunity causing me to take less precautions than I should. This little salutary experience, which I will relate, has made me doubly careful, and I do not think that my future results will show any similar mishaps.

The first case occurred in the person of a young woman in most miserable health, who had suffered terribly from hæmorrhage, and came into the hospital with severe hæmorrhoids. I performed the operation with the clamp and cautery. A few days after she got pain in the pelvic region, with constitutional disturbance, and the action of the bowels was followed by smart bleeding, and it recurred on two occasions. It was arrested on each occasion by the injection of iced water, and she got quite well. I cannot take any blame to myself in this instance. Either some vessel must have escaped the action of the cautery, or the blood was in such an impoverished state that there could not have been coagulating power enough to close thoroughly the vessels. I have operated on many such cases, however, and have not had any bleeding; in fact, it is in such cases as this that I believe we find the special advantages of the cautery. I once saw, in a similar case, where ligature was employed, nearly fatal secondary hæmorrhage ensue after the separation of the threads.

The second case occurred in a hospital patient, a man. Smart bleeding occurred after the action of the bowels, which, however, was stopped by the injection of iced water. In hospital cases I am not so particular in applying the cautery, as I know there is assistance handy if bleeding should occur. I think it very probable I did not cauterise sufficiently here. Both these cases were examples of secondary hæmorrhage proper, which is very rare indeed.

Sometimes a good deal of blood is passed on the first action of the bowels. The patient gets alarmed, and I am sent for; but on examination it is found that the greater part of this evacuation consists of dark coagulated blood, which had evidently slowly escaped into the bowel after the operation, and had remained there until the action took place. The third and fourth cases were of this description. In the one the bleeding ceased spontaneously; but in the other some arterial blood was poured out, and my assistant, who was called to the case in my absence, was obliged to pass a large speculum into the bowel, screw it up, and allow it to remain until I arrived. This answered most effectually. Now in both these cases I take blame to myself. In each there was a mass of internal hæmorrhoids, which I clamped and cauterised in the ordinary manner; but, in addition, there was a large mass of external growths, covered partly by mucous membrane. I removed them with the scissors, but did not apply the cautery to the bleeding surface, as I have done since in instances where the muco-cutaneous growths, as I would term them, are very large. When the cut parts are returned after the operation, of course the wounds which were external become converted, as it were, into internal, and vessels which have been divided and have not been cauterised are very liable to bleed. Many years ago I saw a nearly fatal case of hæmorrhage from this cause.

The fifth case was an instance of bleeding coming on immediately after the operation, and, excepting the last case I shall mention—which, however, is not exactly similar,—it is the only instance of the kind I have met with, although I have been constantly expecting it, and have wondered at its non-occurrence. I operated on a gentleman for large internal hæmorrhoids. In clamping the largest tumour, and after dividing it and cauterising, a portion of the cut pedicle slipped away, and on unscrewing the instrument I noticed a vessel bleeding freely; it retracted, however, and apparently ceased to bleed. I finished the operation, and returned the parts. In about ten minutes, just as my assistants and myself were about to take our departure, the patient suddenly called out that his bowels were about to act; and immediately a large gush of blood took place, making him very faint. I at once introduced a large silvered glass speculum into the rectum, when another large gush of blood took place, and the bleeding continued for some moments, but by pressing the speculum well in I stopped it very quickly. The speculum was retained for about a quarter of an hour, and the bleeding did not recur. This might have been a serious case if I had left the house; and doubtless I was very blamable, in the first place, for allowing a portion of the pedicle to slip, and, in the next place, for not applying the clamp again and cauterising the vessel, which of course had not been touched at all by the hot iron.

The sixth and last case was one of a peculiar character. It occurred last July, in the person of a gentleman who suffered severely from internal hæmorrhoids; one was a large solid growth, more like a polypus, and having a thick solid pedicle. Before putting on the clamp I made a free incision around its circumference, and in doing so I wounded a large vessel; it spouted forth its contents over me, and then retracted, and, as I supposed, ceased to bleed. I embraced the tumour with a large clamp, inserting the blades into the cut surface, and removed the growth, freely cauterising the pedicle. In about an hour the patient felt very faint, and was obliged to resort to measures to relieve this; shortly afterwards, however, this condition passed away, and he felt pretty well until about forty-eight hours after the operation, when he had a strong desire to evacuate the bowels, and he passed a large quantity of coagulated blood. He made a very quick recovery. Now in this case there was a very narrow chance of the patient having a serious hæmorrhage, and I was much to blame; for there can be no doubt that the large vessel which I had divided, and which had apparently ceased bleeding, burst out afresh on the completion of the operation, but was arrested by two causes—namely, the fainting, and the coagulation of the blood acting as a plug. I ought not to have trusted to the powers of nature to arrest bleeding from so large a vessel, but should have drawn the part down and have clamped and cauterised that as well as the rest of the pedicle.

It is a somewhat curious circumstance that in the majority of the cases where bleeding occurred it happened in the last series of operations, and I have no doubt is entirely explained by the fact that repeated operations at an earlier period of my practice without any hæmorrhage occurring had made me bold and somewhat careless; for when I first began to perform this operation I had a constant dread of hæmorrhage, and used to apply the cautery so freely that bleeding could not take place. I have, however, since the occurrence of the cases I have detailed, returned to my former method of free cauterisation, and I do not believe I shall get any further cases of bleeding.

One other point in reference to the result of this operation, about which I have often been questioned, is as to the liability to the occurrence of stricture. My experience shows that stricture is not likely to occur from clamping and cauterising mucous membrane, but it is just as likely to occur after this operation as after any other operation when the skin is too freely dealt with. I have had three cases where, from this cause, cicatrisation of the skin caused a contraction of the anus; and hence I am extremely careful about the removal of skin, and only adopt this measure where there is an abundance of this tissue, or where, in consequence of great weakening of the sphincter, it is necessary to produce firm cicatrisation. If, however, I am obliged to remove skin at all freely, I always make a patient use a bougie for a few weeks.

In one instance only have I met with a case where a fistula resulted. In this case I had not the charge of the after-treatment, and therefore do not hold myself responsible for the result.

ANALYSIS OF TWELVE CASES OF PNEUMONIA,

ADMITTED INTO WESTMINSTER HOSPITAL DURING THE MONTHS OF MARCH, APRIL, AND MAY OF THE PRESENT YEAR.

By F. DE HAVILLAND HALL, M.D. Lond., M.R.C.P.,
MEDICAL REGISTRAR TO THE WESTMINSTER HOSPITAL.

(*Concluded from p.* 91.)

No. 6 was a very ordinary case of pneumonia of the right base, and does not present any feature of particular interest.

No. 7, on the contrary, is an example of one of the difficulties in the diagnosis of pneumonia. As the notes are very brief, I will give them as they occur in the ward-book.

E. D——, female, aged twenty, admitted April 19th. Illness began on April 12th with earache (no discharge), followed by cough, rigors, and pain in the right side. She took to her bed on the 15th. At present she complains of pain across the chest. Pulse 144; respiration 44, jerking. Right side dull up to nipple in front and midway between spine and angle of scapula behind. In front there is a little crepitation, with distant and feeble bronchial breathing; behind, only very feeble breathing; vocal fremitus and resonance so feeble as to be almost imperceptible. Sputa viscid, and inclined to be rusty. Heart: nothing abnormal, not displaced. Left chest healthy.

The physical signs continued much the same till her death on April 22nd, the only alteration being that there was no air to be heard entering the lower two-thirds of the right lung, and there was entire absence of vocal resonance and vocal fremitus over the dull region.

The autopsy, which was made thirty-two hours after death, revealed the following condition of affairs:—The lower and middle lobes of the right lung were in a state of red hepatisation, passing into grey; the main bronchus was occupied by a fibrinous deposit, which extended throughout the bronchi down to those of the fourth and fifth magnitude. There were also evidences of recent pleurisy and pericarditis.

Dr. Fincham, under whose care the patient was, had suggested that the cause of this anomaly was obstruction to the main bronchus by a plug of mucus; which is the view Skoda takes of these cases, the physical signs of pneumonia being sometimes restored after a violent fit of coughing. No amount of coughing, however, would have displaced the exudation in this case, as it was of a very firm consistence. Extensive closure of the bronchial tubes is, according to Walshe, the usual explanation of this occurrence, though it may also be due to pressure on the bronchus by an enlarged gland or tumour.

No. 8.—D. B——, aged twenty-nine, a labourer, admitted April 26th. He says that he slept out of doors all the night of the 21st, and was taken ill next day with rigors and pains in the limbs; cough began the same night. On admission: Face slightly livid; faint yellow tinge of conjunctivæ; pulse 128, feeble; heart-sounds normal; respiration 32; temperature 102°; left lung quite healthy; right lung dull down to second rib; feeble breathing; slight crepitation at end of inspiration; increased vocal resonance; heart-sounds heard unduly loud; the next two spaces resonant, very little air entering, and below hyper-resonance, with fair vesicular breathing; posteriorly the lung is dull up to spine of scapula, with fine crepitation, tubular breathing, bronchophony, and increased vocal fremitus; abundant frothy, watery sputa, with some viscid rusty sputa. Urine: specific gravity 1016; acid; faint trace of albumen; chlorides diminished.

On the morning of the 28th his temperature was 103°, pulse 140, and respiration 36. Furiously delirious during the night; out of bed several times. Quite delirious now, constantly trying to get out of bed. Too exhausted to be examined much. Got out of bed about 6 P.M., and died five minutes afterwards.

The post-mortem examination showed that the upper and lower lobes of the right lung were solidified throughout, in the condition of grey hepatisation; and that the upper lobe was in the more advanced condition, beginning to break down. Middle lobe quite healthy. In the left lower lobe, a piece of lung of the size of a small orange was in a state of grey hepatisation, the lung-tissue surrounding it being fairly healthy, except that it was œdematous.

The most interesting feature in this case was the implication of the upper and lower lobes in the pneumonic process, the middle lobe being unaffected. I have not met with a similar case. During the life of the patient the opinion formed from the physical signs was that he had phthisical consolidation of the apex and pneumonia of the base. One other point is also worthy of remark, and that is the extreme restlessness of the patient just before death. I have seen two or three cases of pneumonia lately in which the patients have insisted on getting out of bed to use the night commode or for some other purpose, death ensuing almost immediately afterwards.

No. 9 is a case of pneumonia complicated with pleurisy and pericarditis. The patient had previously been in the hospital suffering from pericarditis, though what it was due to did not clearly appear. He left the hospital on May 17th, by his own wish, and was readmitted on May 20th.

R. T——, aged twenty-seven, an ostler. He states that he was taken ill on May 19th, with rigors and sharp pain in the left side, as if "knives were being jobbed in." Spat up two ounces of black blood yesterday. Has had a cough the last three days. Temperature 104·6°; pulse 116, full, soft; respiration 36, shallow, painful. Lying on right side, too exhausted to be examined.

May 21st.—Right side normal. Left apex, good resonance and vesicular breathing; dull up to fifth rib; faint tubular breathing; the dulness gradually increasing towards the back, reaching to midway between angle and spine of scapula. Posteriorly there is loud tubular breathing and bronchophony; absent vocal fremitus; pleural friction in infra-axillary region. Sputa viscid, rusty; respiration 48; pulse 108, full; chlorides almost absent from urine; temperature, morning and evening, 103°. He was ordered carbonate of ammonia, brandy, and a jacket poultice.

22nd.—Pulse 112, of fair volume; respiration 52, panting; countenance somewhat dusky; sputa viscid, rusty. Had a very bad night. Posteriorly the left side is dull all the way up, with loud tubular breathing. Vesicular breathing at left apex anteriorly. Right side normal. He seems much distressed and is very restless. Urine slightly albuminous and containing hardly any chlorides. Temperature: morning, 102°; evening, 102·4°.

23rd.—Not much change, except that his temperature fell in the morning to 99·8°; evening, 101°.

24th.—Pulse 148, very feeble and running; respiration 52. Dull up to third interspace anteriorly, but not transgressing the median line; vesicular breathing above; loud pericardial friction sound. Posteriorly the chest is dull up to the spine of the scapula, with tubular breathing, but no vocal resonance or fremitus. Aspect very distressed, livid; conjunctivæ jaundiced. Urine bile-stained, containing one-sixth of albumen. Morning temperature 100·4°.

25th.—Died at 2 A.M.

The post-mortem examination showed the whole of the lower lobe of the left lung, except a small patch at the base, to be in a state of grey hepatisation; the upper lobe was œdematous. The lung was closely adherent to the costal pleura by a thick layer of lymph, resembling half-melted butter in consistence. About half a pint of straw-coloured serum in pleural cavity. Right lung healthy. Pericardium much dilated, containing half a pint of light-yellow serum. Surface of pericardium like a nutmeg-grater, with some shaggy lymph hanging from it, but no adhesion. Liver and kidneys in a state of cloudy swelling.

No. 10 is only noticeable for the extremely rapid way in which the physical signs of pneumonia cleared up.

J. B——, aged twenty-one, a stonemason, admitted on the 1st of May. Taken ill on April 27th with rigors, heat of body, pain in the right side, and cough. On the day of admission he was too exhausted to be examined; his temperature was 103° F., and at night it went up to 105°, the next morning it had fallen to 100°, and, although the sputa were still rusty, there were no physical signs of pneumonia; by the evening his temperature was normal. Discharged on the 14th of May, quite well.

No. 11.—T. W——, aged thirty, a labourer, admitted on the 14th of May. In this patient the pneumonia commenced at the left apex posteriorly, the day after his admission tubular breathing being heard over the scapula, but there was no increased vocal resonance or fremitus in spite of the dulness. On the next evening (16th) fine crepitation was heard all over the upper lobe posteriorly, and loud tubular breathing; and on the morning of the 17th the pneumonic process had extended to the front, as there was dulness at the left apex down to the second rib, with fine crepitation. On the 20th he had slight epistaxis; his temperature was 101·6°, on the 21st it had fallen to 99°, and on the 22nd it was 98°, so that the epistaxis may be considered in the light of a critical phenomenon. The delirium of this patient was of a very violent character, as, according to my experience, is so frequently the case in apex pneumonia. Huss remarks, however, that this is not especially the case. Besides being delirious, he was at times very restless at night; for which he had chloral prescribed, on one occasion with the effect of giving him an hour's quiet sleep. In several other cases of pneumonia I have seen it given with a satisfactory result. Dr. Habershon, however, says it is not a safe drug to employ where the respiration is liable to embarrassment.

No. 12—the last case—occurred in a healthy youth of the age of eighteen, a porter. He states that he was quite well up till the morning of May 14th, when he was taken suddenly ill about 10.30 A.M. with frontal headache, followed by pain in the chest; has not had rigors. Cough commenced on the 16th. Sputa were blood-stained on the 17th. Temperature on the evening of the 18th, the day of his admission, was 103·2°; the next morning it went up to 104·2°. Physical examination showed that the middle of the right lung was affected, as from the angle to the spine of the scapula there was dulness on percussion, with tubular breathing and loud bronchophony; at the angle of the scapula there was a little fine crepitation; both above and below the dull region there was good resonance, with fair vesicular breathing. The sputa were rusty. Pulse 108, feeble, dicrotous; respiration 44 per minute. On the evening of the 19th the temperature had fallen slightly, being 103·6°, and it continued falling, so that by the evening of the 21st it had reached 98·4°. The physical signs on this day were a little medium crepitation at the apex of the right lung in front, posteriorly quite resonant up to the angle of the scapula, from there to the spine of the scapula impaired; above the spine, resonant. Vesicular murmur, with medium-sized crepitation, over the dull region, with increased vocal resonance. Pulse 96; respiration 44.

May 22nd.—Pulse 72, very small and feeble; respiration 32. Only very slight impairment of resonance over the right scapular region, where the breathing is feeble, with occasional crepitation.

For the next five days the temperature kept below normal. He was discharged on the 4th June, perfectly well.

The chief points to be noted in this case are the limitation of the pneumonic process to the middle and posterior part of the right lung, the anterior surface being unaffected, and the rapid fall of temperature on the fifth day of the disease, which continued to drop without any break till the morning of the 23rd, when a temperature of 97·4° was recorded. This patient also afforded an instance of loss of sensibility about the bladder, as he allowed it to become much distended without making any complaint, but was able to pass his water when urged to do so.

Since May 18th, the date of admission of the last of these cases, four patients suffering from pneumonia have been admitted into the Westminster Hospital, and have all done well.

STRANGULATED UMBILICAL HERNIA.

By W. C. ARNISON, M.D.,

SURGEON TO THE NEWCASTLE INFIRMARY.

On March 20th I was requested by Mr. Charles Carr, of this town, to visit Mrs. D——, aged thirty-eight, mother of eight children, suffering from strangulated umbilical hernia. The history was a very common one. The hernia appeared seven years ago, after one of her confinements. No truss was worn, and not much inconvenience felt. On reaching the house, we found that an enema, which Mr. Carr had ordered in the morning, had been followed by a very large evacuation, with great relief to all the symptoms. It was therefore decided to defer any operation, as the hernia had always been, as it then was, irreducible.

On March 23rd Mr. Carr again requested me to see the patient, as the symptoms had returned after a period of relief, and there was now stercoraceous vomiting, its first appearance, although symptoms of strangulation had existed, more or less, for twelve days.

The patient was of the corpulent build so common in these cases. At the umbilicus was a lobulated tumour, the smaller portion as large as a walnut, prominent, and thinly covered with skin; the larger portion, buried in a thick layer of subcutaneous fat, could be felt under the integument. Attempts at reduction had failed, and the time for delay had clearly passed; an immediate operation was therefore advised and submitted to.

With the patient under chloroform, a last attempt was made to reduce the hernia. That failing, an incision was made in the median line on the lower side of the tumour, and the sac readily reached. Finding it impossible to get even the finger-nail between the sac and the edge of the umbilical orifice, I was compelled to lay the sac open, and then readily returned a considerable knuckle of intestine. The opening was still occupied by omentum, which could not be returned until I had traced it up into the smaller portion of the original hernia, into which it passed through an orifice so narrow as to require enlarging by the knife, after which it was easily hooked out by the finger and passed into the belly, leaving the ring clear. The wound was then closed by sutures, covered with a compress, and the whole secured by a broad calico band pinned tightly round the body.

The operation was concluded at 6 P.M. About three hours afterwards the bowels acted of their own accord, and during the following day flatus was freely passed. On March 25th there was vomiting, which soon ceased; and on the 26th the bowels again acted freely. The highest temperature reached was 102·2°, on the 25th. Progress towards recovery has been slow, owing to the formation of abscesses near the wound, but these are now (July) nearly well, and the patient has gone into the country.

The treatment after the operation was almost *nil*, a spare diet for a few days, an opium pill at bedtime, and ice occasionally. When the abscesses formed they were treated by incision and drainage-tubes.

This is the third operation for umbilical hernia which I have reported in THE LANCET, all successful. I hesitate to speak with confidence from an experience founded on only three cases, but, giving it for what it is worth, I should say that the cases in which it is possible or safe to operate without opening the sac must be very rare, and that the dangers of that proceeding have been a good deal exaggerated, although I would fully acknowledge the special desirability, in this form of hernia, of leaving the sac unopened whenever possible.

Newcastle-on-Tyne.

OVERWORK AS A CAUSE OF INSANITY.

BY GEORGE H. SAVAGE, M.D. LOND.,
ASSISTANT-PHYSICIAN TO BETHLEM HOSPITAL.

As the question of overwork has been raised in the pages of THE LANCET, I have thought it might be of interest to collect some observations made in Bethlem Hospital. It must be premised that the assigned causes of insanity are frequently incorrect, yet at Bethlem we have good opportunities of getting true family histories from the nearest relatives.

Among the men we find many cases in which overwork, especially if associated with worry and money troubles, is the cause of a break-down. Among the women we find very slight evidence of overwork acting as a cause of insanity. Of course there are cases such as those of widows who have to struggle to maintain a large family, but the cases are less common than among the men.

Continuous monotonous work, such as letter-sorting and shorthand-writing, is apt to act injuriously. We have seen cases in which continuous railway travelling acted as a cause of nervous exhaustion. One patient, who has been several times under our care, attributed his symptoms to night work as a "reader" for a daily paper. Diversified mental work never seems to produce the effects that monotonous toil does, unless carried to a great extreme.

I append a few particulars as to the cases attributed to mental overwork that were admitted into Bethlem Hospital during 1874 and up to June, 1875. There were twenty men and eight women.

The ages of the men were as follows:—One under twenty years, nine from twenty to thirty years, five from thirty to forty years, four from forty to fifty years, and one over fifty years. In three only was there a distinct history of insanity in the family; in two others there was at least oddness in other members of the family. The occupations were various; but in all there was a possibility of overwork, which was not clear among the women. There was one belonging to each of the following employments:—Architect, surveyor, accountant, inventor, musician, clergyman, artist, artmaster, schoolmaster, policeman, and bootmaker. There were seven clerks, including two law-writers, and two students: one an Oxford man who had exhausted himself in getting a double first, and the other a medical student preparing for his second College.

In the above cases there were few complications. In one there had been rheumatic fever and chorea; and one, the bootmaker, was distressed by a rupture that interfered with his work. Three were unduly anxious about competition, one about competitive designs, one on account of his pictures being rejected at the Academy, and a third about his "second College." In one only was there a history of drink.

Most had limited incomes that depended solely on their own work. Several owed their exhaustion to following more than one calling; thus one was a librarian all the week and a preacher on Sundays, others worked all day in an office and then did copying at night. Nearly all the cases were admitted in a very weak condition; some refusing food which they fancied they had not earned.

We had every variety of mental disturbance, from acute mania to profound melancholia. I would specially call attention to one series of cases—namely, the general paralytics. We had, among our twenty cases, five suffering from this disease, one of whom sank very rapidly. Besides these we had several cases that caused us considerable doubt as to diagnosis and prognosis. They were admitted weak, tremulous, and with loss of memory, and in some cases buoyant and exalted. They look like general paralytics, but rest and good diet cured them. Another condition was that of self-condemnation. These patients fancied they had not done their duty, and were commonly suicidal. One we learnt afterwards committed suicide.

Among the men one-half were married. This contrasts with the cases we have to consider found among the women.

There were eight women whose friends thought over-study had produced insanity. These were all single; three were under twenty years, two under twenty-five years, two under thirty-five, and one under forty-five. In two only was there known to be a family history of insanity. Three had been hysterical before the attack of insanity, three had suffered from other physical ailments—namely, rheumatic fever, chorea, and uterine disease.

The form of insanity varied. We had several with that exaltation that has been noticed as not uncommon in the insanity of young women. This may be in part due to romantic ideas that were bred of novels.

The occupations were as follows:—Five were teachers, one a school-girl, and two dressmakers. Of the teachers, three were in elementary schools, one an ordinary governess, and one a teacher of music and languages.

In none of these cases among the women could I get evidence that satisfied me that real mental work was the cause of the insanity. In one certainly the attack came on two days after an examination, but this girl had a sister who has been in Bethlem.

To sum up, I would say that overwork rarely, if ever, alone sends us patients on the female side. On the male side we do have a fair number who are really broken down by long hours and monotonous mental toil. I believe the monotony is the chief evil.

It will be seen from the above that heredity does not play a very large part in these cases.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

GUY'S HOSPITAL.

MEDULLARY SARCOMA OF SPERMATIC CORD AND PELVIS; INTESTINAL OBSTRUCTION; COLOTOMY; TEMPORARY RELIEF; DEATH.

(Under the care of Mr. Bryant.)

In our "Mirror" of the 6th February last (p. 196) we briefly related the early history of the subjoined case. The patient having since died, the following notes, taken by Mr. C. E. Perry, will be interesting.

The patient, a tanner, aged eighteen, was admitted Dec. 10th, 1874, with a hard, cylindrical, tender swelling in the right groin, extending downwards into the scrotum and upwards through the internal ring into the pelvis. Two or three days before the patient was on a pack of skins with his leg across a pole, from which a fellow-workman tried to pull him by dragging at his left leg. After resisting for some time, the patient felt a sudden snap and great pain in the right groin. He continued his work till evening, but when he went to bed he detected a swelling in the right groin, which was very painful. Two days afterwards he was admitted into the hospital.

Dec. 23rd.—The swelling along the spermatic cord had diminished, and was not tender; but a round, firm, and somewhat elastic swelling was detected above the pubes, extending about half way to the umbilicus, appearing just like a distended bladder. He passed his urine freely.

26th.—The swelling had increased, and was of a more solid character, extending more to the right of the middle line than the left, and reaching nearly to the umbilicus. There appeared some deep connexion between it and the swelling of the cord where it dipped into the pelvis. Mr. Bryant made a pelvic examination, and found the whole pelvis filled with a tumour. A catheter was passed, but the withdrawal of a few ounces of urine did not diminish the swelling at all.

Feb. 5th.—An exploratory needle was put in, but no fluid escaped. He strained a good deal in passing his motions, and passed very little at a time. An enema was given, and the bowels were freely opened.

March 2nd.—As the bowels had not been opened for a fortnight, and injections were immediately returned, the obstruction in the bowels being very great, colotomy was decided on, and was accordingly done in the left loin.

4th.—He had passed much flatus through the wound, but no motion. He vomited occasionally. Pulse 100; temperature 99·4°.

5th.—He had several fits during the night, there being twitchings on both sides of the body and face, beginning in the right leg. He was almost unconscious, and only recognised his mother between the fits, but was quite blind. He passed some liquid fæcal matter through the wound, but the following day he appeared more conscious, and had only one fit in the night and one in the morning. He passed much flatus through the wound, and complained of his head. He had no motion, and passed his water involuntarily; sp. gr. 1010, no albumen.

7th.—His sight was somewhat better, and he was quite conscious. His abdomen was less tense, and he had passed some fæces, but the pain in his head and in the lower part of his abdomen continued.

8th.—Pulse 80; temperature 99·5°. An examination of his eyes with the ophthalmoscope failed to detect any abnormality.

17th.—He had passed several motions during the past two or three days through the wound, and seemed very much better.

24th.—He vomited two or three times during the day; he passed 48 fluid ounces of urine, sp. gr. 1008. He was ordered ten grains of bromide of potassium and one drachm of syrup of tolu in water three times a day.

April 7th.—He still vomited first thing in the morning, and after food; he had not passed more than half a pint of urine in twenty-four hours. The abdominal tumour was about the same, very hard and distinctly nodulated, the scrotum also being œdematous.

8th.—He had voided only half an ounce of urine during twenty-four hours. A catheter was passed, but no urine was drawn off. Pulse 144; temperature 102·2°.

9th.—There was a good deal of œdema of the tongue, as well as of the feet and ankles. He had passed no urine at all in the twenty-four hours. He was also drowsy. Pulse 128; temperature 100·5°. About 3 p.m. he passed nine drachms of urine, highly coloured and with thick deposit; specific gravity 1012 (neutral); containing a large quantity of albumen; deposit under microscope, blood, pus, &c.

12th.—Passed a pint and a half of urine; specific gravity 1012; clearer. The bowels were opened twice per rectum. The tongue was not so swollen, but on the under surface on the right side there was a large superficial slough. He vomited at times, but there were no cerebral symptoms. The growth seemed much larger and markedly lobulated, extending towards the opening in the left loin, through which it could be felt.

14th.—The patient seemed in a drowsy condition; pupils were contracted and tongue more inflamed; pulse small, hard, and irregular. During the night following he had several epileptic fits. Passed two pints and a half of urine; specific gravity 1010; clear, light-coloured; little albumen.

16th.—He had no more fits. Passed two pints and a half of urine, containing a large quantity of albumen; specific gravity 1011. Pulse 108; temperature 99·8°.

17th.—He appeared very ill; bleeding from the mouth. Passed eight ounces of urine loaded with albumen; much deposit. Temperature 96°.

18th.—He died about 5 a.m.

Post-mortem appearances from the report of Dr. Goodhart.—Dropsy of scrotum and legs. There was one very small cancerous gland in front of the pericardium, just above the diaphragm. On opening the abdomen, which was remarkably prominent forwards as high as the umbilicus, where it ceased by an almost abrupt ridge, the recti muscles at the lower part had to be cut from the tumour, as they were infiltrated by the latter. The abdominal cavity was occupied by a large, soft, fleshy-looking mass, which appeared at either side to be behind the peritoneum; at all events a membrane was reflected from the wall of the tumour continuous with the peritoneum. In front, across the centre of it, ran a third band of fibrous tissue, which corresponded with the thickened layer of transversalis fascia, midway between the pubes and umbilicus. In the median line the tumour was no longer confined to the extra-peritoneal tissue, but occupied the peritoneal cavity, and there were secondary growths in the peritoneum in the left loin, one large mass, one inch and a half in diameter, immediately above the internal aperture made for Amussat's operation in the left loin. The tumour had pushed the intestines out of its way and occupied the entire pelvis, so that there was no room for anything else in that cavity. The rectum was flattened out and empty behind, though healthy. At the base of the bladder was a large mass of growth, about as large as a fœtal skull, which enveloped the urethra on both sides, and the vas deferens on the right. The ureters, up to the brim of the pelvis, were closely contracted, and only with difficulty could a probe be passed along. Beyond this upwards to the kidney they were tortuous, and of the size of the little finger, not particularly thick, but full of urine. In the right groin was a tubular prolongation of the tumour from the external ring to the internal, where it became blended, but still capable of dissection from the main mass. This prolongation was in the tissues of the cord; and when we consider the history, it seems most probable that here the tumour originated; that thence it started along the vas deferens downwards into the pelvis, and so came to occupy the structures at the base of the bladder, and thence filling up the pelvis, it bulged out into the peritoneal cavity above the sacral promontory. The bladder was quite flattened out and empty, and pushed considerably to the left; its mucous surface was injected in places, but its coats were neither thickened nor otherwise altered. Two secondary tumours were appended to the main one, besides the funicular prolongation already mentioned, one above connected into another growing in an omental adhesion attached to the upper part, and the second near to the left internal ring. The colon was somewhat contracted beyond the opening made for colotomy, but the sigmoid was dilated and contained scybala. Some prolapsus of the colon out of the aperture; all the parts had soundly healed. Round the internal attachments of the bowel to the opening the peritoneum had several tubercles of cancer, and at the upper part was a large mass, as if the cut in this region had determined a growth of cancer here, for there was no reason why the growth should have developed here rather than elsewhere. There was no general carcinoma of the peritoneum. The kidneys were pale, and weighed 15 oz.; they were examples of the fatty style of tubal nephritis. The pelves were very much dilated, the pyramids flattened out and forming cysts, and their mucous surfaces, as well as that of each pelvis, much ecchymosed. The liver contained a large mass, of circular form, distinct from its substance, yellowish externally, very vascular centrally, on the under surface of the right lobe away from the gall-bladder. The spleen had a mass invading its substance. A section of the growth in the pelvis showed it to be a firm yet softish, yellowish, but in parts gelatinous, very vascular growth, which under the microscope appeared to be made up of lymph-like cells. The lumbar glands were cream-like near promontory of sacrum; they were not enlarged further up.

A subsequent examination of a portion of the secondary growth from the liver showed that it was not distinctly sarcomatous; it had the appearance which many growths in the liver have—namely, a very fibrous stroma with alveoli full of rounded cells. The cells were not all round, some of them were angular. The secondary growths, at any rate, must be called carcinoma rather than sarcoma.

GREAT NORTHERN HOSPITAL.

A CASE OF TRAUMATIC EMPHYSEMA WITHOUT INJURY TO THE CHEST-WALLS.

(Under the care of Mr. ADAMS.)

FOR the notes of the following case we are indebted to Neville Hart, M.B., house-surgeon.

C. P——, aged eight, was injured on the 25th of June by the wheel of a light cart which, passed over the upper part of his back. On admission there was intense emphysema of the face, temples, and chest, as well as of the left side of the back, the abdominal walls, arms, and thighs. There was also great dyspnœa. No bruise was apparent, nor were any fractured bones discovered; but the sternum appeared considerably depressed from the greatly distended condition of the areolar tissue of the pectoral muscles and arms. The emphysema and dyspnœa increased until his death, which occurred about an hour and a half after admission.

Autopsy, forty-one hours after death.—Rigor mortis present. No external marks of injury. Frothy fluid mixed with blood was seen issuing from the mouth and nostrils. The emphysema was more or less general. On removing the sternum and costal cartilages a quantity of air escaped from the chest. The lungs were much collapsed; both upper lobes were deeply congested, the lower lobes less so. On the antero-lateral surface of each lung there was a reddened patch, on which some distended, but apparently unruptured, air-cells were seen. The trachea and bronchial tubes contained red, frothy fluid. The heart was nearly empty, and the blood was slightly coagulated. The ribs, costal cartilages, and vertebræ were found uninjured. The abdominal viscera were healthy and uninjured.

This case is of interest as it shows that the lungs may be ruptured, under certain conditions, without great injury to the chest-walls. Mr. Hilton, in a similar case under his care, thought rupture occurred owing to the egress of air from the chest having been prevented. This case certainly favours the view adopted by Mr. Hilton, as the boy's face was probably driven down upon the ground. It is possible in both cases that the endeavour to keep the chest filled to assist in withstanding the pressure, afforded the conditions favourable to rupture.

GENERAL HOSPITAL, BIRMINGHAM.

A CASE OF SYPHILITIC DISEASE OF THE NERVOUS SYSTEM.

(Under the care of Dr. FOSTER.)

FOR the notes of the following interesting case we are indebted to Dr. Alfred H. Carter.

W. W——, aged forty-seven, a brickmaker, was admitted on May 22nd, 1874. The history of his case was as follows. About the end of October, 1873, he, for the first time, complained of burning and aching pain in right temple, associated with tenderness on pressure at the same spot. This pain was much worse at night, so much so that it gave rise to insomnia for several weeks. This condition continued for a week, and then he began "to see double," and the right eye was intolerant to light. On seeking medical advice, he was told that he was suffering from rheumatism of the head, for which he remained under treatment until the end of that year without much relief. During this time his right upper eyelid began to droop. He then left town for the country, and the pain moderated, but the ptosis increased, and the diplopia continued. He remained in this state more or less until the middle of April, 1874, when, in addition to the symptoms already named, he noticed a watery discharge from the right ear, attended with pain in the organ (this preceding the discharge for a few days) and deafness, not complete, but well-marked. This continued for eight or nine days, and then stopped completely, and did not return; with it the deafness also disappeared. Still the ptosis increased, and then diplopia became more marked, until May 1st, when the former was complete. On May 3rd (two days after), at 11 A.M., on attempting to rise from his seat after being shaved, he fell at full length on the floor, as the result of an attack of giddiness. He drank some water, and felt all right again, and nothing unusual in any way did he notice in his limbs at that time. He felt as usual the following day, but thought it better to remain at home. At 4 P.M., on rising from his chair to go up stairs (not feeling so well), he noticed that his left leg dragged after him. He retired to his bed, and the next morning, on waking, found his left arm and leg quite powerless, his mouth drawn to the right side, and his speech impaired. There was not at any time any loss of consciousness. Without any material alteration in his symptoms, he applied to the hospital for admission on the 22nd of that month (three weeks after).

He has been the father of eleven children by the same wife, of whom only four are now living. Of the remainder three were born dead, one had small-pox (syphilitic pemphigus?), and died before three weeks old; one died of scarlet fever (?) at three years of age; and two died before two years of age, causes unknown. No history of syphilis admitted by the patient, who has always had good health until the present illness, with the exception of small-pox when quite young. Knows nothing about his relatives as to the causes of death. His work has exposed him much to wet, standing frequently in water with shoes and stockings off.

At the time of admission his condition was noted briefly as follows:—

May 22nd.—Patient looks strong and well nourished; his right eyelid is completely paralysed, and covers the eye of that side entirely; his mouth is slightly drawn to the right side. On raising the drooping eyelid, a strong convergence of that eye is noticeable, with complete inability to move it either outwards or downwards, and only slightly upwards. The movements of the left eye are perfect. The tongue is protruded in a straight line, and the faucial arches are equal. The ordinary signs of paralysis of the facial nerve are apparent on the left side, but associated with no perversion of sensibility. The left orbicularis palpebrarum acts perfectly. On the opposite side there is numbness of the face, as far inwards as the nose and middle line of upper lip, extending as low as the angle of the mouth. The same condition occurs with regard to the surface of right hard palate. On anything being drawn over these surfaces, a sensation like "pins-and-needles" is complained of. His speech is thick and spluttering, but he has no difficulty in finding words to express his thoughts, but only in articulating them. No mental aberration beyond slight impairment of memory. The left arm hangs perfectly helpless by his side, and he is unable to move it in any direction. The fingers are semiflexed, and the thumb drawn across the palm; no rigidity. He is quite unable to open his hands. The left leg is not so completely paralysed; he is able to stand, and can walk imperfectly by the aid of a stick, but in so doing drags his toes, which frequently catch the ground. Sensation perfect in both upper and lower limbs. Complains of no pain anywhere, and feels "quite well in himself." Physical examination of chest and abdomen reveals no morbid sign. Ordered five grains of iodide of potassium three times a day, and counter-irritation to the right temple, in the shape of a blister, to be kept open by cantharides ointment.

June 20th.—Has much improved. Can now walk about without a stick; begins to move his arm. His speech is better; and the eyelid can be raised high enough to expose the whole of the pupil of the right eye. The strabismus and the numbness remain as usual. Some œdema of the left arm and leg. Ordered to keep the arm in a sling, and the leg to be supported in a horizontal position. Counter-irritation to the temple discontinued. The iodide of potassium to be increased to ten grains three times a day.

Aug. 10th.—Discharged. All the hemiplegia had completely disappeared. The action of the right eyelid perfect, though some strabismus still remained, much less marked, however, than on admission. In excellent health.

Reviews and Notices of Books.

The Cyclopædia of the Practice of Medicine. Edited in German by Dr. H. VON ZIEMSSEN. The English Translation edited by ALBERT H. BUCK, of New York. London: Sampson, Low, and Co.

THE first three volumes of the American translation of Ziemssen's "Cyclopædia of the Practice of Medicine" are before us, and ere making any comment on the first volume we have much pleasure in saying that they promise to be a very valuable addition to medical literature. The more important advances that have been made in Germany no doubt gain slow admission into this country through the pages of this and other periodicals, but we have them here at first hand, many of the articles being written by those whose names have become as household words, and presented to the public in a style commensurate with the magnitude and value of the work. We believe that about eight or ten volumes of the "Cyclopædia" have been published in Germany, and it is stated in the prospectus of the English edition that arrangements have been made by which two or more volumes will be published per annum till the whole is completed. The general scheme of the work is analogous to that of our own recent Cyclopædias of Medicine and of Surgery, each article being entrusted to the care of one who has paid particular attention to it, and the whole work therefore constitutes a series of monographs written by observers possessing special qualifications for their tasks.

The first volume, which we propose to consider here, is devoted to acute infectious diseases. The subjects and the names of the authors are in succession:—(1) Typhoid Fever, by Liebermeister, pp. 1—237. (2) Relapsing Fever, (3) Typhus Fever, and (4) Chorea, by Lebert, pp. 237—464. (5) The Plague, by Liebermeister, pp. 465—487. (6) Yellow Fever, by Haenisch, p. 488—510. (7) Dysentery, by Heubner, pp. 511—573. (8) Epidemic Diphtheria, by Oertel, pp. 574—699. It need hardly be remarked that Ziemssen, who edits the "Cyclopædia," has shown considerable tact in the selection of his contributors.

The account of typhoid fever given by Liebermeister is drawn from his personal experience, embracing 1900 cases which came under his care whilst physician to the Hospital at Basle. He defines the difference between typhoid and typhus fever to be that typhus fever is a purely contagious disease, whilst typhoid belongs to the miasmatic contagious diseases. Typhus can be transmitted directly from person to person; its contagion is as intense and evident as is that of the acute exanthemata. Typhoid fever, on the contrary, is never transmitted from person to person. Of all the cases treated at Basle from 1865 to 1871, only forty-five originated in the hospital, and many of these, there was reason to believe, were due to the formation of local foci of the disease. Liebermeister agrees with Budd in believing that it is propagated continuously, and never originates autochthonously. It does not originate in decomposing substances, but finds in them a favourable ground for its growth and multiplication. It would seem that the period of incubation is on the average three weeks, but it may be as short as two and as long as four. As regards the mode of entrance of the poison into the body, Liebermeister thinks it is certainly by the air breathed, and in all probability, notwithstanding the opposition of Pettenkofer, by the water. In almost all instances, when an outbreak occurs, careful inquiry will show that the typhoid poison has been introduced, and Liebermeister gives some very remarkable evidence on this point. The frequency of cases of typhoid at different seasons of the year is well shown by curves representing the mortality from this cause in Basle, Berlin, and London, comprising about 18,000 cases, and agreeing well with one another. The minimum proves to be in February and April, and the maximum in September and October. In Munich, however, a remarkable exception occurs, the maximum frequency being in February, four months later than in Berlin. This Liebermeister attributes to the breeding-place of the poison being more deeply seated in the earth, since the same isothermal line runs through both cities. Buhl's researches have further shown that as the level of the ground-water steadily rises typhoid diminishes, and as the latter falls the disease increases; and the same holds good for Berlin. The Munich observers, Pettenkofer, Buhl, and others, think the poison does not enter the system by drinking, but by the air. Liebermeister, however, adduces good arguments against this view.

The symptomatology of the disease is very fully yet clearly given, great stress being laid on the importance of thermometric observations, in regard to which he says justly that "a rational treatment of typhoid fever without following the temperature is not possible, and it may well be asserted that any physician who does not make two or more observations of the temperature every day neglects his duty"; and, he continues, "the use of the thermometer in private practice, showing, as it does, to unprofessional persons the importance of the rise and fall of temperature, and the effect of treatment on the fever, has more than anything else narrowed the field of homœopaths and charlatans." As might be expected, the section on the Pathology of the disease is singularly complete, and the reader will find the results of all the more important modern German investigations on this subject, though those of foreign observers are but sparingly alluded to. The section on the Diagnosis of Typhoid Fever, and that on the Complications and Sequelæ of the disease are admirable.

Liebermeister adduces very strong evidence in favour of the cold water treatment, showing that in regard to cases of consolidation of the lungs, of hæmorrhagic infarction, and of pleurisy, a notable diminution both in frequency and mortality is observable since the introduction of the cold water system.

We have given somewhat full details of the subject of typhoid fever, in order to give our readers some idea of the general features of the work, but the other articles are not less completely worked up. This is particularly the case with Lebert's memoirs on Asiatic Cholera and on Typhus Fever, which are replete with interesting information; and the same may be said of Heubner's article on Dysentery. This author seems to be more familiar with English literature than the others.

The paper, the print, and general get-up of these volumes, their size alone excepted, leave nothing to be desired. The translations are exceedingly easy, and we have noticed very few clerical errors. It is a work that we sincerely trust will meet with liberal recognition on the part of the numerous physicians and general practitioners throughout the country who are desirous of making themselves acquainted with the advances that have been made in medicine during the last twenty years in Germany.

Kystes Hydatiques du Poumon et de la Plèvre. Etude Clinique. Par ALFRED WILLIAMS HEARN, Docteur en Médecine de la Faculté de Paris. pp. 250. Paris: Delahaye. 1875.

THIS is a careful and exhaustive monograph on a disease happily rare in this country, but remarkably prevalent in Australia and in Iceland. The author was led to undertake the laborious task of its composition by having had under his care a patient who presented most of the symptoms of tubercular phthisis, but who died somewhat suddenly from asphyxia, after an attack of profuse expectoration of hydatid cysts. In compiling the work, the author has consulted every treatise on the subject and the records of every published case, appending to his monograph a full abstract of 144 cases, 82 of which were fatal. Armed with the data afforded by the study of these cases, he gives a complete analysis of all the symptoms of pulmonary hydatid disease; the diagnosis between these intra-thoracic cysts and tubercular phthisis or pleuritic effusion; the prognosis—which is found to be worse in Europe (two-thirds of the cases being fatal) than in Australia, a difference owing to surgical interference being resorted to in the latter country far more frequently than in the former. Such interference, he thinks, should take place as soon as a diagnosis is made, and should be either puncture or the continuous galvanic current. The following are briefly the symptoms to which he assigns most importance: a spasmodic cough, at first dry, but later accompanied by expectoration, either bronchitic or of hydatid fluid or cysts; dyspnœa in proportion to the development of the cyst; hæmoptysis, at first scanty, later copious, and either slightly preceding or accompanying the rupture of the cyst; persistent pain in the region of the cyst, and frequently a sensation as of a foreign body in the chest; debility contrasting with the healthy appearance of the patient; little or no pyrexia or nocturnal sweats. Locally, the cyst frequently leads to bulging of the chest-wall; diminution or absence of vocal fremitus; dulness limited to the area of the cyst when this is in contact with the thoracic parietes; absence or diminution of breath-sound at the level of the cyst, with puerile or bronchial breathing in its neighbourhood; and lastly, at the end of a variable time, the pathognomonic expectoration of clear and transparent liquid, or of membranes or hooklets. Out of the 62 cases of recovery here recorded, in no fewer than 45 the cure was due to expectoration of the hydatids, while in 1 case they escaped by means of the intestine; 5 got well after simple puncture, and 1 after puncture with injection of iodine into the cyst; 7 followed puncture or incision through the chest-wall and spontaneous evacuation of the cysts by the bronchi; and 2 only resulted from incision through the chest-wall.

OUR LIBRARY TABLE.

The Quarterly Journal of Microscopical Science. Edited by Dr. PAYNE and Messrs. LANKESTER and DYER. No. LIX. July, 1875. London: J. and A. Churchill.—The present number of this journal opens with an interesting paper by Mr. Balfour "On a Comparison of the Early Stages in the Development of Vertebrates," in which the successive modifications undergone by the blastoderm are traced from the amphioxus through the sharks and osseous fishes, frog, and bird, to the mammal. Dr. Denis Macdonald gives an account of the anatomy of the border of the posterior elastic lamina of the cornea, and demonstrates that this lamina does not, as is usually stated, become continuous with the little tendons of the ligamentum iridis pectinatum, though they are associated in a very intricate and peculiar manner. Dr. Klein has a good paper on the pathology of sheep-pox, of which we have elsewhere given an account. Mr. Jackson describes a new peritrichous Infusorian, to which he has given the name of Cyclochæta spongillæ. Mr. Hubrecht supplies some observations on the minute anatomy of Mediterranean Nemerteans. Mr. Lankester records some new points in the structure of amphioxus and their bearing on the morphology of vertebrata. Dr. T. R. Lewis describes certain Nematode Hæmatozoa in the dog which correspond to the Filaria sanguinolenta. Dr. Macintosh finally describes the Amphiporus spectabilis and other nemerteans. There is the usual quarterly chronicle of microscopical science and account of the proceedings of societies. The part is illustrated by five plates, and is a very good one.

The Childhood of Religions; embracing a Simple Account of the Birth and Growth of Myths and Legends. By EDWARD CLODD, F.R.A.S. London: King and Co. 1875.—This book is by the author of that excellent and very popular little volume, "The Childhood of the World." The present subject is one more difficult of treatment, and requires, if we may so express it, more delicate handling. The volume is intended for the youth of both sexes, who must, however, have attained a certain age and a degree of knowledge sufficient to appreciate it; and we can understand that many parents and teachers might hesitate to employ it. For our own part, we hold that in this, as in other things, "honesty is the best policy." If our aim be the attainment of truth, and we pursue it with singleness of purpose, reverently seeking to find out, assimilate, and sympathise with whatever is honest, true, and ennobling, we have no cause to fear, but everything to hope, from our efforts to behold things as they are, and not as they appear by the light of our own prejudices. Apart from these considerations, however, this book will be found uncommonly interesting to grown-up children who have occasionally dipped into the sources of information from which our author has drawn his materials, but who do not possess the time or opportunity to pursue these studies steadily and systematically. To such it will prove, as it has proved to ourselves, most acceptable. The information is well arranged and of the best, and the history of "The Childhood of Religion" is told and traced out simply, lucidly, and sympathetically.

On the Graphical Representation of the Movements of the Chest-wall in Respiration. By A. RANSOME, M.D. Pamphlet. 1875.—In this pamphlet, which is reprinted from the Memoirs of the Literary and Philosophical Society of Manchester, Dr. Ransome, already well-known for much good work in connexion with respiration, describes an instrument by which he has been able to measure and record the movements of points on the chest-wall, in *three* directions at right angles to each other—namely, forward, upward, and outward—during one act of breathing. He shows that the actual shape of the respiratory curve (ends of the third pair of ribs) is very different from what it would be on the usually received hypothesis, that the ribs are simply rigid bars moving upon the support of their costo-vertebral joints. Dr. Ransome gives a series of tracings, in which he shows the true form of curve pursued by the ribs in question, which are deserving of careful study, and may perhaps hereafter become an aid in the clinical investigation of disease.

Zeitschrift für Biologie. BUHL, PETTENKOFER, and VOIT. Band xi., Heft 2. München, 1875.—This part contains a paper by K. Vierordt on Physiological Spectral Analysis. 2. On Asparaginic Acid as a product of Artificial Digestion of Glue by the Pancreatic Gland, by Dr. Knieriem. 3. Researches on the Contamination of Air by Drain-pipes, and upon the Relative Activity of the chief Disinfectants, by Dr. F. Erismann. 4. Xanthin and Uric Acid in the Urine of a Diseased Ram, by H. Weiske. 5. Histological and Physiological Studies, by G. Valentin (construction of magnet-electrometer and action of currents). 6. Substitution of Lime in the Bones, by Dr. J. König. Lastly, On a Means for determining the Presence of Free Carbonic Acid in Water, by Max von Pettenkofer.

Proverbs from Far and Near, Wise Sentences, &c. Collated and Arranged by WILLIAM TEGG. London: William Tegg and Co. 1875.—This is a selection of proverbs, &c., gleaned, as the editor tells us, from the pages of Ray, Fuller, Grose, and many another worthy—some well, others little, known. And what an amount of thought is contained in a small number of pages! The wit, wisdom, and experience of ages are compressed in these pithy sentences, which give expression to almost every variety of character and every shade of thought. Some are rough and graphic, some playful, tender and delicate in expression, some witty, some cold and cynical, many humorous, and many more sagacious. The selection seems to us a good one; and there is something for everybody in a collection of proverbs.

The Monthly Microscopical Journal. Edited by Dr. LAWSON. No. LXXIX., July 1st, 1875. London: Hardwicke.—This number contains four articles:—1. Notes on Bucephalus polymorphus, by Charles Stewart. 2. Measurement of Angular Aperture, by Mr. Stephenson. 3. Notes on the Use of Mr. Wenham's Reflex Illuminator, by Mr. Slack. 4. On Dr. Schumann's Formulæ for Diatom Lines, by Mr. J. Hickie. The Chronicle of the Progress of Microscopical Science contains a good account of Dr. Thin's article on the Microscopic Appearances in Inflammation of Connective Tissue.

ANATOMY AT THE EXHIBITION OF THE ROYAL ACADEMY.

IN the 19th century the portraying of the nude figure does not occupy so much of the artist's attention as it did in those days when art was in its highest state of perfection —in those bright days when men were taught to speak the truth and pay a strict attention to their physical well-being, and when women were so uncivilised as not to interfere with their natural figure by constricting stays and tight waistbands. But with the advance of civilisation the public taste has proceeded with equal steps, so that now such a state of over-refinement has been attained that the visitors at a gallery dare hardly look at a picture of a figure in scanty attire, even if a Hanging Commitee should have ventured to find a place for it upon their walls. Such a state of affairs is much to be regretted, for the human form offers the grandest theme for the painter's art, and the severest test of his scientific knowledge and skill. A mere change in the position of a limb or an alteration in the pose, by bringing into play a fresh series of muscles, whilst it sets another at rest, presents a varying subject to the student in the life-school, just as a passing cloud or a gust of wind unfolds fresh beauties to the admiring eye of the landscape painter. The more drapery that is placed upon the human figure the easier does the artist's task become, and the better opportunity does it afford him for putting on colour. In fact, the model now, for the most part, plays the part of a lay figure, and its subtle beauties are hidden much as the tracery of a church roof or the decoration of a rood-screen was smothered by the plaster and whitewash of the unappreciative churchwarden of the last century.

There are, however, in the exhibition at Burlington House some few pictures to which we may venture to draw the attention of the admirer of the highest form of pictorial art.

"A Modern Cinderella" (64) is a charming little picture, somewhat in the style of the modern French school, and, with the aid of the letter-press of the catalogue, tells a pathetic tale. The patient model has just taken off, and is hanging up, a silk dress which she has been wearing for the artist, and is about to put on her old and well-worn dress. The arms and shoulders are exposed, and though the subject can hardly be considered as an anatomical study, still Mrs. Jopling has shown enough of the nude figure to make a picture-dealer's wife declare that she could never hang such a thing in *her* house. "Ezekiel's Vision" (129) by Mr. Poole, R.A., is one of the most displeasing pictures in the exhibition. It contains some small naked men, which, quoting Ezekiel (i. ver. 5), the artist tells us are "the likenesses of four living creatures." "The Festival," and "The Golden Age" (233 and 236), by E. J. Poynter, A., we count amongst the gems of this year's exhibition. They are hung on either side of the door of the third gallery. They are pure examples of anatomical study. The muscular development of the male figures, who are gathering ripe fruit, is treated in a most masterly manner, and without any of that exaggeration of muscle which Raphael and the old masters were tempted to indulge in.

No. 398, Mr. Leighton's "Eastern Slinger scaring birds in the Harvest Time" (moonrise), comes very near perfection. The picture, which is as strange as it is attractive, demands a careful and lengthy examination. A young man of brick-dust hue is in the act of slinging a large stone. He will have to sling it a long distance, for the birds have not dared to come anywhere near him. Now, considering the expenditure of force which the act must necessitate, we have no hesitation in saying that he is not exerting himself sufficiently. The left arm, which occupies an abducted and unnatural position, should be much closer to the side, and the hand should have been clenched. Such an arrangement would have given much energy to the conception, and by throwing the muscles of the left side of the chest into vigorous action would have imparted into the upper part of the figure a fixity and strength which at present it lacks.

"Andromeda" (473), by A. Hill, is a very graceful figure, soft and slender as an Andromeda should be. Standing upon the wet and slippery rock, she receives almost all her weight upon the left leg; but, altogether, there is a want of security in the pose. Mr. Hill has graced the foot with a second and third toe longer than the great toe; yet, notwithstanding this charm, the drawing of the leg and foot does not please us so much as that of the upper part of the figure.

No. 875 (L. Wingfield) represents a fair young woman weeping by the waters of Babylon. The artist has not been successful in the selection of his model, whom he has painted with bare foot and shoulders. The picture is hung high up in a corner of the lecture-room, where it will not be likely to attract much attention.

In the sculpture galleries Mr. W. C. Marshall, R.A., is well represented by his "Nausicaa" (1326). Mr. E. B. Stevens's "Bowler" (1323) is a fine and powerful study. Mr. J. Warrington Wood has two fine works in marble in the central hall.

THE LANCET.

LONDON: SATURDAY, JULY 24, 1875.

When the Obstetrical Society took up the subject of Puerperal Fever for discussion, they were met at the very outset by the preliminary question: Is there such a thing as puerperal fever? It is well to begin at the beginning—to take nothing for granted. The question was framed, as Dr. Arthur Farre showed, in a remarkably able argument, syllogistically, almost precluding any other than a negative solution. Mr. Spencer Wells took the definition of puerperal fever adopted in the Nomenclature of the College of Physicians drawn up by Dr. Farre: "A continued fever, communicable by contagion, occurring in connexion with childbirth, and often associated with extensive local lesions, especially of the uterine system." Upon this theme Mr. Wells says: "I must ask you to say if, in your experience, you ever saw such a case which could not, on careful inquiry, be traced to exposure of the patient to some one or other of the contagious or infectious fevers—to scarlet fever or diphtheria, to measles or small-pox; and I proceed to ask you if, in any case where puerperal fever could not be proved to be really scarlet fever, diphtheria, measles, or small-pox, ... it was not a traumatic or surgical fever, erysipelas, pyæmia, or septicæmia."

Now, the first thing that occurs to the medical reasoner on studying this complex question is, to refuse to be bound down within the precise limits assigned. On its own hypothesis, indeed, the question is imperfect. Typhoid, for example, is omitted; and yet it is certain that it may attack lying-in women, and that its specific characters may be so obscured by the special conditions of the recipient as to simulate what is conventionally called "puerperal fever." Then follows a more serious fallacy in the argument. Mr. Wells pursues his point thus: "If you have seen such a case, then let us know something about the fever, its period of latency, its course and duration, and its termination; and especially tell us something about the poison which has been the cause of the fever." Now, this interrogative argument bears a very close resemblance to the *petitio principii*. It would not follow, as is here assumed, that a specific puerperal fever does not exist because those who believe they have seen it cannot define its period of latency, its duration, describe its pathology, and especially say something about the poison. On this mode of reasoning there was a time, and that not very remote, when we should have been called upon to deny the existence of typhoid fever. And even now, although we may "say something about the typhoid poison," we cannot be sure that that "something" is worth saying.

Dr. Fordyce Barker very aptly and clearly showed that Mr. Wells, in asking for this specific account of the pathology of puerperal fever, was asking for more than was granted as known of the zymotic fevers. "Would," he said, "Sir William Jenner or Dr. Murchison, or Hoffman or Lebert, insist that a disease could not be registered as typhus or relapsing fever except certain anatomical lesions could be demonstrated?"

Then, again, there is another fallacy in the proviso—"on careful inquiry." It seems to be implied by the terms and structure of the question that the "inquiry" which should fail to trace a presumed puerperal fever to scarlet fever or other known zymotic, or to the conditions that may for convenience be included under the general term "surgical," could not be "careful." Now, it may be freely admitted that careful inquiry will frequently bring to light the fact that what has passed for puerperal fever was really a zymotic fever introduced into a lying-in woman. But it must also be admitted that the most careful inquiry will not seldom fail to elicit any evidence to justify this suspicion of zymotic invasion. And yet the patient is stricken with a terrible, even fatal, disease.

Grant this—and how can it be denied?—and then we are brought face to face with the practical difficulty. What shall we call this disease which kills? Shall we, because we cannot discover in a given case that it is scarlet fever, or measles, or pyæmia, or erysipelas, say it is not a fever at all? Yet that is really the *reductio ad absurdum* prepared for those who assume that all fevers in lying-in women must be scarlet fever or some other of the known diseases enumerated in the question. This assumption would land the physician in perpetual difficulty. For example, "careful inquiry" will often not be successful in tracing the source and nature of the fever until long after the patient is dead. What is he to call the fever in the meantime? How will he register the cause of death? There must, then, for practical purposes be some conventional or provisional name which shall embrace all the febrile conditions to which the lying-in woman is liable. What name so convenient as "puerperal fever"?—one consecrated by custom, and possessing the inestimable advantage of not committing the physician to any absolute theory? Struggle as you may, prove to demonstration that there is no such entity as puerperal fever, this or some equivalent general term will be imposed upon you by the irresistible logic of facts. Nor will it help us much to adopt Dr. Farre's term, "post-partum fever." This is only shifting the difficulty. Very soon the same terrors that in the popular mind are attached to the term "puerperal fever" would gather around "post-partum fever." Nor is the term really so good. It is less comprehensive. Whether it be in strict etymological correctness or not, the word "puerperal" is understood to embrace the fevers that manifest themselves shortly before and during labour. These the word "post-partum" ignores.

It is a curious illustration of the influence which the syllogistic form of putting a string of questions exercises in dictating the answer, that many of the speakers fell into the "surgical trap." There was quite a chorus of assent to the proposition that there was no such thing as puerperal fever. The chief dissentients were Drs. Barnes, Fordyce Barker, and West. These speakers, as well as Dr. Richardson, all insisted upon the peculiar condition of the body brought about by the processes of labour and puerpery, and the consequent liability to fever as the outcome of disturbed puerperal process. Some of these forms of disease were described in this journal some years ago by Dr. Barnes in a series of lectures on Puerperal Fever, under the names "excretory puerperal fever," "thrombotic puerperal fever," and others. In those lectures he justified the term "puerperal fever" as a general one, meaning in its broad sense simply fever in a lying-in woman. He contended that we must first recognise the bare clinical fact that a lying-in woman has a fever; and that, as the next step, you may proceed to determine, if you can, the precise nature of that fever. Analysis, the search after causes, are subsequent steps. Starting from this basis, he divided puerperal fever into the two great divisions of Heterogenetic, or those derived from without, including the zymotic fevers; and Autogenetic, or those arising from conditions inherent in the patient. This classification and the terms which express it have been adopted by many writers since. It is founded upon unquestionable truths, and seems to offer the best basis for further analysis and inquiry.

A great practical question, one continually surging up, received attention and some useful illustration. This is the question of the contagiousness of puerperal fever. Obviously, the answer will hang upon the conclusion arrived at as to what puerperal fever is. If it be scarlatina, then certainly it is contagious. But Dr. FORDYCE BARKER, who contended so ably for an essential puerperal fever, maintains that surgical septicæmia and surgical pyæmia, occurring in puerperal women, do not constitute a continued fever communicable by contagion. Hence there are puerperal fevers which are contagious, and there are puerperal fevers which are not so. It might be stated generally, bearing in mind that the rule is not absolute, that the heterogenetic class contains the contagious forms, and that the autogenetic forms include those which are not contagious. The great point to remember is that puerperal fever is not a constant entity; that it may be one thing or another distinct thing; and that it may therefore present various characters. In the presence of this difficulty and of the unsettled opinions upon the whole subject, it becomes simply impossible and absurd to lend any countenance to the popular belief that puerperal fever is a disease always communicated to the patient. As we have said in a former article on this point, one case of puerperal fever may occur in any man's practice, and he may be quite innocent of its production. It may be of spontaneous or autogenetic origin. But, as a rule—to which, however, there may be exceptions,—two or a larger series of cases ought not to occur in the practice of one man. In such an event the suspicion that he has been concerned in carrying the disease assumes a high probability, rising with the accumulation of the cases. And, we repeat emphatically, a man in such a position ought to retire for a while from obstetric practice.

But an allied question to the foregoing admits of a more doubtful answer. Is the lying-in woman or the pregnant woman in such a condition of increased susceptibility to the invasion of zymotic poisons that it is dangerous for a physician who has recently been in attendance on cases of scarlet fever or erysipelas to treat such a woman, or to attend her in labour? The answers from good observers are far from uniform. It is a wide-spread belief that there is increased susceptibility. On the other hand, there are not wanting men with ample opportunities of observation who deny it. And if it were true to the extent some think, few women could escape puerperal fever in some form. For it may be affirmed that the risk is being continually run, under the exigencies of daily practice, without any such result as that which is dreaded. Dr. WALLACE mentioned a fact which many men in busy practice might parallel. "On several occasions," he says, "children with the rash of scarlatina out on them were in bed with the mothers when they were confined." This part of the subject clearly needs further study. We have heard a very experienced and thoughtful physician, who was unable to take part in the debate, declare, as his opinion, that pregnancy conferred a degree of immunity from other diseases, including zymotics. Certainly, if the theory of increased susceptibility is carried to the full extent of its logical conclusion, practice could hardly go on. Women must deliver themselves. And most assuredly even then they would not be secure against puerperal fever.

For originality, for extent of material, for ability in handling, this discussion at our London Society will hardly take rank with the famous debate at the French Academy of Medicine some years ago. The difference in the character of the two debates depends mainly upon two circumstances that could not fail to make their mark. The first is that the mass of experience is vastly greater in Paris than in London. Puerperal fever at various times has literally decimated the Paris lying-in wards. The second condition lies in the greater number of physicians whose duties compelled them to observe the disease. Puerperal diseases are not in Paris the exclusive domain of purely obstetric physicians. Hence such men as CRUVEILHIER, ANDRAL, and TROUSSEAU could all bring the wealth of their knowledge of general pathology and their powerful intellects to bear upon the elucidation of the problems presented by fevers in puerperal women. It is true that, in the Obstetrical Society, three surgeons of mark—SPENCER WELLS (who started the theme), HUTCHINSON, and CALLENDER—were drawn into the discussion. But, valuable as their contributions undoubtedly were, it must be admitted that they spoke from little or no personal observation of disease in childbed. Running along a parallel road, they sought to solve a problem that lay beyond their path by the treacherous method of analogy. They reasoned from that which they knew to what they did not know. Analogy, where the fundamental factors are essentially different, requires to be applied with extreme reserve.

This, then, we think, is the weak point of the debate. The experience was too special; too restricted to a section. The debate would have been more valuable if it had elicited and brought into one focus more of the experience and of the matured thought of the many able general practitioners who are familiar with disease in all its forms and every variety of condition. This defect may still be supplied. There is no reason why this debate should not be supplemented by the record of carefully investigated local epidemics or series of cases, or even isolated cases, arising under circumstances that admit of precise analysis and estimation in their bearing on cause, nature, and treatment. The fatal tendency of most minds is to frame theories upon their own limited experience, and to adopt hastily and to adhere obstinately to the theories of others. Yet this is precisely one of those questions which no man can decide upon his own experience. He who would arrive at a just and comprehensive theory must weigh with respect the facts, if not the opinions, of others. With caution he must endeavour to seize their true relations. Then he may gather them into groups that admit of being more conveniently handled. And thus, by a process, tedious perhaps, but trustworthy, he may succeed in analysing the confused elements of a chaos, surveying them separately, and then reuniting them into an orderly whole, where, each retaining its individual significance, all shall contribute, by mutual reflection, to bring out the essential truth.

The London debate may be said, in one sense, to be the complement of the Paris debate. The one gives the history of the puerperal fevers of hospitals, those factories of childbed disease; the other gives the fevers of home life. Both are necessary to the formation of just conclusions. And yet our facts are probably defective. It may still be wise to wait for fresh material. Will the final, the solving evidence come from the bedside or the laboratory? Hitherto the chemist pure has done little. Will the man who combines chemistry with a profound knowledge of histology and the changes wrought in the body by disease, aided by experimental inquiries, do more? There is greater hope in this direction. In the meantime the clinical physician will not be tempted out of his path by the golden promise of bacteria.

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THE known relations between dipsomania and other forms of mental disease—their coincidence in both individuals and families, their common origin, their similar characteristics, and allied course—furnish one argument of great cogency in favour of the compulsory seclusion of the dipsomaniac. The condition is unquestionably the result and the evidence of moral imbecility, and in many cases is associated, as distinctly, with mental weakness. It may be doubted whether there are not some forms of insanity which are nearer health than the state of the individual whose craving for alcohol overpowers every other consideration and every motive which can be placed before him. Compulsory restraint is as necessary for the recovery of the habitual drunkard as for that of the insane; and a degree of success may reasonably be anticipated as great as, and indeed greater than, in many other classes of mental disorder. This being so, the full justification for the mode of treatment is to be found in the fact that the relation of individual to society does not differ, even in degree, in the two cases. We shut up our lunatic, not only because the seclusion is essential to his restoration to health, but also because his unrestrained presence in the community is dangerous to its members; and as a source of crime and of injury to others there is little to choose between the two forms of disorder. It is true a comparison is not easy. Lunatics are restrained, dipsomaniacs are not; and so the enormous amount of injury inflicted by the latter on those around them cannot properly be compared with that which results from the acts of the insane. But if a hundred insane persons of various kinds, and a hundred habitual drunkards, were living in their own homes, it is probable that at the end of a year the resulting injury to those by whom each set of persons was surrounded would be much greater in the case of the dipsomaniacs than in that of the insane.

This relation of the drunkard to society, too often overlooked or underrated in our unhappy familiarity with it, furnishes an effectual reply to the objection which has been made to the proposed legislation on the ground that it would involve an unjustifiable interference with individual liberty. Our social life, it has been urged, is so arranged as to secure the most perfect freedom of individual action—a freedom which is to be limited only when its exercise interferes seriously with the well-being of others. Then society may step in with whatever means are best calculated to restrain the prejudicial course of action. All injurious effects on society do not justify the restraint of individual action. Many contingent injuries society is content to endure for the sake of the greater good of human freedom. At present the line is drawn so as to exclude all forms of drunkenness from those actions which justify interference, even temporary, with individual freedom of action. In doing this, however, the disastrous consequences, direct and indirect, to society of habitual intoxication are to a great extent ignored, and yet they are grave and extensive beyond those of many actions which are held to furnish abundant ground for individual restraint.

A reason of great weight for the compulsory treatment of drunkards is furnished by the manner in which intoxication is regarded by our criminal law. While the most constant habitual drunkenness is not considered to be ground for even a temporary interference with individual liberty; while absolute freedom to drink to maddening excess is allowed to every member of the community,—for every criminal action performed under the influence of drink we hold a person criminally responsible. If the drunkard, while under alcoholic influence, not only unaware of the difference between right and wrong, but even unconscious of what he is doing, strike a fatal blow, he is, or may be, liable to the punishment of death. The punishment for the crime is really a punishment for the drunkenness; for it is in most cases merely a matter of external and accidental occasion whether a drunken person does or does not commit a crime. It is hard to justify this severity of the system which in effect visits the drunkenness with the full punishment of the crime, if no attempt is made at preventive measures for the reclamation of the unhappy drunkard, because such a measure would involve a temporary interference with his legitimate freedom.

There is yet another ground on which, it may be not unfairly urged, the liberty of the individual may be reasonably limited if essential for his reclamation from such a curse as that of habitual intoxication. That there are some necessary limits to freedom of action, even where the action involves no injury, direct, or it may be indirect, to any person except the individual concerned, is clearly recognised in our present law. Preservation of nominal liberty may entail the loss of a much more real freedom of action. Accordingly, on some of these actions a restraint is placed. No person, for instance, is at liberty to commit suicide; an attempt at self-destruction is punished as a crime; the survivor of two persons who agree on a common suicide is regarded as a murderer. In the same way, no individual is allowed to abrogate for life his personal liberty; he may not sell his freedom of action, or place his services for the rest of his life at the disposal of another. The liberty to renounce his freedom is denied him, for the manifest reason that such liberty is liberty only in semblance. For the preservation of his real freedom it is necessary that he should be subjected to a definite restraint. The application of this principle to the dipsomaniac is clear. If a man is and apparently cannot help being constantly drunk, unable to discharge the commonest duties of life, private or public, to his family or to society, by continuing free to drink, he does, in effect, forfeit so much larger a freedom of action that his compulsory seclusion for a time, if his cure can be thereby effected, is more than justifiable, it is even obligatory upon society. We hear much nowadays about individual freedom and personal liberty. It is incumbent upon us to look well that we are not losing the substance in grasping at its shadow.

Of course the proposed system is not to be carried into effect without an extensive organisation and fresh machinery. Reformatories must be established; commissioners must be appointed, under whose direction and supervision the system can be worked; the degree of drunkenness at which the seclusion should be adopted must be defined, due safeguards against abuse must be provided, and the power to be allotted respectively to the friends of the individual and to the governmental body must be accurately prescribed. The arrangement of such a system is unquestionably a task of magnitude, but it presents no insuperable difficulty. Systems of far greater elaboration have grown up in our midst with insensible gradations, and the problem needs only due care and perseverance for its successful working out. One thing, however, is certain. Arrangements for the treatment of drunkards must be independent of any existing organisation. The drunkard must not be stigmatised, or be in any accidental way liable to be stigmatised, as criminal or insane. Such an absolute distinction is necessary in justice to the individual, and it is necessary for any prospect of success in the proposed legislation. Safeguards against abuse would not be difficult to frame. In spite of abstract objections of theoretical philosophers, the system of our lunacy arrangements leaves little room for injustice; and the task to provide all due safeguards against injustice would be still more easy in the case of the dipsomaniac than in that of the insane.

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We must congratulate the officers of the Army Medical Department, especially the junior ones, upon having their case at last brought before Parliament, as also upon the fact of their advocate being none other than the honourable member for Salisbury.

The report of the debate given in the daily papers was remarkably meagre; it afforded but a skeleton, and that a very imperfect one, of the statement made by Dr. Lush, who spoke with great lucidity and with a temperance that evidently carried weight. No one reading the published accounts of the debate could form anything like a fair estimate of what was said, for instead of confining his remarks to the points that have appeared, Dr. Lush went into the subject as fully as could well be done in a speech of thirty-five minutes' duration, and those of our readers who were not present must refer to Hansard for what was said. Dr. Lush was well supported by other speakers who took part in the debate. After having been present in the House of Commons, we had the curiosity to compare what we had heard with the published reports. If we had depended upon the latter, we should have regarded it as a very poor and weak debate, which it was not. While we think that the medical profession, and medical officers especially, are much indebted to Dr. Lush for his able and disinterested advocacy, we cannot help reminding them that Mr. Lyon Playfair's name was conspicuous by its absence, and this fact should not be lost sight of by the medical graduates of the Universities of Edinburgh and St. Andrews. The least that this right honourable gentleman could have done was to have lent the weight of his name to such a cause on such an occasion, the more especially as he owes his election in a large measure to the votes of the medical graduates of the Universities he represents in Parliament, and he mainly grounded his claim to their confidence and support on his declared sympathy with their professional aims. Though Dr. Lush referred to the subject of honours and rewards, the points principally dwelt on by him were those which the most thoughtful members of the Department agree upon considering their chief grievances, namely—1. The want of a healthy flow of promotion right through the Department. 2. The state of uncertainty in which, as regards their position and everything affecting them, medical officers exist. 3. The arbitrary and harsh manner in which they were removed from their regiments. 4. The withdrawal of forage, which had been guaranteed them by a Royal Warrant. 5. The great difficulty about obtaining a fair amount of leave. And he strongly urged upon the War Minister the advisability of enforcing compulsory retirement from the administrative grade at sixty years, with a view to remedy the first and chief cause of complaint amongst the junior officers. In this he was warmly seconded by Dr. Ward, who, in a clear and convincing manner, showed the necessity of such a step. It seems to us that the view of the matter taken by Dr. Ward is but the common sense one when he remarked that "if control officers, chaplains, and naval medical officers are retired at sixty, surely army medical officers should also be compelled to go at that age." Mr. Hardy's rejoinder on this point, that the services of valuable officers would be lost to the State were this advice carried out, and injustice inflicted on the Department itself, seems to us to be merely begging the question. The Army Medical, like other services, requires young blood, and it seems to us as clear as that two and two make four, that, so far from proving an injury to the Department, forced retirement at sixty years would, while it merely inconvenienced *one*, benefit *three*, two by promotion and one by appointment. We hope the hollowness of the term "rank," as applied to medical officers, has been once and for ever exposed by Dr. Ward, who briefly explained that medical officers *really* possess no rank whatever; nor did they desire vacuum, but substance. That as regards the latter, notwithstanding the fact that their pay of late years was slightly increased, nevertheless, owing to the length of time spent by them in their junior grade, less money was actually received by them during their service than by those for whose benefit the Warrant of 1858 was deemed necessary; and that, as regards the former, it is simply absurd to institute a comparison at all between the relative positions of medical and military officers; for, whereas the former bring an expensively acquired profession, which they sell to the State for *money* only, taking away with them no collateral advantages of title or position, but relinquishing as they began, Dr. So-and-so, the latter come to the State to acquire a profession, plus permanent rank and social standing, to say nothing of a fair prospect of obtaining one of the many lucrative appointments open to combatants.

Mr. CAMPBELL-BANNERMAN, when he stated that a committee composed of eminent medical officers had inquired into the whole question before the late Warrant was issued, omitted to inform the House what committee he was referring to. And he altogether neglected to state how far that Warrant was in accordance with or in direct opposition to the views expressed by these eminent medical officers. Assuming that the principle of unification is sound and correct, which we believe, much surely depends on the way in which a thing is done. It makes all the difference whether you give a copper to a beggar or heave it at his head.

There were fifty members present in the House during the debate, and that Dr. LUSH's speech and those of the other members must have had a considerable effect is clear from the fact that Mr. HARDY begged the honourable member not to divide the House on his motion. And, what is more to the point, Mr. HARDY, as it seemed to us, practically promised to do nearly all that Dr. LUSH asked, in order to avoid a division.

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THE current number of the *Quarterly Journal of Microscopical Science* contains an important article by Dr. KLEIN on the Pathology of Sheep-pox, to which we desire to direct the attention of our readers, since the results of his researches throw much light on the closely allied conditions of small-pox in man. The ovine disease, though not communicable to the human subject, is yet due to a specific contagion, and both in its pathology and symptomatology closely resembles variola.

Dr. KLEIN states that, in order to obtain the material for this investigation, he communicated the disease by inoculation to a number of sheep, and thus obtained specimens of skin, which he proceeded to examine with the microscope at all stages of its development. The virus was obtained from two sources; one portion being forwarded by Professor CHAUVEAU, of Lyons, and the other by Professor COHN, of Breslau. In some of the inoculations the lymph was first diluted with from fifteen to twenty times its volume of half-per-cent. solution of common salt, whilst in others it was injected in an undiluted state; but no difference was observed in the two series of cases. A difficulty arose at this point, for it was found that, as in vaccination, it is extremely rare to meet with instances in which secondary pustules present themselves in addition to the primary one at the seat of insertion; but it was felt that the value of the results would be impaired if the investigation were limited to the local effects produced by inoculation. Dr. KLEIN, after some consideration, fortunately succeeded completely in producing a general eruption by introducing the sheep-pox virus into the circulating blood. He diluted the liquid with from fifteen to twenty times its bulk of the dilute solution of common salt above referred to, and injected it directly into the external mammary vein of a healthy sheep. He also inoculated the animal in the ordinary way, and was thus enabled to compare the anatomical characters of the primary and secondary eruptions in the same animal. The injection and inoculation were performed on the 1st of April. The primary papules made their appearance on the 4th. On the 7th several small secondary papules appeared on the lips and around the mouth, and increased rapidly during the three succeeding days.

Careful examination, under high powers, of the lymph sent by Professor COHN revealed several distinct morphological elements—as granules in transparent masses, spheroidal bodies, micrococci, decolourised blood-corpuscles, and bacteria. On exposing the lymph to the temperature of incubation for twenty-four hours, the transparent masses containing granules were found to have developed a kind of mycelium, to the felt fibres of which the granules were attached in rows. After forty-eight hours the granules had developed into micrococci and pale spheroids. These spheroids, which are highly refractive, he considers to be characteristic of sheep-pox in its active condition.

Anatomical investigation of the changes which occur at the seat of inoculation—and those observable in the secondary pustules are essentially similar—shows that they may be divided into three stages: of which the first is characterised by progressive thickening of the integument over a rapidly-increasing but well-defined area; the second by the formation in the rete Malpighii of vesicular cavities containing clear liquid (the "cells" of older authors), in which sooner or later organic vegetable forms are developed; and the third by the impletion of these cavities with pus-corpuscles. The process commences in the rete Malpighii and in the subjacent papillary layer of the corium: in the former by the enlargement of the cells and multiplication of the nuclei; in the latter by the enlargement of the papillæ and the germination of the endothelium of the capillaries. The lymphatic canaliculi become dilated and more distinct, the cells lining them enlarged, and white corpuscles are mingled with their contents; the lymphatic vessels into which they open are distended with a material which resembles coagulated plasma. At about the third day the lymphatics begin to contain granular matter, micrococci, and branched filaments; and by the fifth day they are filled with these bodies. The branched filaments, continuing their growth, form necklace terminal processes, each of which breaks off at its free end into conidia. Whilst these changes are going on in the corium, horny transformation of the middle layer of the rete Malpighii occurs, so that a stratum is formed, and the cells beneath this enlarge and encroach in the form of processes on the subjacent corium, and some of them enlarge into vesicles, whilst others become flattened and form septa between them. The vesicles increase in size and number, and become filled with the felt-like mycelium, the fibres of which are of extreme tenuity, and with micrococci and conidia. Sooner or later, so much of the rete Malpighii as lies between the horny striatum and the papillæ of the corium becomes infiltrated with migratory lymph-corpuscles, which soon make their way into the "cells" or cavities, and convert them into microscopical collections of pus-corpuscles.

No comment is needed to point out the value of these observations and the extreme interest that attaches to them; if any were requisite, it would only be necessary to refer to the article on Small-pox by CURSCHMANN in the second volume of the American edition of ZIEMSSEN's Cyclopædia to show how uncertain is the note there struck on this very point. Dr. KLEIN's observations constitute, in our opinion, one of the best bits of pathological work that has been lately done, and affords strong evidence of the parasitic fungoid origin of the disease.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF SURGEONS.

THE publication of a Report on the Affairs of the College of Surgeons, drawn up by the President himself, is an encouraging fact. By those who have been conversant with the internal workings of the College for the last twenty years such a contingency must at one time have been deemed almost beyond the range of possibility. Even five years ago, when the fellows and members held their first official meeting within the College walls, the wily and distrustful authorities of that day did not scruple to insult their constituents by causing the resident porter to be sworn in as a special constable "to prevent felonies and disorders." Happily the domination of cliquism is broken, and the light of liberality and of progress has, at last, dawned on the Council of the Royal College of Surgeons of England. If we consider who they are that have been elected members of the Council during the last seven or eight years, we can easily understand that the influence for good of such men must make itself felt. It is not, perhaps, too much to say that if it had not been for the obstructive interference of the nyctalopic officials, who seemed to suffer actual personal pain whenever the transactions of the Council were viewed in the open day of criticism, annual reports from the presidents would doubtless have been instituted long before the year 1875. Be this as it may, the thing is now accomplished, and the fellows and members of the College, while congratulating themselves on the demolition of another barrier of bigoted conservatism, should not forget that to Mr. Marshall is due the credit of the initiation of this Report, and to Mr. Le Gros Clark, the ex-president, belongs the honour of first giving effect to the wise and liberal measure.

The Report itself is of extreme interest, and deserving of attentive perusal. After dealing with the changes in the Council and with other matters concerning the general management of the College, its museum and library, and its examinations, the President, who is singly responsible, proceeds to give an abstract of the Minutes of the Council during the collegiate year. The chief topics therein treated are, firstly, the appointment of a committee to consider and report on the new bye-laws relating to examiners and examinations in anatomy and physiology; and, secondly, the part that the College has taken in the Conjoint Scheme. Although the report of the committee has not yet been presented, the Council has determined that it is expedient that the examinations in anatomy and physiology should be conducted by a board distinct from the Court of Examiners which has charge of the final or pass examination in surgery and pathology. Such an arrangement will not, however, necessarily preclude the examiners in the final examination from taking part in that on anatomy and physiology. It is needless to point out that the separation of the examiners will be fraught with good results. By such an arrangement the examinations at the College will not only become more searching, but, what is of no less importance, they will be more certain and reliable.

The College has for some time past been at a standstill with respect to the Conjoint Scheme; and although the "Enabling Bill" is now passed, there are many shoals and quicksands beyond. The old grievance concerning the appointment of examiners still remains undetermined, and, as far as the co-operating bodies themselves are concerned, is perhaps undeterminable.

MORTALITY RETURNS IN ST. GEORGE'S, HANOVER-SQUARE.

IT transpired at the last ordinary fortnightly meeting of the vestry of St. George, Hanover-square, that this is now one of the few sanitary authorities of the metropolis that persist in their refusal to pay for the copies of the death-register which are so essential to the due performance of the duties of the medical officer of health. This and a few other of the London vestries continue to incur the grave responsibility of endangering the sanitary welfare of their districts, either in the exercise of a paltry economy, or to indulge a feeling of pique at having been called upon to pay the local registrars for services which had been gratuitous during a long series of years, but for which a recent Act of Parliament authorises a legal payment. It is now more than twelve months since notice was given by the Registrar-General that after the 1st of January last, when the new Registration Act came into operation, he should be obliged, in the interest of the metropolitan registrars, to discontinue the transmission of gratuitous returns. Since the beginning of the year most of the vestries have made arrangements with the local registrars by which, at a trifling cost, the sanitary interests of the different districts have been considerably forwarded. Under the new system, these copies of the death-register are in the hands of the medical officer of health each Monday morning instead of Wednesday evening or Thursday morning, as under the old gratuitous system. Beyond this, many of the medical officers of health have arranged with the registrars for *daily* notice by post-card of the registration of every death from zymotic disease. The advantage of such prompt notice in these cases, in order to afford the means for securing as far as possible isolation and disinfection, is self-evident. This was impossible under the old system. The sanitary authority of St. George, Hanover-square, and a few others, continue to ignore all these advantages, and have, in the face of an increasing epidemic of scarlet fever, which renders the mortality returns doubly valuable, wasted more than six months in the vain endeavour to bring about a return to the gratuitous system. The President of the Local Government Board has been importuned by several deputations to urge the Registrar-General to desist from his determination to obtain for his *employés* a payment which has been legalised by Act of Parliament, and which constitutes a small but perfectly legitimate portion of the expenses incidental to sanitary organisation. At the meeting of the St. George's vestry before referred to, General Sir William Codrington pertinently remarked that the returns would cost only £25 a year, and that it would be better to pay for them, and know what was going on; but this common-sense view did not prevail, and a resolution was passed to make another application to the President of the Local Government Board. In the meantime there are no mortality returns for the use of the medical officer of health of the district of St. George, Hanover-square.

THE NARCOTIC INFLUENCE OF RAILWAY TRAVELLING.

There is something peculiarly striking in the somnolence which the movement of a railway carriage induces in a large number of travellers. It is not felt by all; some persons, indeed, are quite unable to sleep in a train; but the sedative effect on a great many is quite irresistible. In these days of railway catastrophes, the timid traveller, possessing a strong imagination—an essential element in great timidity,—might weave a curious fancy of a syren lulling to sleep the victims whom she lures to destruction, or of grimy-handed Art imitating the redder touch of Nature in the unconsciousness to pain into which, as Livingstone has taught us, the victims of the carnivora pass before their death. But to the physiologist the phenomenon has a scientific interest as another illustration of the strange effect of reiterated sound upon the brain-cells; gently loosening, by its vibrations, the links which bind together the centres of consciousness and of sensation. We know of many instances of a similar effect on the nerve-centres of repeated sensory impressions. How they act we do not know yet, but we have gained some insight in the discovery of the part which "inhibition" plays in nervous action. We see it, for instance, in many effects of peculiar auditory sensations. Take the influence of the ploughboy's whistle on his resting team, or the idiosyncrasy to the sound of the bagpipe, with which Shakspeare has made us familiar. We know still less of the mode of the action of sound upon the brain to which we have referred: whether on the nerve-cells directly or through the vessels, whether through the auditory path or through many sensory nerves, or whether in part by the motion of the brain itself upon its "hydrostatic bed," is still uncertain. In any case it is a rough reproduction of the "lullaby" which is the instinctive sedative of nature, and doubtless may be allowed to exercise its full effect with much advantage in lessening the wearying effects on the nerve-centres of a railway journey.

THE CHOLERA.

Hardly have we had a breathing-space since the cessation of the last great epidemic of cholera in Europe when the disease has again shown itself within the basin of the Mediterranean. Some time in May last, cholera, it would appear, broke out in Hamah, a city of Syria, having a population of about 30,000, and situated midway between Aleppo and Damascus. So much is this city out of the way of the ordinary tracks along which cholera has been accustomed to spread in its westward extensions, that the local medical practitioners and sanitary agents of the Ottoman Government could hardly persuade themselves that the disease was what it seemed to be. Their doubts, however, have unhappily been too certainly set at rest by the dispersion of the disease to Aleppo and intermediate places in the north, to Damascus in the south, and to more than one of the seaport towns. Moreover, in Damascus the disease threatens a formidable development, if, indeed, this has not already taken place. This outbreak has followed upon much distemperature of season, intense and unaccustomed heat in Hamah, and excessive rains in Damascus. Among the early victims to the disease, we regret to have to mention Dr. Dillon, the Ottoman sanitary physician at Mosal, who was directed to proceed to Hamah and report on the outbreak. He was attacked with cholera shortly after reaching that city, and died after a very brief illness.

No definite information has yet been received of the source of the outbreak. It has been stated that the disease was introduced into Hamah by a body of troops coming from Kerbela. This statement requires to be confirmed, but it is by no means improbable. In 1871 it will be remembered that a body of pilgrims carried the disease from Meshed Ali, the sister city of Kerbela, on the Lower Euphrates, across Arabia into the Hedjaz, whence it spread into the Soudan. The existence of the disease in Meshed Ali had not been noted until after the appearance of cholera in the tract of the pilgrims in the Hedjaz. An attempt made to limit cholera to Hamah by a sanitary cordon utterly failed, and was given up; but a like lesson has not been learned from previous experience of the futility of quarantine, and the Levantine ports are now busily employed in pitting themselves against each other as to quarantine restrictions.

A medical commission, consisting of Dr. Millinger, jun., and Dr. Zitterer, has proceeded from Constantinople, under the directions of the Ottoman General Board of Health, to the seat of the outbreak to investigate its origin, and suggest measures for controlling it.

THE VIVISECTION COMMISSION.

The Royal Commission appointed by Government to inquire into the practice of experimenting on living animals has discontinued its sittings for the present, and will not resume them until the 15th of October next. The labours of the Commission up to the present time have been directed to the examination of those persons who, while they hold the highest professional positions, are not supposed to have any extreme views on the subject upon which the Commissioners are engaged. Sir Thomas Watson, a past president of the College of Physicians; Sir George Burrows, the present holder of that honourable office; Sir William Fergusson and Sir James Paget, who stand in similar relationship to the Royal College of Surgeons; Dr. Sharpey, as the representative of British physiologists, and a member of the Senate of the University of London; Mr. Simon, as the guardian of the public health, and the person under whose auspices much experimentation has been carried on; Dr. Acland and Prof. Rolleston from the University of Oxford; Prof. Humphry from Cambridge; Dr. Taylor as the representative of medical jurists and toxicologists, as well as others, have, up to the present time, given the Commissioners the advantage of their valuable experience and opinions. When the sittings of the Commission are resumed in October, those who have laboured chiefly at the scientific branches of the profession, and those also whose duty it is to instruct students in practical physiology, will probably have an opportunity of stating their views. The most eminent of the Scotch professors—Sir Robert Christison, Professor Turner, and Professor Lister—will be invited to give evidence, as well as Professors Burdon-Sanderson and Michael Foster, Dr. Klein, and others. The last batch of evidence taken will be derived from the group of anti-vivisectionists; and these, we hope, will be expected not only to assert, but also to prove their assertions, which some of them have not hitherto shown themselves very ready to do. It will be seen that the labours of the Commission are by no means light, and from the very patient investigation which they seem to be making of the subject before them, there can be little doubt that the report which they will present to Parliament at the commencement of next session will be the basis of some temperate and well-considered regulations which will do for the science of physiology very much what has been effected for anatomists by the Anatomy Act.

INFANTILE SUMMER DIARRHŒA.

The Registrar-General, in his last Weekly Return, calls attention to the fact that, notwithstanding the recent low temperature and abundant rainfall, the fatality from diarrhœa in our large towns continues to increase, and that in London it exceeds the average proportion in the corresponding period of the last ten years. About 80 per cent. of the deaths referred to diarrhœa during July and August are of infants under one year of age, and a very large proportion of the remainder of children aged between one and five years. Diarrhœa is, therefore, as essentially an infantile as it is an urban complaint. Those who know best the unfavourable conditions under which the infants of the working classes are reared in towns feel greater surprise at the number of survivors than at the numbers who fall by the way; but the wide divergence in the death-rate from diarrhœa in different towns affords an important and interesting problem, the effort to solve which only fills one with the conviction how little is yet really known as to the best means for controlling this summer scourge of infant life. The annual death-rate from diarrhœa in the eighteen largest English towns during the week ending the 17th inst. averaged 2·9 per 1000; and whereas not a single death was referred to diarrhœa in Portsmouth, and only one each in Bristol and Sunderland, the death-rate from this disease was equal to 6·7 per 1000 in Leicester, and 7·4 in Nottingham. Year after year this terrible mortality from infantile diarrhœa in Leicester recurs, and no satisfactory explanation of its exceptional fatality in this town has ever been offered. The theory that it is due to the exceptional degeneration of the population of the town is not easy of acceptance, because we do not find that the death-rate in Leicester is abnormally high, except in infancy, and it is difficult to believe that healthy adults give birth to unusually sickly children. The true solution of the problem has yet to be arrived at, and in the meantime it might be useful, as we cannot ascertain why infants die of diarrhœa in Leicester and Nottingham, to inquire why they do not die from this disease in Portsmouth and Bristol.

BLOOD-POISONING FROM SEWER GAS.

The death of Dr. Alexander Crichton, of Mortlake, furnishes another and very sad instance of the effects of sewer gas and of the disasters which are entailed by imperfections in a system of drainage. We have been favoured by Dr. Marshall, of Mortlake, with particulars of Dr. Crichton's illness, which leave no doubt as to its origin. A day or two after his return, in apparently good health, from a visit to Edinburgh, the sewers in his street were opened and cleaned, having been in a filthy condition and very offensive. The process lasted a week, the smell being most unpleasant. The stoppage of a house-drain led to some escape of sewage matter beneath and outside his own surgery. About ten days afterwards he was employed to inspect the ventilation of the sewers, complaints having been made of the odours from the ventilators, some of which he found most offensive. Two days afterwards he complained of headache, followed some days later by vomiting, slight jaundice, and abdominal pain. Delirium followed, and blood appeared in the urine, and subsequently in the vomit. Violent delirium gave place to coma, and slight hæmorrhage from the lungs was added to that from the kidneys and stomach. He died on the eighth day of his illness, an extremely offensive odour having been given off for some hours before death. The temperature, when taken, appears to have been natural, and the bowels were obstinately constipated. The origin of his illness appears clearly to be ascribed to the Mortlake sewers, and this was the opinion of Dr. George Johnson, who saw him before his death. There appears to be a radical defect in the Mortlake drainage, which the remedial measures adopted are quite inefficient to overcome. Our readers will remember the outbreak of low pneumonia in a large school which followed the insertion into a neighbouring drain of one of the ventilators which were, in part at least, concerned in Dr. Crichton's blood-poisoning. We cannot wonder that they are regarded with disfavour by the inhabitants. The free ventilation of sewers into the open air is a necessity, if the air within the houses drained by it is to be kept pure; but the ventilators should be so placed that the inhabitants do not suffer from the means employed for their safety.

DISEASED MEAT PROSECUTIONS IN THE CITY.

In view of the imperative necessity, upon sanitary as well as public grounds, that the enactments provided by the Legislature for the suppression of the traffic in diseased meat should be fairly enforced by the justices before whom such cases are usually tried, we feel it our duty to call the attention of the Governmental authorities to the extraordinary result of a prosecution instituted by the Commissioners of Sewers, as the sanitary authority in the City of London.

We learn from the daily newspapers that on the 2nd inst. four summonses were heard before Sir Thomas White, the sitting Alderman at Guildhall, against persons who were accused of having wilfully transgressed the law by sending meat unfit for human food for sale at the Metropolitan Market, Smithfield.

The first case was that of a man who was charged with having sent the carcass of a diseased cow to London, consigned to a meat salesman in the said market. It was proved by the evidence adduced by the prosecution that the carman who first unpacked the meat at once discovered its unwholesome condition, and that in the opinion of the sanitary inspector who seized the meat "it was in a disgusting and unsound state, and quite unfit for human food." Dr. Sedgwick Saunders, the medical officer of health, was examined, and stated that he had carefully inspected the meat on the day it was sent to London, and found it diseased. He also stated that, in his opinion, the animal had not been slaughtered at all, but had died from disease in a highly "fevered condition" (a term well understood by experts in such matters), and was afterwards "dressed" for market. The Doctor added, with much emphasis, that no person could have eaten such meat without serious danger to health, and that, in his experience, he had never seen a worse case or one more deserving of punishment. Mr. Montagu Williams, who conducted the defence, cross-examined the several witnesses, but without in the smallest degree altering the facts of the case, and then called a Mr. Packman, in whose shop the meat had been seized, and to whom it was consigned for sale. This person stated that, although the meat was not in prime order, "he would not have objected to eat some of it, but would have preferred a piece of Scotch beef," &c., upon which the worthy Alderman said he could not convict in the face of such a statement from a respectable butcher, and that therefore he must dismiss the summons, thereby entirely ignoring the sworn testimony given on behalf of the prosecution, and despite the fact, of which he was informed by the officer of the court, that the defendant *had been previously convicted, and had undergone two months' imprisonment for the same kind of offence.*

Those who know the earnestness with which Dr. Sedgwick Saunders performs his onerous and responsible duties will not be surprised to learn that he was indisposed to submit to this decision. Accordingly we find him alluding to the subject with some force of expression in his weekly report to the Commissioners of Sewers, and complaining of the miscarriage of justice which he alleged had occurred, a complaint which was endorsed by the solicitor who conducted the prosecution, and embodied in that officer's report to the same body.

We have again and again observed with regret the trivial and quite inadequate penalties imposed, notably by the City magistrates, for offences of the description under consideration. The Corporation of London are the market authorities for the greater part of London, and the meat sold within their narrow jurisdiction travels, and is consumed, far beyond their municipal limits. Upon them therefore rests the grave responsibility of affording their fellow-citizens some security against this foul trading.

SWIMMING-BATHS IN THE THAMES.

THE Floating Swimming-baths Company has at length commenced active work, having opened their establishment at Charing-cross to the public during the last fortnight. In general appearance the interior differs but little from those at Lambeth and other parts of London, Vienna, Frankfort, Paris, &c. The general arrangements are very good and comfortable, but, on all grounds, it is a decided mistake to permit smoking. The chief item of interest that concerns us is the state of the water, as the bath derives its supply from the Thames, and it is plain that on this particular point the success of the company very much depends. The process at present adopted is one of simple filtration. The water taken from the Thames is sent through long bags made of stout sea-cotton, the bags being protected by a sort of case or glove. The mud and other suspended particles fall to the bottom of the bags, or are retained in the meshes, the water finds its way into the chamber where the bags are suspended, and is thence pumped into the bath. The bags are of course changed frequently and washed. At certain times of the tide, when water cannot be procured from the river, the bath water is refiltered and sent back again, but when the system is in working order the level of the water is simply maintained by small "overflow" apertures at one end, the inflow and outflow being continuous. The water is in general appearance and colour much like that in the baths in London and elsewhere, but occasionally contains small floating particles, which we have not yet examined microscopically. We may suggest for the consideration of the manager the desirability of sending the water after filtration through a thin layer of charcoal before pumping it into the bath. Such a process would be simple, and, as the charcoal itself can be cleaned at intervals, not costly, and would ensure a much greater amount of actual purity, as well as decolorisation.

ARTIFICIAL RESPIRATION IN APOPLEXY.

IN a recent number of the *Gazzetta d'Italia*, Dr. Corso, the assistant to the chair of Physiology at Florence, advocates the use of artificial respiration in cases of "fulminant" apoplexy, and of compression of the brain by hæmorrhage or other causes. The immediate cause of his remarks was a case related in the same paper, in which a Dr. Despalles of Brussels employed the inhalation of oxygen in a case of apoplexy with hemiplegia with a successful result, the sensibility and power of movement returning in four hours. Dr. Corso claims that artificial respiration was first employed for apoplexy in Prof. Schiff's laboratory, and quotes the opinion expressed by Schiff in his lectures on the nervous system, published in 1866, that in cases of fulminant apoplexy, produced by paralysis of the medulla oblongata, artificial respiration should be used, and never bloodletting. In 1871, Schiff also made numerous experiments on animals, and established the fact that the only way of preserving animals suffering from apoplexy, due to compression of the brain, from certain death, was artificial respiration. The explanation of this fact is that the immediate cause of death is paralysis of the respiratory centres by compression of the medulla oblongata, and the consequent non-oxygenation of the blood. The advantage of artificial respiration over the inhalation of oxygen is that it lowers the pressure of the blood in the intra-cranial vessels, and thus lessens the tendency to further hæmorrhage.

In support of these views Dr. Corso relates a case in which he claims to have employed artificial respiration for the first time in such cases in the human subject. It was that of a lady who fell backwards and sustained a fracture of the skull. When seen, she was cyanotic, insensible, breathing slowly and superficially, the pulse also was infrequent and very feeble, and death seemed imminent. Artificial respiration was immediately performed, and continued for twenty minutes; under its influence the heart's action increased in force and frequency, the respiration became natural, and consciousness returned. The patient did not, however, completely recover, but died fifteen days afterwards from the laceration of the brain caused by the hæmorrhage and fracture. Dr. Corso points out that had it not been for the irreparable lesions produced by the injury, the patient would have lived, and that the artificial respiration gives the brain and the medulla oblongata time to return to their normal functions, and hence a better chance of recovery, at any rate from the immediate danger.

There is no question that in many cases of coma due to compression of the brain, and also in that produced by opium or alcoholic poisoning, artificial respiration might be used with advantage; perhaps also in cases of so-called "congestive" apoplexy; but it seems to us open to grave doubt whether it would be applicable to cases of severe cerebral hæmorrhage. The fear of increasing the hæmorrhage should make us hesitate to adopt it until clearer proof is given that the restored action of the heart would not increase the pressure in the cerebral arteries and destroy that quiescence in which seems to lie the only chance of recovery in many cases. The difficulty in diagnosing the exact cause of the apoplexy will also stand in the way of any general employment of this method, except where it affords the only chance of obviating immediate death.

SCARLET FEVER IN LONDON.

FOR some months past scarlet fever has been unduly prevalent in the various districts of the metropolis, but within the last few weeks it has considerably increased, and must now be characterised as epidemic. We have from time to time alluded in our columns to local outbreaks, such as that occurring in Knightsbridge barracks and in South Kensington. The latter is still the subject of inquiry, and ere long we hope the mysterious circumstances which led to the seizure of so many persons at the same dinner and evening party will be explained. A similar occurrence is reported from West Brompton, when six out of fourteen guests present were attacked. We have received letters from medical men at Brixton, stating that within the last fortnight the number of scarlet fever cases has enormously increased. Similar reports have been received from other districts. Fortunately, hitherto the epidemic, though widely extended, has been of mild character, and the percentage of deaths, to the considerable number of cases, small. An unusual number of adults have been attacked by this epidemic, far more than we remember to have met with before; for though the children, as is usual, form the bulk of the cases, yet the number of adult sufferers is unprecedentedly great. Fortunately the season is nearly at an end, and families will be leaving town, so that, as far as London is concerned, we may hope the worst is over; since it is far easier to secure effectual isolation with the poorer classes than it is with the wealthy, who are often extremely careless and selfish in this respect. What we really fear is the extension of the disease to other districts. At the present time there must be a large number of convalescents preparing to leave their sick rooms for change of air. We can hardly hope that in every case a sufficient interval has been allowed to intervene between the decline of the disease and removal, or that the clothes that may have been in contact with a patient during some period of his sickness have been properly disinfected. If these precautions are neglected, considerable mischief will ensue, and we urge upon the individuals in question the necessity of submitting implicitly to the dictates of their medical attendant on these points. After a slight illness which has only confined the patient to bed for a few days, it seems absurd to him to be confined to his room for a period of three weeks; but he should remember that even in the mildest case the most serious sequelæ of renal complication and dropsy may ensue, and the period of greatest risk from these lies between the sixteenth and twenty-fourth day. His own welfare, as well as that of the public, requires him therefore to bear with patience the confinement and isolation which experience teaches to be necessary for absolute safety.

VENTILATION IN RAILWAY CARRIAGES.

The enormous increase in the gross number of railway travellers in the United Kingdom, the establishment of smoking carriages, and the gradual extension and popularity of saloon cars, all go to direct attention to the ventilation of railway carriages. There can be no doubt whatever that, at the present time, it is deplorably bad, and so we are glad to be enabled to quote some notes upon the subject contained in the last Annual Report of the State Board of Health of Massachusetts. This Board requested Professor Nichols to make some investigations into the character of the air in smoking cars. As a matter of course, it was found that the amount of carbonic acid gas found in the cars greatly exceeds the average in public buildings. A smoking car in America, arranged with tables, chairs, and sofas, will accommodate 50, and an ordinary car 75 passengers. As the average capacity of a passenger car is about 2500 cubic feet of net air space, excluding that occupied by passengers and furniture, 50 cubic feet in the one, and 33⅓ in the other, is given to each occupant. So that, in order to ensure proper ventilation, the air in smoking cars should be changed thoroughly at least every four minutes, and in ordinary cars every three minutes. The report proceeds to explain and criticise the plans adopted on Russian railways by Baron de Dershau for heating railway carriages; but this plan is entirely distinct from any scheme for ventilation, and need not be described here. The main conclusion to which the report above quoted directs attention is, that some system of forced ventilation, or of steam heating and forced ventilation combined, must be found, inasmuch as under the very varying circumstances of travel, comprising number of passengers, rate of speed, amount of smoke, and varying temperature, no natural system can be successful.

It may be contended that no fair parallel can be drawn between the American cars and the carriages on English railroads. But all who have travelled third-class in an "excursion" carriage occupied by at least forty persons must have been conscious of an atmosphere redolent of tobacco smoke, perspiration, and other perfumes, most of which result in carbonic acid, sulphuretted hydrogen, ammonia, &c. It is tolerably evident that saloon carriages will gradually, in England, replace those now in use. And hence, when they are being built, it is well, on the score of health as well as comfort, that some attention should be paid to their ventilation.

KNIGHTSBRIDGE BARRACKS.

A discussion took place in the House of Lords on Monday night with respect to the removal of Knightsbridge Barracks. The military element was strongly represented by the Duke of Cambridge, the Earl of Lucan, and the Earl of Normanton. The Earl of Lucan stated that he had received from the medical officer of his regiment a satisfactory account with regard to the sanitary condition of the barracks and the health of the men. This statement is at variance with that of the Barrack Commissioners, who reported that this building was one of the worst in the kingdom, and, from structural defects, could not be materially improved. The Duke of Cambridge hoped the barracks would be rebuilt and improved, but, from military considerations, he could not advise removal from their present site. We are glad that the defects of the barracks have been admitted by so high an authority, but regret that it will be found necessary to reconstruct them again on the same site, which, in our opinion, is too narrow for the required buildings. Would it not be possible to secure another site in the Park which would give more space? For instance, the ground behind the Royal Humane Society's station on the north bank of the Serpentine seems extremely eligible for such a purpose. It is in the least frequented portion of the Park, it is near the powder magazine, and the open part of the Park on which reviews are held. The removal of the barracks from the neighbourhood of the Knightsbridge-road would improve the value of house property in that district, and as rents rose the "objectionable" tenants would clear off, and handsome mansions appear in the place of the present squalid tenements. Nor do we think that the officers and men would object to such a removal. Spacious, handsome barracks, free from the present disagreeable surroundings, would be far preferable to a reconstruction on the same site of a building that, from want of space, must present many of the objectionable features of the old one.

THE HAMPSTEAD HOSPITAL.

Since our last reference to this subject the Select Committee has held three sittings, and a considerable mass of evidence has been taken. Mr. Shaw Stewart, one of the managers of the Asylums Board and chairman of the Stockwell Hospital, gave evidence in favour of the present site, which he considered not more unsuitable than the Stockwell and Homerton sites. On behalf of the Hampstead Residents' Committee thirteen witnesses have been examined. Mr. Pearson Hill, son of Sir Rowland Hill, read a statement agreed upon by the joint committee of residents and local authorities of Hampstead, stating in detail the grounds of objection to the present site. Dr. Letheby, who was next called, stated that the supposed danger of contamination of the water-supply by the proximity of the proposed site (No. 3) to the reservoir was imaginary, and expressed his belief that that site was in every respect eligible. Dr. Murchison also gave evidence of similar purport. Three of the principal medical practitioners in Hampstead and its neighbourhood, Dr. Cooper Rose, Dr. Anderson, and Mr. Alford, related their experience during the small-pox epidemic, and stated cases in which the contagion was apparently due to the hospital; they also pointed out the dangers which were necessarily involved in the present position of the hospital. Other residents gave evidence as to cases which were apparently traceable to direct contagion from the hospital, and also with respect to the nuisance caused by the ambulance drivers and the use of public conveyances by patients or their friends. Evidence was also given by house-agents of the great depreciation in the value of house property in Hampstead during the epidemic and since the proposition to rebuild the hospital.

The Committee sits again on Friday (to-day), and it is expected that the inquiry will then be concluded.

HÆMATINURIA.

This curious disease was the subject of notice by Dr. J. Warburton Begbie in a recent communication read before the Medico-Chirurgical Society of Edinburgh. One of the two cases related by Dr. Begbie was of considerable interest, both from an etiological and a therapeutic point of view. The patient was a clerk aged twenty-five. The dark colour of the urine appeared first in September, 1873. Up to this time he had always enjoyed good health. No reason is assigned for the appearance of hæmatinuria then. After a few weeks it disappeared, and reappeared in the autumn of 1874, after walking nine miles and being exposed to cold and damp. The urine was never dark before eleven in the morning, doubtless due to the warmth and rest of bed. Before the dark urine was passed there was invariably a sensation of cold and discomfort, but no rigor. The disease resisted gallic acid and large doses of quinine, given to the extent of producing unpleasant symptoms of chinchonism. After the failure of quinine, Dr. Begbie ordered twenty grains of chloride of ammonium, dissolved in water, three times a day. From this day no dark urine was passed. It is true that the weather also became milder. But on two occasions, when the medicine was intermitted, the disease returned. Dr. Begbie regards warmth as the most important remedial agent. Not the least interesting feature of these cases is the evidence they afford of the thermometric delicacy of the renal organs. The value of the chloride of ammonium must be tested by other cases. But its influence here seemed marked, and will justify further use of it in similar cases.

THE PUBLIC HEALTH BILL.

The principal incident in the further consideration of this Bill by the House of Lords was a proposition by Lord Aberdare to strengthen the hands of the Local Government Board in dealing with local authorities. This, he suggested, should be done by enabling the Board, on complaint of its own officer or any other person as to default of duty on the part of the local authority, to step in and supply a remedy. The Duke of Richmond declined to adopt the suggestion, and it fell through. The incident was instructive as showing the extreme crudity of conception of some distinguished members of the House as to the relative functions of the central and the local authorities in local government. Anything more fatal to sound local governmental progress in sanitary matters than investing a Central Board with practically unlimited powers of interference could not well be conceived. Lord Aberdare seems to have yet to learn that there are worse evils than such as arise from defaulting local authorities.

DECLINE OF TYPHUS IN LONDON.

On Saturday, 17th inst., the two Metropolitan Asylum District Fever Hospitals at Homerton and Stockwell did not contain a single typhus patient. Such a fact affords most conclusive evidence of a marked decline in the prevalence of typhus within the metropolis. The fatality of the disease, moreover, has also showed a considerable decrease. The deaths referred to typhus in London during the thirteen weeks ending 3rd inst. were but 46, against 65 and 73 in the corresponding quarters of 1873 and 1874; and in the first fortnight of July only three fatal cases were registered. This decrease of typhus cases and deaths in London is the more satisfactory because the disease showed a somewhat increased prevalence in 1873 and 1874. In 1872 the deaths referred to typhus in London were 175, whereas the fatal cases successively rose to 284 and 312 in 1873 and 1874. The two fever hospitals above mentioned contained on the 17th 31 enteric fever patients, but this number is also unusually small. Owing to the small number of wards of the four fever and small-pox hospitals belonging to the Asylums Board which are now required for the treatment of these diseases, the institutions are to a great extent used for sufferers from scarlet fever, which has recently shown an increasing prevalence, more particularly in South London.

THE BRITISH MEDICAL ASSOCIATION.

As we have before stated, the forty-third annual meeting of this Association will be held at Edinburgh on Tuesday, Wednesday, Thursday, and Friday, August 3rd, 4th, 5th, and 6th. The presidential chair will be occupied by Dr. Copeman, of Norwich, Sir Robert Christison, Bart., being the president elect. The various Sections have been arranged as follows:—Medicine: President, Dr. Quain, F.R.S. Surgery: Professor Lister, F.R.S. Obstetric Medicine: Dr. Matthews Duncan. Public Medicine: Right Hon. Lyon Playfair, M.P. Psychology: Dr. Rowe, F.R.S. Physiology: Professor Burdon-Sanderson, F.R.S. Gentlemen desirous of reading papers, cases, or other communications are requested to forward the titles to the General Secretary, or to one of the secretaries of the Section in which the paper is to be read. No paper must exceed twenty minutes in reading, and no subsequent speech must exceed ten minutes. There will be an exhibition of the latest inventions in medical, surgical, and obstetrical instruments and appliances.

UNVEILING OF PROF. HYRTL'S BUST.

On the 22nd ult. an interesting ceremony took place at Vienna. Our readers are aware that the eminent anatomist Hyrtl resigned his professorship about twelve months ago, and retired into the country accompanied by the best wishes of his colleagues and pupils. Since that time the College of Physicians have resolved to place his bust in the principal hall of the University; and at the above-mentioned date Hyrtl was invited to be present at the ceremony of unveiling. The Prime Minister, Prince Auersperg, and several heads of departments, represented the Government; the University and the Faculty of Medicine had sent numerous delegates, and the students were present in great and enthusiastic numbers. From the description given by the *Allg. Weiner Med. Zeit.*, nothing could surpass the eloquence and warmth displayed in the speeches, and the discourse delivered by Hyrtl himself was expressive of heartfelt gratitude and humility respecting his wonderful and patient labours carried on for forty years in the field of anatomy and experimental physiology. The ceremony was followed by a dinner, during which the most flattering testimony was borne to Hyrtl's worth; and this indefatigable and good man, honoured by his colleagues and numerous pupils, may well be proud in his retirement of the approval of his contemporaries.

THE STORAGE OF WATER.

The copious supply of rain with which we have been favoured during the past fortnight should naturally lead to the calculation as to what proportion of it will be saved and what wasted. Mr. Bailey Denton is continually drawing public attention to the enormous waste of rain-water in England in consequence of the absence of any provisions for storage, and this, too, when a good and continuous water-supply is one of the much-debated problems of the day. It is rather less than a year ago since we drew special attention to this subject (*apropos* of a circular issued by the Local Government Board), and advised rural sanitary authorities to adopt the plan carried out from time immemorial in many other countries, particularly in the East, and build tanks in every chief town and village. Had such tanks existed, a supply might during the past week have been obtained and stored sufficient for the wants of the population during the next eight or ten months.

THE EXAMINATION FOR THE L.R.C.P. LOND.

It will be in the remembrance of our readers that some little sensation was caused at the meeting of the General Medical Council in reference to an adverse criticism made by the visitors of examinations upon the clinical portion of the examination for the qualification of Licentiate of the Royal College of Physicians of London. The matter, as will be noticed from an article in another portion of our columns, came before the College on Monday last, and if the facts stated by Dr. Sibson be true (and there can be no reason to doubt the specific statement he advances), the complaint made by the visitors dwindles considerably in proportion. We shall await the specific answer to the charges which the College has requested its Council to frame; meanwhile we may add that it was a mistake to appoint two *surgeons* to criticise a *medical* examination.

SANITARY MEDICINE AT WALTON-ON-THE-NAZE.

The Commissioners for improving the town of Walton-on-the-Naze do not seem to sufficiently prize the public health of which they are the custodians. They have coolly proposed to reduce the salary of the medical officer of health from £40 to £10! The officer in question, Dr. Grimshaw, feels naturally hurt by such a disparaging suggestion. He has held the office in question for three years, and this with excellent results. Several epidemics have been prevented from spreading, and the state of the public health has been very creditable. Such a state of matters is of great value to a seaside resort. Instead of justifying the lowering of Dr. Grimshaw's, salary, it indicates the propriety of raising it. Surely no local medical man will be a party to the contemplated procedure.

ALL WORK AND NO PAY.

Lord Carnarvon has invited the College of Physicians, indirectly and politely, it is true, but still not the less certainly, to edit and publish, at *its own cost*, the more important portions of the various official papers and reports that are received at the Colonial Office relative to medical questions in the colonies. Lord Carnarvon does not feel disposed to ask the Treasury to find payment for such work as this. We cannot but express our surprise at his lordship's proposal, and do not wonder that the College, as will be gathered from a notice of its meeting on Monday, declined to ask any of its body to do this public colonial work just "for the honour of the thing." Lord Carnarvon must surely be aware that it would be a laborious undertaking, and that unpaid work is seldom, if ever, well done.

SOCIAL SCIENCE CONGRESS.

The arrangements for the ensuing Congress at Brighton are progressing actively. Lord Aberdare is to preside over the meeting generally, and Sir Charles Reed will preside over the Department of Education. The Health Department will be presided over by Dr. Richardson, whose labours both as a sanitary scholar and as a practising physician are thus honourably recognised.

MORTALITY AT SEA.

The annual parliamentary paper showing the mortality among sailors at sea has just appeared. A total of 4602 deaths are recorded, as compared with 5393 in 1873, and 4123 in 1872. The usual classification is adopted, so that, as we have before remarked, no reliable comparison can be made with the mortality in this and any other section of the population. Masters of ships are not included in the list. Sixty deaths are scored up to natural, and 161 to unknown, causes. What are natural causes? Is it not possible to classify such cases under one of the ten groups of diseases that compose the list? And why is it that, except in cases of murder, no inquiry as to so-called accidental deaths at sea ever takes place? The law as it now stands is, on these points, specially defective, and this return is absolutely valueless for showing us either the actual or the comparative mortality that occurs among sailors at sea.

BLUE URINE.

In a case recently described to the Société de Biologie by M. A. Robin, a curious blue tint of urine corresponded to attacks of lumbar pain. The urine was scanty, not actually blue when passed, but on standing a sediment fell in which were many deep-blue granules, distinct under the microscope, showing no trace of crystallisation. The nuclei of cells of bladder epithelium were also stained blue. Urea and uric acid were lessened in amount. The blue substance was a little soluble in water, hardly soluble in alcohol or ether, insoluble in chloroform or alkalies, soluble in sulphuric acid, with a tint at first rose then reddish-orange; soluble in hydrochloric acid, with a magnificent carmine colour. It corresponds closely with the cyanourine of Braconnet, who believed it to be a transformation of uric acid, less oxidised than urea.

At some recent excavations on the Thames Embankment, near the Houses of Parliament, some relics of a very distant age have been discovered. They consist chiefly of bones of extinct quadrupeds and birds, but among them was found the under jaw-bone, retaining all the molar teeth, of a man. There was also found the upper jaw, palate, facial bones, and eye-sockets of an animal of the rodentia order. This fragment is nearly of the same size as the like parts of man, and but for the position of the rodent teeth and the absence of the canine teeth, might be mistaken for a portion of the human head. It is stated, however, that no animal of the rodentia order of so large a size is known to have existed in this country within the period of human history. With these extremely interesting remains was found a flint-knife, fashioned of course by human skill at some remote period. We trust that a careful descriptive account of these fossils will appear in a short time. The "find" is one of transcendent interest to naturalists and comparative anatomists throughout Europe.

In a report of the Chinese Hospital at Shanghai, recently published, we find that the medical officer of the institution, Dr. Johnston, speaks almost rapturously of the value of the subcutaneous injection of atropine in opium-poisoning. During the last ten years upwards of 500 such cases of poisoning (nearly all suicidal) have come under his own observation, 62 having been recorded last year. Many of the most desperate cases rallied and recovered under the treatment advocated. The loss of life annually in China from abuse of the drug must be appalling. Opium-smokers to the number of 360 were treated in the hospital in 1874, but the experience and results obtained were not encouraging, and Dr. Johnston expresses his opinion that it is a hopeless task to reclaim the confirmed opium-smoker.

A meeting was held at the Mansion House on Tuesday, in connexion with the forthcoming exhibition to be held in Brussels next year, to consider the questions of public health and means of preserving life. The meeting was very numerously attended, and an executive committee for London was formed to represent British interests. The congress which will be held in Brussels at the same time will discuss all matters connected with sanitary science, ashore and afloat, as well as the best means to be adopted for saving life from fire and water, for the prevention of accidents in travelling by sea, road, and rail, and for the disposal of the dead. A vast variety of subjects are proposed to be embraced, and if the affair is well organised, good and practical results ought to be obtained in the way of preventing disease, maintaining health, and saving life.

The annual report of the Dublin Fever Hospital and House of Recovery shows that 858 patients were admitted during the past year. The deaths amounted to 90, and represented a higher mortality than usual. This excess was chiefly owing to the large number of cases of scarlatina, enteric fever, and pythogenic pneumonia. Dr. Grimshaw, the physician to the hospital, adduces his reasons for terming the pneumonia "pythogenic." He states that he has traced it distinctly to a miasmatic source, and that it prevails in the spring and summer months. He thinks the disease should now be looked upon as a specific fever, the lung affection bearing the same relation to the fever as sore-throat does to scarlatina, ulceration of the intestines to typhoid, or inflammation of the membranes of the spinal cord to cerebro-spinal fever.

In the annual report of the health of Chester just issued, Mr. Kenyon, the medical officer of health for the town, makes a few observations on the prevalence of puerperal fever in the district last year. A large proportion of the midwifery cases in country towns are conducted by midwives. When puerperal fever appears and certain midwives have to cease practising and to relinquish their engagements, it is not always considered that a woman's only source of income is, perhaps, taken from her, and that she may starve or go into the workhouse. Mr. Kenyon proposes that a sum of money should in some way be made available for supporting a midwife during the period of her suspension. The suggestion is a good one, and it would not be very difficult to put it into practice.

We understand that the Local Government Board will shortly undertake an inquiry into the various processes for the disposal of sewage, and will report thereon. It is said that Mr. Read, M.P., one of the Secretaries of the Board, will be associated with two engineers in the work. It is not very clear what Mr. Read's qualifications for a visitor and reporter of sewage systems are. Would it be unreasonable to hint that the medical profession should be represented in such a commission?

A portrait of the late Rev. Andrew Reed, D.D., the founder of the Earlswood Asylum for Idiots, Redhill, Surrey, was unveiled last week in the presence of a large assembly of ladies and gentlemen. The ceremony seems to have been an important affair, and has been described at length in the daily papers. The late Dr. Reed was a well-known philanthropist, and created several large charities besides the Earlswood Asylum.

Mr. Cross stated last week in the House of Commons that the return relative to the Infant Life Protection Act, 1872, was nearly complete, and would shortly be laid before the House.

Another importation of small-pox into the port of London occurred on the 17th inst. The vessel was visited by the officers of the port authority immediately after hauling into dock, the patient was removed to Stockwell in the nearest ambulance, and the forecastle of the ship as well as the belongings of the crew were fumigated and disinfected.

In London last week 1481 deaths were registered, including 4 from small-pox, 27 from measles, 90 from scarlet fever, 10 from diphtheria, 61 from whooping-cough, 26 from different forms of fever, and 204 from diarrhœa. It will be observed that the fatality from diarrhœa continues to increase.

The International Congress of Ophthalmology will meet in New York in September, 1876. The committee are making great efforts to secure a large attendance, and one that will leave its mark on scientific ophthalmology. They earnestly desire the co-operation of the medical profession in Great Britain.

An official inquiry into the cases of scurvy reported in The Lancet last week has been ordered by the Marine Department of the Board of Trade, as some doubt exists as to the quality of the provisions that were served out to the crew during the homeward passage.

A fever-stricken ship put into Falmouth a few days ago having on board six dead sailors and several who were ill. The master and steward were the only members of the crew able to do anything. The cause of the outbreak has not yet been stated.

Dr. George Buchanan was elected President of the Society of Medical Officers of Health at the annual meeting held on the 16th inst.

Mr. William Soper, M.R.C.S., has been appointed a Manager of the Metropolitan Asylums Board.

ROYAL COLLEGE OF PHYSICIANS.

A meeting of the College was held on Monday last. The Registrar read a further communication from the Colonial Office relative to the publication of the official documents and medical reports received at the Colonial Office from time to time from the colonies. Lord Carnarvon had previously applied to the College for information as to the best way in which this could be done, in the belief that such publication would throw much light upon the geography of disease, and advance the cause of the public health in our dependencies. The College had already stated that the records should be published under the supervision of a physician of acknowledged ability. Lord Carnarvon now replies that he was not prepared to ask the Treasury to find the remuneration for such a duty, and he wished to place the documents at the disposal of the College of Physicians; but the College showed no disposition to take any further steps in the matter.

A second communication from the Colonial Office was read, calling attention to a recent article on Leprosy—especially the observations on the heredity and contagiousness of the disease,—published in the *Medico-Chirurgical Review*, and asking to be informed if there is anything in the facts or statements therein adduced or made which would lead the College to modify the views which it has recently expressed, and in which it asserted the non-contagiousness of leprosy, and as to other points. The old Leprosy Committee, consisting of the senior censor, Dr. Farre, Sir Wm. Gull, Dr. Milroy, Dr. Owen Rees, Dr. Greenhow, Dr. Tilbury Fox, and Dr. Fayrer, were re-appointed to report upon the matter.

A petition from various lecturers on insanity was read, praying that a three months' course of work in the wards of a lunatic asylum might count as part of the compulsory term of clinical study demanded of candidates for degrees. The College was informed that the Censors' Board took a favourable view of the request, and it has been acceded to by the College.

The Registrar then read several communications from the General Medical Council, the only important one being the criticism of the visitors appointed to attend the examination for the licentiate degree. This has been fully referred to before in the report of the General Medical Council. The two chief points in the report had reference to the asserted insufficiency of the clinical examination in the wards, it being conducted on the occasion reported upon by only one examiner, who had nine men to examine in two hours and a half, and that in a hurried way. Dr. Bennett read a report, in which he stated that at the meeting of the General Medical Council he was compelled to admit that the number of examiners on the occasion in question was insufficient. The examiner implicated, Dr. Sibson, in a short statement of facts, called attention to two chief inaccuracies in the report of the visitors. They stated (1) that the examination lasted only two hours and a half, whereas it was three hours and a half, *the visitors having left before the end of the examination;* (2) that at the end of twenty minutes the comments of the candidates were read over, whereas half an hour was the least time given to the candidates for their reports on cases. As to the asserted hurry, Dr. Sibson said this was scarcely consistent with the remark of the visitors that when doubt was experienced on the part of the reporting candidates they were helped somewhat to a proper conclusion, or a new case was given them. And the visitors omitted to state that each student was given two cases to report on, upon each of which he could spend half an hour. Dr. Sibson stated in reference to other points that he spent two hours in the wards the day before the clinical examination over the cases. Both examiners were *hospital surgeons,* and, it is said, spent some part of their visitation time in the surgical wards.

A discussion ensued, in which a strong opinion was expressed as to the satisfactory nature of Dr. Sibson's explanation, though the deficiency in the number of examiners was tacitly allowed to be a real defect. The report of the visitors, Dr. Sibson's explanation, and Dr. Bennett's report were referred to the Council, with instructions to prepare a suitable reply to be forwarded to the General Medical Council.

DR. OTIS AT UNIVERSITY COLLEGE HOSPITAL.

DR. OTIS is an eminent American surgeon, who has gained great reputation in New York by his ingenious inventions bearing upon the treatment of stricture of the urethra. He has peculiar views as to the manner of dealing with this complaint, and had an opportunity, on the 7th inst., by the courtesy of Mr. Berkeley Hill, of operating in the theatre of University College Hospital, before a large assembly of students and medical men, upon a patient affected with stricture. Dr. Otis used the different instruments he has had constructed for the purpose, and being Clinical Professor of Genito-Urinary Diseases at the College of Physicians and Surgeons of New York, is evidently accustomed to lecturing; for he offered, in clear and forcible language, a sketch of his tenets regarding the treatment of urethral stricture, and described, whilst showing them to his hearers, his instruments in such a manner that the principle upon which their construction is based was perfectly understood. A little tinge of humour gave additional attraction to the lecture.

Dr. Otis considers that no reliable standard of the size of the urethral canal can exist; and he generally measures the calibre of every individual urethra by an ingenious instrument which he calls urethrometer. This consists of a straight tube, the end of which can be made to dilate into a kind of fenestrated sphere, the latter corresponding to a dial plate at the handle, which marks the size of the sphere. By this the normal calibre of the urethra can be accurately measured, as also the circumference of the stricture. As to the size of the urethra, Dr. Otis has found, by numerous measurements, that a certain relation exists between the circumference of the flaccid penis and the calibre of the canal. Now when this calibre has been ascertained by means of the urethrometer, a bulbous sound of the corresponding size should be introduced. If it passes easily, this may be accepted as representing the normal calibre. If only a smaller size will enter, the difference between this size and that indicating the normal calibre will show the exact amount of contraction present at a given point.

Dr. Otis showed the urethrometer and his polished steel bulbs fixed on slender shafts, and used them on a young patient brought into the theatre affected with stricture connected with discharge. The lecturer then contended that his system is superior to all others, as, either by gradual dilatation, rupture, internal division, or perineal section, the patients are not cured, because they must, for the remainder of their lives, use dilating instruments, this not being an actual cure. By using his dilating urethrotome, after having mathematically (as described above) ascertained the size of the patient's urethra and the circumference of his stricture, he claims to cure the latter radically. No instrument is afterwards used, save for the first few days, both to arrest hæmorrhage and protect the cut surfaces from the contact of urine. Patients have been seen three and four years after operation, and found quite well. Thus Dr. Otis combines dilatation (not rupture) with division.

The dilating urethrotome consists mainly of a couple of parallel bars, which are separated at will by means of a screw at the handle; the upper bar carries a canula, in which a narrow blade is concealed, which is made salient by being drawn forward, or pushed backwards, over a short elevation on the floor of the canula.

The lecturer, after having ascertained the size of the present patient's urethra and stricture (the dial plates mark the French scale), introduced his dilating urethrotome, opened it to the required extent, and cut the stricture in withdrawing the instrument. The patient seemed to suffer rather sharp pain, and had some hæmorrhage. As the bulbous sound of the corresponding number could not, after this section, be passed, the patient was cut again, and the sound passed readily. Dr. Otis now applied, to cool the organs, a neatly contrived "cold water coil" of indiarubber, on the syphon principle, to demonstrate the manner in which he moderates hæmorrhage.

Another patient was then brought in, but as the actual cutting would have been inconvenient to the young man just at that time, no actual operation took place, and the audience separated highly gratified at the skill of the surgeon, and the fluent delivery of the lecturer.

It remains to be seen how far Dr. Otis's system will shake the other methods now in use among surgeons; but there is no doubt that this dilating urethrotomy deserves the most careful attention, especially as the author of it quotes, in a pamphlet published by Putnam, of New York, in 1875, 100 cases of stricture thus treated, where permanent cures have mostly been obtained. As Dr. Otis promises excellent results without the necessity of bougies for years, and as his instruments are not only ingenious, but pretty easily managed, it is likely that many surgeons will be disposed to give them a trial.

MR. PRESCOTT HEWETT.

A CROWDED and influential meeting was held in the Board-room of St. George's Hospital, on Saturday, July 17th, "to consider the propriety of presenting a memorial to Mr. Prescott Hewett, on his resignation of the office of surgeon to St. George's Hospital, in recognition of his services in the advancement of medical science, and of the influence his character has had on the profession and the public." Resolutions were unanimously and enthusiastically passed approving of the objects of the meeting, and a committee was appointed to carry the same into effect. Sir

James Paget attended by special invitation, and a parallel having been drawn between the career of Sir James Paget and Mr. Hewett, Sir James said that scarcely anything had happened to one that had not in a few months after happened to the other. He might next year be president of the College of Surgeons, and the year after it would come to Mr. Hewett's turn. Sir James said he could follow the similarity in many more details, but refrained from doing so lest it should appear that he in any degree, in character, resembled one who had been for many years his great rival in friendship as in other things.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

THE thirteenth annual meeting of this Society was held in the Council Chamber on the 13th inst. The yearly report submitted by the secretary showed that the Society had made a great advance during its past session. The members had increased from forty to fifty, and their attendance at the ten meetings of the session had been nearly one-half greater than that of previous years. The communications submitted to the meetings, of which upwards of thirty had been made, had shown more general research and originality than previously. One evening of the session had been devoted to a general discussion upon the subject of vaccination, its benefits and dangers. The result determined the Society to repeat such discussions upon some debated medical subject, every succeeding session. A number of important morbid specimens had been added to the pathological department. The Society in all respects, financially and otherwise, was pronounced to be in a most prosperous condition. The following gentlemen were elected as office-bearers for the ensuing session:—President, E. Bronner; Treasurer, W. Whalley; Secretary, D. Goyder; Committee, R. H. Meade, J. Foster, P. E. Miall, and J. Dunlop; Pathologists, M. Lee and A. Rabagliati; Auditors, W. H. G. Buckley and C. H. Taylor.

Correspondence.

"Audi alteram partem."

QUACK MEDICINES.

To the Editor of THE LANCET.

SIR,—With your permission I should like to draw your attention and that of your readers to a subject which, I think, is of considerable importance to the medical profession. Every medical man knows that there is a handful of men who have stepped out of their own legitimate and respectable calling, and who deal extensively in quack medicines and secret nostrums, often of their own making, and who call themselves consulting and operating chemists. The advertisements of these men penetrate every house, for you cannot take up a periodical or newspaper that is not full of them. I have a local paper before me which contains twenty-five of these advertisements, one person having inserted fourteen. When reading these advertisements one is at a loss to know at which to be most astonished—the assurance of the writers of them or the credulity of those who read them. Dr. Fergusson, of Bolton, said the other day in his report before the Royal Commission sitting in Manchester, that the populations of large towns were degenerating, and the chief causes to which he attributed this state of things were drunkenness and smoking. I think he might also have added the drugging of children and the consumption of quack medicines to which the working classes are, with a strange infatuation, addicted; this propensity caused no doubt by the insinuating advertisements, and, for the most part, made up testimonials which are constantly kept before the public. Can nothing be done to stop all this? But until something is effected by legislation, if THE LANCET would devote some of its valuable space to the analysis of some of the principal quack medicines, great good would be done to the medical profession and to the public. Dr. A. S. Taylor, M.D., F.R.S., Lecturer on Medical Jurisprudence, &c., in Guy's Hospital, has kindly just analysed a noted medicine called "Clarke's Blood Mixture," and has appended to his report some valuable remarks and suggestions. It will be seen from the analysis that the active principle of this mixture is iodide of potassium in four-grain doses for an adult, four times a day. I need not tell my professional brethren the injurious effects the prolonged use of this drug must have on the weak and anæmic, who are the people mostly likely to take this mixture attracted by its name. It is probable that many medical gentlemen, especially those in large towns, have treated patients suffering from the effects of quack medicines. If in future they will kindly take notes of such cases, and from time to time insert them in the medical journals, they will confer a great boon on the profession and a greater boon still upon the public at large.

I am, Sir, your obedient servant,

Lincoln, July 19th, 1875. WILLIAM O'NEILL, M.D.

[COPY.]

Report of Analysis of a Liquid described as "Clarke's World-famed Blood Mixture or Purifier."

A bottle containing this mixture was forwarded to me by Dr. W. O'Neill, of Silver-street, Lincoln, with a request that I would make an analysis of it, and inform him of its composition.

The bottle was enclosed in several paper-wrappers, setting forth a number of cases in which it was alleged that this "blood mixture" had wrought many cures in a variety of diseases.

The quantity of liquid contained in the bottle was eight ounces. It had a dark brown colour, but was clear and free from any sediment. It had the smell of chloric ether (a compound of chloroform and alcohol), and a sweetish saline taste which was not unpleasant. Its reaction on test paper was alkaline. On shaking it, it formed a brown-coloured froth. When evaporated to dryness, it left a thick dark saccharine extract, weighing for the half-ounce about twenty-nine grains. When this extract was incinerated, it left a white saline residue which proved to be *iodide of potassium*. The brown colouring matter had the usual properties of burnt *sugar* (caramel), the colouring which is used to give a brownish tint to brandy, sherry, and other pale wines. In addition, the mixture contained a small quantity of a solution of potash, just sufficient to correct the acidity of the burnt sugar. Alcohol and chloroform (as chloric ether) were detected in it. Arsenic, antimony, lead, copper, and other metallic poisons were sought for, but the mixture was found to be quite free from any metallic impregnation.

The composition of the mixture was found to be as follows in eight ounces:—Iodide of potassium, 64 grains; chloric ether (B.P.), 4 drachms; solution of potash (liq. potassæ B P.), 30 minims; water coloured with burnt sugar to the requisite tint, 7½ ounces.

There was no injurious ingredient in the mixture. The chloric ether is a pleasant stimulant, but the *iodide of potassium* is the efficient medicinal agent. The dose of this salt is moderate; it amounts to about four grains in each tablespoonful, but this dose is directed to be taken by adult males four times a day, making a daily quantity of *sixteen grains* of the iodide of potassium.

Why such a mixture as this should be designated a "blood mixture" and a "blood purifier" is incomprehensible. It has no more claim to these titles than nitre, common salt, sal ammoniac, or other saline medicines which operate on and through the blood by absorption. The iodide of potassium has been long used by regular medical practitioners in the treatment of scrofulous, syphilitic, and rheumatic diseases. Its properties are well known, and there is no novelty in its employment. The only novelty in this form of mixture is that the iodide is dissolved in water coloured with burnt sugar, and it is described as a "blood purifier."

Iodide of potassium, when used in proper doses and employed in cases which really require it, is a good, safe, and useful medicine. Although in each tablespoonful of the mixture the proportion of iodide is small, yet the four doses directed to be taken daily represent *sixteen grains*, and if the person taking it is not under medical observation, such a daily quantity as this may accumulate in the system and do mischief.

In some constitutions the iodide of potassium frequently taken, even in medicinal doses, proves speedily injurious. It produces a diseased condition, to which the name of "iodism" has been given. In one instance, three grains, taken three times a day, caused, after the fourth dose (twelve grains), shivering, headache, thirst, quick and full pulse, with vomiting and purging. In another case a dose of five grains caused difficulty of breathing, discharge from the eyes and nostrils, inflamed conjunctiva, and most of the symptoms of a severe cold, for which these injurious effects of the iodide may be easily mistaken. In some cases the iodide has acted powerfully on the salivary organs, causing salivation. In others it has acted powerfully on the kidneys, and has produced a copious flow of urine. These facts show that it is not a medicine which can be safely taken in quantities of sixteen grains daily by a person who is not under medical observation.

The sale of medicines of this kind should be strictly prohibited, unless the bottles containing them were supplied with a caution label setting forth their true composition. It is only reasonable that a person should know what he is purchasing; but the rule of English law applied to such cases is the same as in the buying of a horse, *Caveat emptor.* A man who has reached adult age is supposed to be able to exercise a sound judgment for himself, although it is notorious that there is no instance in which so much credulity is shown as in the purchase of medicines to which some great curative powers are attributed.

Alfred Swaine Taylor, M.D., F.R.S.,
Lecturer on Medical Jurisprudence and
Toxicology in Guy's Hospital.

St. James's-terrace, Regent's-park,
July 15th, 1875.

ON THE PHYSICAL CAUSE OF THE PRESYSTOLIC MURMUR.

To the Editor of The Lancet.

Sir,—I should deem it almost impossible for anyone with an unbiased mind, a correct ear, and an adequate experience to have failed repeatedly to verify the accuracy of Dr. Gairdner's description of the presystolic murmur had we not a few such distinguished instances to the contrary. It is true that this murmur is a difficult one to demonstrate for the first time to many, even of those who can distinguish most of the morbid heart sounds readily. The exceeding sharpness and rapidity with which the first sound succeeds the murmur leads many to regard the murmur as systolic, and to mistake the first for the second sound of the heart. In other cases, again, I have known the murmur to be mistaken for a diastolic bruit. But having once mastered a case, the murmur is a very easy one to recognise when not complicated by the presence of others. The term auricular systolic, used by Dr. Gairdner, is not, however, I venture to think, quite a happy one, inasmuch as it does not describe the whole mechanism of the murmur. It is true that in most cases a bruit is only audible with the accelerated passage of blood through the narrowed mitral orifice during auricular systole. But both thrill and murmur may commence before the time of the auricular systole, "extending from the second sound through the pause." Dr. Gairdner speaks of this as an associated murmur, the noise of the blood stream attracted towards the expanding ventricle. It is, however, as far as I know, peculiar to cases of mitral stenosis, being prolonged and intensified up to the systole by the contraction of the auricle. The current of blood propelled during the pause by the residual force of the ventricular contraction may, as I think Dr. Salter has pointed out, in certain cases of mitral constriction (especially in the funnel-shaped mitral) be sufficient to set the valve vibrating, and to give rise to a continual *bruit* extending from the second sound through the pause to the first, and being augmented by the increased tension of blood when the auricle contracts. Since, then, narrowing of the mitral orifice is the only condition necessarily present at all periods of the murmur, I think the older terms mitral-constrictive or presystolic preferable to that proposed by Dr. Gairdner.

I am, Sir, yours faithfully,
R. Douglas Powell, M.D., F.R.C.P.,
Physician to the Hospital for Consumption and Diseases of the Chest at Brompton.

July 19th, 1875.

"PASS" AND "PLUCK" AT THE COLLEGE OF SURGEONS.

To the Editor of The Lancet.

Sir,—I think it would have been fairer to the various medical schools if the report of the examiners, which was published last week, had been supplemented by another set of statistics, showing the number of registered students at each school who have completed the studies required for the primary and pass examinations respectively.

I have had the curiosity to place in parallel columns—(1) the number of students at the various metropolitan schools who registered for the first time in October, 1873, and who therefore should have been candidates at the primary examinations in April and May last; and (2) the number from each school actually examined during the whole year:—

	No. of First-year Students registered in October, 1873.	No. of candidates at Primary Examination in in 1874-75.
St. Bartholomew's ...	100 ...	80·83
Guy's	94 ...	78
University College ...	66 ...	87
St. Thomas's	53 ...	64·3
King's College	46 ...	47
Middlesex	37 ...	26·5
St. George's	34 ...	31·5
London	38 ...	41
St. Mary's	21 ...	25·5
Charing-cross	13 ...	13·5
Westminster	12 ...	10

It is obvious from this list that the residuum of students who have been kept back from the primary examinations is much greater at some schools than at others, and this consideration materially modifies any estimate that is made of the relative merits of the teaching of anatomy and physiology.

I remain, Sir, yours very faithfully,
July 20th, 1875. A Teacher.

CONTAGION OF PUERPERAL PYÆMIA.

To the Editor of The Lancet.

Sir,—I observe in your issue of this day (July 17th) that my friend Dr. Fordyce Barker represents me as holding that what is called "puerperal fever" is not contagious. You will give me space to correct this error of his. I not only have never said that it is not contagious, but I have said it is "communicable," or, in ordinary language, contagious. I am, Sir, your obedient servant,

Edinburgh, July 17th, 1875. J. Matthews Duncan.

A FRAUD PREVENTED.

To the Editor of The Lancet.

Sir,—In one of your recent numbers there is an advertisement asking for a gentleman who has recently passed the L.R.C.P. Exam. of London, to prepare a gentleman for the two examinations for that qualification, and offering a fee of £50. I answered this advertisement, and have to-day received a reply to my letter. To save your space, I may say that the first part of this letter states where the writer of it was educated, and expresses a fear lest he should be unable to pass the examinations by September, when he has to go abroad. Then follows the pith of the letter, which I give in full and *verbatim*:—

"Now, Sir, a few words in strictest *confidence*. If you will present yourself and pass the first and second Royal College of Physicians Examination of Edinburgh (where I am unknown), I will give you the sum of £50, exclusive of traveling (*sic*) and boarding expenses for three days, while the examination lasts. Will meet you at * * * *, and accompany you to Edinburgh, and pay the £50 in any way you mention. Exam. on the 28th of this month, or special."

Nothing but an urgent sense of duty would lead me to publish a letter sent to me in "strict confidence," but secrecy in this case would be participation in a fraud. I cannot conceive that any good can arise from publishing this gentleman's name. I have sent a copy of his letter to the College of Physicians of Edinburgh, and will forward the name to any of the examining boards of the United Kingdom who apply to me for it.

I am, Sir, your obedient servant,

Gower-street, Bedford-square, W.C. A. Pearce Gould, B.S.

PARIS.

(From our own Correspondent.)

The death of Demarquay has been the chief medical topic of the last week, and very many anecdotes touching this eminent surgeon have been related in conversation or published in the journals. Some of his bequests have already been made known. Thus he leaves 100,000 francs to the Academy of Medicine, to be employed either in helping that learned body to select a more suitable place of residence, or in founding an annual prize. In like manner 10,000 francs have been left to the Société de Chirurgie, for founding a triennial prize. His library, which was exceedingly extensive and complete, has been bequeathed to the Maison Municipale for the use of the medical men and students attached to the hospital. His former pupils have inherited his surgical instruments. Besides these scientific and professional bequests, there are others which denote the humanity and religious disposition of Demarquay. Thus certain sums of money have been left to ameliorate the condition of the curate, the sister of mercy, and the village teacher of Longueval, Demarquay's birthplace; 15,000 francs to the poor; 10,000 francs for the charitable institutions of Longueval, &c. It is said that Demarquay's brother inherits all the rest of his fortune, consisting of 800,000 francs, and his fine property of Longueval. But perhaps there is some exaggeration in this estimate of Demarquay's fortune, though he was said, especially during the latter years of his life, to make a yearly income of £6000 by his practice.

In connexion with the floods which have produced such destruction in the south, and spread a general feeling of consternation throughout this country, it is well to mention the proofs of humanity and generosity which have been given by the profession. Besides the invaluable services rendered by the medical men of Toulouse and the other localities to the victims of the floods, the presence of mind and noble behaviour of two internes (house-surgeons) of the Hôtel Dieu of Toulouse deserve to be especially noticed, they having been the means of saving the lives of the inmates of the hospital, more than 200 in number. On June 23rd, at 5 P.M., the waters of the Garonne had invaded the Faubourg Saint Cyprien, and had filled the cellars, kitchens, and pharmacy of the Hôtel Dieu. The whole hospital was disorganised. The servants and patients were helpless from terror. The flood was still rising. The only bridge left, the one opposite the Hôtel Dieu, was threatened with destruction. The general in command had ordered his troops to retire. The wards of the hospital were beginning to be reached by the water, the building began to crack and shake, and every means of communication with the town was cut off. Under these most trying and extraordinary circumstances, MM. Bonneau and Labat, the house-surgeons, took a rapid determination, and, assuming all the responsibility, they decided that the hospital should be evacuated by any means. Owing to their energetic exertions, the 200 patients were conducted or carried safely out of the hospital and over the bridge, amidst the greatest anxiety and the most painful incidents. Two days after, when Marshal Macmahon visited the flooded city, the Prefect presented the two gallant house-surgeons to him, and in the name of the city demanded for them the Cross of the Legion of Honour as a reward for their intrepidity.

The *concours* for appointing two vice-professors of surgery and one of accouchement at the School of Medicine is very nearly ended, the candidates now going through the last test, that of publishing, and arguing on, various theses appointed by the judges. It may be of interest to give a list of the subjects chosen by the Paris professors:—1. The influence of constitutional maladies on the course of traumatic lesions. 2. On arthropathies of nervous origin. 3. On the accidents which may complicate traumatic dislocations. 4. Comparative study of the various methods of exercise. 5. On the value of hysterotomy in the treatment of fibrous tumours of the uterus. 6. On the part played by muscular action in traumatic luxations. 7. Pathogeny, course, and termination of tetanus. 8. On transfusion of blood. 9. Point out the influence which histology has exercised on the progress in diagnosis of tumours. 10. Traumatic lesions of the liver. 11. On the various dispositions of the funis, except procidentia, which can disturb the regular course of pregnancy and parturition. 12. Make known the counter indications of version in presentation of the shoulder, and the means which can be used to supersede this manœuvre. 13. In what cases is it necessary and advisable to procure abortion. All these various theses, after having been printed, will be put in the hands of the various candidates, each one of them having to defend his thesis against two adversaries.

Paris, July 13th, 1875.

Medical News.

Royal College of Physicians of London.—The following gentlemen were admitted Licentiates on the 19th inst.:—

Anningson, Thirkell, Burnley.
Baly, William, St. Mark's Hospital, City-road.
Blackmore, George Henry, Shaftesbury-road, Hammersmith.
Childs, Christopher, Warwick-street.
Clarke, Arthur, Brill, Buckinghamshire.
Clayton, Joseph Everett, Rutland-street.
Collins, Charles Edward, Crowndale-road.
Cooper, Ernest Frederic, St. Paul's-road.
Haines, Edmund William, Tavistock-place.
Hood, Francis Edward Charles, Guy's Hospital.
Irving, Charles, St. Bartholomew's Hospital.
Jackson, Ernest Carr, Harley-street.
Kebbell, William, Brighton.
Kempe, John Arthur, Wimpole-street.
Murrell, William, York-street, St. James's-square.
Pasley, Nicholas Claude Burgoyne, Palace-road.
Peck, Awdry, Yalding, Kent.
Peevor, George Hamilton, Portsdown-road.
Phillips, Arthur Owen Henry, Bethlem Hospital.
Poynder, George Frederick, Weeting, Brandon.
Ree, Frederick George, Ealing.
Reid, Thomas Whitehead, St. Bartholomew's Hospital.
Rendall, John, Maiden Newton, Dorchester.
Robson, Arthur William Mayo, Leeds.
Romano, Frederick William Richard, Albany-road.
Rudd, Leonard, Guy's Hospital.
Spooner, Frederick Henry, Plymouth.
Thompson, Alfred, Spilsby.
Waylen, George Swithin Adee, Granville-square.
Williamson, Francis, Durham-place.

Royal College of Surgeons of England.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on Tuesday and Wednesday last:—

Alford, George E., Weston-super-Mare.
Blake, Andrew Henry, L.S.A., Castle-street East.
Briggs, William H., Stroud, Gloucestershire.
Chippingdale, Samuel Dodd, Commercial-road.
Clayton, Joseph Everett, L.R.C.P. Lond., Leeds.
Clinton, Samuel A., M.D., L.S.A., Chislehurst, Kent.
Crouch, Ernest I., L.S.A., Hornton-street, Kensington.
Daubeny, Charles A., Yatton, Somerset.
Eames, James Crompton, M.B. Edin., Manchester.
Gawith, James Jackson, L.S.A., London.
Haines, Edmund W., L.R.C.P. Lond., Tavistock-place.
Hayward, William T., L.K.Q C.P. Irel., Liverpool.
Hobson, Lewis John, Ainger-terrace.
Hood, Francis E. C., L.R.C.P. Lond., Bletchingley, Surrey.
Hunter, Robert H. A., Dalston.
Irvine, Delaware Lewis, Newcastle.
Jones, Thomas R., L.R.C.P. Lond., Walton, Lancashire.
Jumeaux, Benjamin, L.R.C.P. Edin., Stafford.
Latour, George Lewis, Lambeth.
Lumby, John R. H., Birmingham.
Mitchell, Charles J. C., L.S.A., Bedford.
M'Naught, James, M.B. Edin., Wall, Northumberland.
Ormerod, Joseph Arderne, Oxford.
Palmer, Francis C., Weston-super-Mare.
Peevor, George Hamilton, L.R.C.P. Lond., Portsdown-road.
Richards, Thomas, Cardiff.
Skipworth, Herbert, Brigg, Lincolnshire.
Smith, Charles Callow, L.S.A., Redditch.
Sparrow, George Gordon, L.R.C.P. Edin., Southsea.
Street, Alfred W. F., Barnetby, Lincolnshire.
Sykes, William, L.R.C.P. Edin., Sheffield.
Symonds, Charters J., St. John's, New Brunswick, Canada.

Thomas, Edmund F., L.R.C.P. Edin., Weston-super-Mare.
Tindle, John G., Middlesborough.
Vernon, William, L.R.C.P. Edin., Newcastle-on-Tyne.
Watkins, Arnold H., M.B. Edin., Nailsworth.
Wilson, Arthur C. J., Manchester.
Winship, William L., Newcastle.
Wright, Newton W., Ardwick, near Manchester.

The following gentlemen passed the Primary Examination in Anatomy and Physiology on the 15th inst.:—

Messrs. A. P. Cooper, E. Denning, E. C. Bentham, H. D. Cooper, W. T. Atkey, and R. R. Norton, University College; B. B. Fox, E. M. Wilson, and C. W. C. Fletcher, St. George's Hospital; F. W. W. Goodsall, St. Bartholomew's Hospital; H. S. Michell, F. Willcocks, and A. Shipton, King's College; D. E. Thomas and R. H. Grimbly, St. Thomas's Hospital; John Gabe and R. G. White, London Hospital; F. F. I. Blaker, Guy's Hospital; R. C. Revell and E. Semple, Middlesex Hospital; W. Foster, Westminster Hospital; William Scott, Glasgow; and C. H. Hough, Cambridge.

Of the 163 candidates examined during last week, 83 failed to satisfy the Court of Examiners, and were referred for three months' further anatomical and physiological study.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on July 15th:—

Chadwick, Alfred, Heywood, near Manchester.
Crowdy, Frederic Hamilton, Newfoundland.
Fell, Thomas Kennedy, Ulverstone, Lancashire.
Fussell, Ernest, Sherborne, Dorset.
Lilley, George Herbert, Ware, Herts.
Smith, Charles Callow, York-road, Lambeth.

The following gentlemen passed the Primary Professional Examination on the same day:—

Edmund John Thompson, Frank Samuel Goulder, and John Henry Osborne, University College; Thomas William Richardson and John Weller, London Hospital; Frederick De Caux, King's College; Alex. Stuart Brown, St. Mary's Hospital; Thomas Seagrave Sutton, Middlesex Hospital.

In Belfast, for the past quarter ending July 3rd, there were 88 deaths from scarlatina, 10 from small-pox, and 114 from measles. This is an excessively large mortality in a population of 182,000.

Bequests, &c., to Medical Charities.— Mr. Anthony Strutt bequeathed £1000 to the Derbyshire Infirmary. Mr. Edward Lewis, of Chorlton-cum-Hardy, bequeathed £200 to the Manchester Royal Infirmary.

Vaccination Grants.—The Local Government Board has awarded grants to the public vaccinators of the St. Saviour's Union in the following proportion:—To Mr. W. Babbage, £64 6*s.*; Mr. Wright, £50 13*s.*; Mr. Llewellyn, £34 3*s.*; and to Mr. A. Matcham, who has been but recently appointed, £10 3*s.*

Adulteration of Food Act in Sunderland.— Dr. Yeld, public analyst for Sunderland, reports that during the quarter ending the 30th of June last, thirty articles of food and drink were submitted to him for analysis—namely, eighteen samples of milk, seven of bitter and mild ales, three of coloured sweetmeats, one of condensed milk, and one of water. Of the eighteen samples of milk, it was found necessary to prosecute in only one instance, in which 18 per cent. of water had been added, for selling which as pure milk the seller was fined 10*s.* and costs. The coloured sweetmeats were found not to have been coloured with any poisonous ingredient. The sample of water, obtained from a well in Bishopwearmouth cemetery, and which had occasionally been drunk by persons visiting the cemetery, was found to be charged with a considerable amount of organic matter, and quite unfit for drinking.

Health of Dublin.—From the Report of the Registrar-General for Ireland for the June quarter, it appears that the births registered amounted to 2194, and the deaths to 1906, or 24 in every 1000 of the population. The deaths from zymotic affections amounted to 251, being 72 less than in the previous quarter, principally owing to the decline in the mortality from scarlatina; whilst only 2 deaths arose from small-pox, and 6 from measles. The principal causes of death were as follows:—Phthisis 261, bronchitis 253, convulsions 111, heart disease 109, pneumonia 79, hydrocephalus 53, fever 51, scarlatina 42, paralysis 41, apoplexy 39, cancer 37, mesenteric disease 34, diarrhœa 26, croup 20; whilst 49 deaths were accidental, 2 homicidal, and 1 suicidal. The mean of the mean weekly temperature for the quarter was 52·8°; and the rainfall during the thirteen weeks measured 5·058 inches.

In last week's return, the registrar of Sligo district states that one of the deaths registered during the week was of a person aged 106 years.

BOOKS ETC. RECEIVED.

Professor Tyndall on Light.
" " on Sound.
Memoir of Thomas Turner, F.R.C.S.
Dr. Bennett: Report on the Antagonism of Medicines.
Dr. Hartwig: The Subterranean World.
Mr. Heather Bigg: The Gentle Treatment of Spinal Curvature.
Dr. Drewry: Common Sense Management of the Stomach.
Catherine Buckton: Health in the House.
Latham's English Grammar and English Language.
Low's Handbook to the Charities of London.
British Journal of Dental Science. July.
Rumsey's Essays on Some Fallacies of Statistics.
Transactions of the New York Academy of Medicine.

Medical Appointments.

Anderson, Prof. A. G., has been appointed Public Analyst for the Parish of Paddington, vice Hardwicke, resigned: £150 per annum.

Bothwell, G. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the whole of the Leighton Buzzard Union, vice Harris and Etheridge, resigned; also Medical Officer of Health for the Leighton Buzzard Rural Sanitary District.

Brickwell, B. A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Amersham District and the Workhouse of the Amersham Union, vice Courtney, resigned.

Cartwright, A., M.R.C.S.E., has been appointed Surgeon-Dentist to the Hospital for Sick Children, Great Ormond-street, vice Edgelow, resigned.

Clarke, J., L.R.C.S.I., has been appointed Assistant-Surgeon and Registrar to the County Down Infirmary, Downpatrick, vice Lawder.

Craigmile, A., M.B., C.M., has been appointed House-Physician to the Northern Hospital, Liverpool, vice Barr, resigned.

Crawford, S. K., M.D., L.R.C.S.Ed., L.M., has been reappointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Tandragee Dispensary District of the Banbridge Union, Co. Armagh.

Davies, H. H., M.R.C.S.E., has been appointed Medical Officer for the Llandyssul District of the Newcastle-Emlyn Union, vice Jones, deceased.

Davison, F. V., M.B., C.M., has been appointed House-Surgeon to the Bootle Borough Hospital, vice Knox, resigned.

Edmond, W. R., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Resident Medical Officer to the Swansea Hospital, vice Collins, appointed Resident Medical Officer.

Farnell, H. D., M.R.C.S.E., has been appointed House-Surgeon to the Northern Hospital, Liverpool, vice Harris, resigned.

Harries, J. D., M.R.C.S.E., has been appointed Medical Officer to the Salopian Hope Lodge of Odd Fellows, Shrewsbury.

Hawkes, A. M., M.R.C.S.E., has been appointed Medical Officer for the No. 1 District of the Launceston Union, vice Sargent.

Hepburn, D., L.D.S. R.C.S.E., has been appointed Assistant Dental-Surgeon to the Dental Hospital of London, vice Tomes, resigned.

Holderness, W. B., M.R.C.S.E., has been appointed Medical Officer of Health for the Huntingdon Urban Sanitary District: £24 per annum.

Jones, J. T., L.K.Q C.P.I., L.M., M.R.C.S.E., has been appointed a Medical Officer to the Brixton, Streatham, and Herne-hill Dispensary, vice Mercer, deceased.

Leftwich, R. W., M.B., C.M., M.R.C.S.E., has been appointed Resident Medical Officer to the East London Hospital for Children and Dispensary for Women, vice Stocker, resigned.

Lloyd, A. E., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer of Health for the Rhyl Urban Sanitary District, vice Williams, resigned.

Lodge, J., M.R.C.S.E., has been appointed Medical Officer for the Keynsham District of the Keynsham Union, vice Moir, resigned.

Mackinlay, J. E. H., L.R.C.P.L., M.R.C.S.E., has been appointed a Medical Officer to the Coatham Convalescent Home, vice Oliver, resigned.

Marsh, W. A., M.R.C.S.E., has been appointed Medical Officer to the Salop Medical Aid Association, Shrewsbury, vice W. J. Marsh, M.R.C.S.E., resigned.

Marsh, W. J., M.R.C.S.E., has been appointed Medical Officer to the William Watkins Lodge of Odd Fellows, Shrewsbury, vice Willett, deceased.

Mead, H. T. Harvey, M.R.C.S.E., has been appointed Medical Officer of Health for the Christchurch Sanitary District.

Pechey, Miss M. E., has been appointed House-Surgeon to the Birmingham and Midland Hospital for Women.

Philpot, J. H., M.B., Medical Tutor in King's College, has been appointed Sub-dean of the Medical School.

Powell, J., M.R.C.S.E., has been appointed Medical Officer of Health for the Penbryn Sub-district of the Newcastle-in-Emlyn Rural Sanitary District, vice Evans, deceased.

Rendle, R., F.R.C.S.E., has been appointed Resident Medical Officer to the Hospital for Consumption and Diseases of the Chest, Brompton, vice V. Edwards, M.R.C.S.E., retired, after nearly twenty-five years' service.

Thompson, H., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Northern Hospital, Liverpool.

Troutbeck, J., M.B., L.R.C.S.Ed., L.M., has been appointed Medical Officer for the Stanmore District of the Hendon Union, vice Irving, resigned.

Wheatcroft, S. H., L.R.C.P.Ed., M.R.C.S.E, has been appointed Medical Officer for the Oxborough District of the Swaffham Union, Norfolk.

White, Dr. R., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilshannig Dispensary District of the Mallow Union, Co. Cork, vice Roche, resigned.

Wilson, J. M., M.B., C.M., has been reappointed Medical Officer of Health for the North Witchford Rural Sanitary District, at the reduced salary of £40 per annum, Chatteris having been severed from it and formed into an Urban Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

Dove.—On the 15th inst., at Pinner, the wife of J. R. B. Dove, M.B., of a daughter.

Fear.—On the 16th inst., at Brenchley, Kent, the wife of William Fear, M.R.C.S.E., of a daughter.

Gardner.—On the 9th ult., at Naini Tal, India, the wife of T. T. Gardner, M.R.G.S.E., Surgeon-Major Army, of a daughter.

Heron.—On the 13th inst., at King's Cliffe, Northamptonshire, the wife of G. A. Heron, M.D., of a daughter.

Pearson.—On the 18th inst., at Upper Phillimore-place, Kensington, the wife of David R. Pearson, M.D., of a son.

Richardson.—On the 10th inst., at Bennington House, Beal, Northumberland, the wife of Henry Richardson, M.D., R.N., of a son.

MARRIAGES.

Beckett—Allden.—On the 20th inst., at St. Michael's Church, Chittisham, Francis Mears Beckett, M.R.C.S., of Ely, to Harriet Elizabeth, fifth daughter of the late Wm. S. Allden, Esq., and Lydia Allden, of Woodhouse, Ely.

Gamgee—Clark.—On the 22nd inst., at Stamford-hill Congregational Church, Arthur Gamgee, M.D., F.R.S., of Brackenbury, Professor of Physiology in the Owens College, Manchester, to Mary Louisa, second daughter of James P. Clark, Esq., of London and Montreal.—No Cards.

Kelly—Hyde.—On the 8th inst., at Holy Trinity Church, Yeovil, Charles Kelly, M.D., to Florence, daughter of the late Rev. Wm. Hyde.

Spence—Crosse.—On the 15th inst., at St. James's, Piccadilly, J. A. W. Spence, L.R.C.P.Ed., Madras Medical Staff (second son of John Spence, F.R.C.S.), to Fanny Louisa, youngest daughter of the late Edmund Crosse, Esq., of Fairfield, Harrow Weald, and Ladbroke-gardens, Bayswater.

DEATHS.

Bindon.—On the 31st of March, at Guy's Hospital, John V. Bindon, F.R.C.S.I., aged 60.

Clapperton.—On the 18th inst., at Prestwich, Geo. Clapperton, L.F.P. & S. Glas., aged 36.

Dell.—On the 14th inst., at Chiswick, E. C. Dell, M.D., aged 56.

Hardwick.—On the 11th inst., at Axbridge, John Hardwick, M.R.C.S.E., aged 70.

Helsham.—On the 14th inst., at Mile-end-road, Arthur Helsham, Surgeon (in practice prior to 1815), aged 90.

Lane.—On the 15th inst., at Tullow, Co. Carlow, Thos. B. Lane, M.B., aged 62.

Rolf.—On the 10th inst., at South Shields, A. G. Rolf, M.R.C.S.E., of High-street, Gateshead, aged 45.

Shorland.—On the 16th inst., at Weymouth, G. Shorland, M.R.C.S.E., aged 67.

Spyers.—On the 14th inst., at Faversham, Thos. C. Spyers, M.D., aged 38.

Willing.—On the 15th ult., in India, suddenly, Harry Brutton, only surviving son of Dr. Willing, of Great Wakering, Southend. To the great grief of his parents.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

The Care of Lunatics.

An illustration of the difficulties and anxieties connected with the medical supervision of the insane may be found in the last Report of the Physician-Superintendent of the Royal Edinburgh Asylum for the Insane. Dr. Clouston, after drawing attention to the unusually large number of persons admitted suffering from melancholia, comments on the strength of the suicidal tendency in some of the patients. The ingenuity, determination, and persistence of the propensity in a few were very remarkable. One patient tried to swallow everything he could lay his hands on, from the ink used by his fellow-inmates of the ward to write their letters, to small stones, eighty-two of which he swallowed one day, and apparently was none the worse for them. He picked out nails from the woodwork, and tried to push them into his heart, and starved himself so persistently that he had to be fed with a stomach-pump. Two attendants were constantly with this patient. Another man gave quite as much trouble. After a time the intensity of the malady subsides. Chronic patients are to be seen working as shoemakers, joiners, &c., and having access to cutting weapons, who on admission were highly dangerous.

Practitioner.—It is a matter which rests entirely in the hands of the authorities of the institution, and we must decline to give an opinion on the case.

Poisoning by Milk.

To the Editor of The Lancet.

Sir,—In your journal of July 10th I read an interesting article on Poisoning by the Milk of Goats which had browsed upon colchicum. There is a possibility of cows' milk also conveying this poison to the human subject; for in May last, when on a visit to Shropshire, near Downton Castle, I saw a meadow in which the Colchicum autumnale was very abundant, and I learned that a few days before a valuable cow had died of gastro-intestinal irritation, caused by its feeding upon this acrid plant.

I remain yours truly,
H. M. Duncan, M.D. Lond.
Buckingham-Palace-road, S.W., July 15th, 1875.

Sanitary Service in War.

The mortality of the French wounded, says M. Wyrouboff in the June number of the *Philosophie Positive*, was double the mortality of the German wounded in the late war. This result was due simply to the defective sanitary organisation of the French.. The German army, out of a total effective of 914,000 men, lost 17,570 killed, 10,717 dead in consequence of wounds, 12,174 dead by disease, and 4009 missing—making a total of 44,460 dead. The wounded amounted to more than 127,867. M. Wyrouboff does not enumerate the sick. The mortality of the wounded, therefore, was 8·3 per cent. For the French army the data are not so detailed; the number of killed, dead from wounds and disease, is not indicated separately, and the tota effective remains unknown. We have, however, the number of the sick In round numbers the killed, dead from wounds and from disease, were 117,475 (without counting the 119,065 dead in captivity in Germany, and during *internement* in Switzerland and Belgium); the wounded were 131,000; the sick and congelés, 339,421. The total mortality of the wounded and sick together was, therefore, 24·8 per cent. The number o the wounded, it will be seen from these not quite perfect data, was nearly the same on both sides—the proportion being maintained in all circumstances, even when the two armies were almost equal in number, as at Metz, where the French lost during the whole campaign 42,500, and the Germans 44,200. Another striking point is the large total of sick and the enormous mortality. In effect, supposing the number of killed equal to the number of Germans killed (which is probable), the equality of the number of the wounded being given, and taking into consideration that (save small-pox) no epidemic prevailed, then the 100,000 deaths divide themselves very unequally between the sick and the wounded. With the documents in hand, it would be difficult, not to say impossible, to determine with precision the mortality of the sick and that of the wounded; but we have in this direction some data of value. The three great ambulances of the French Society, which had among them 2768 wounded, show a general mean of mortality of 14·5 per cent. Now, those three ambulances, says M. Wyrouboff, "étaient du petit nombre de celles dont l'installation était à peu près convénable." At Metz the mortality exceeded 15 per cent.; in a great number of ambulances installed round Sédan it reached 20 and even 27 per cent. Without exaggeration, therefore, the imperfect figures at our command enable us to say that the mortality of the French wounded was double that of the German! M. Wyrouboff's paper is well worth study, as showing the anxiety of the French to make their sanitary as effective as their combatant service.

Mr. J. V. Solomon.—We shall be very pleased to receive them.

"The Odd Shilling."

To the Editor of The Lancet.

Sir,—I am a general practitioner, and, like most of my class, have experienced the *res angusta domi*, although I now begin to flatter myself that that is a thing of the past. I still fret, however, under unjust burdens.

For the last three years I have on an average attended 100 midwifery cases a year, with fees varying from £1 1*s.* to £3 3*s.* For the sake of illustration let us take the minimum fee of £1 1*s.* The above should thus show a return of £105; yet I find I have only received £100. How is this? Simply owing to the objectionable custom of turning over the odd shilling to the nurse. Who originated this custom? Can nothing be done to put a stop to it? I have myself tried hard for some time past to put a stop to it, but have had only very partial success. What was at first given as a favour seems now to be demanded as a right, as many of the nurses have point-blank asked for the odd shilling, and to conciliate them I have been fain to yield. I think I have thus incurred odium by not giving spontaneously, and if so, then, *à fortiori,* must I have incurred a greater degree of odium from those to whom I did not give at all. This could not be were the custom universal among medical men to pocket the silver as well as the gold. The nurses are paid for their services. Why then should we be expected to supplement their income from our already too hardly earned fees? Further, I have not noticed (with one exception) that physicians and surgeons remit the odd shilings on receipt of their fees. Why should general practitioners be thus saddled with this indefensible burden? We are perpetually crying out about the onerous State taxes, yet we voluntarily impose one on ourselves as burdensome as any of those. The odd shillings in my confinements would nearly pay both my income and assessed taxes in their present reduced rates. The axiom, "Take care of the pence, and the pounds will take care of themselves," seems to be ignored in our profession.

The above subject has been frequently ventilated of late in your columns. But there is another matter akin to this that I have not seen referred to by anyone. I am frequently asked to vaccinate gratuitously the babies of those patients I have delivered, and I invariably refuse. I am often told that this is the practice of many other medical men. Surely this is the acme of generosity, and shall I say, too, the acme of folly? When the State now provides for the gratuitous vaccination of all children, can there be the slightest excuse for private practitioners doing this work gratuitously? I think not, and I hold that any practitioner who does so is acting unjustly to his professional brother. Anyone who can afford to pay £1 1*s.* for delivery can surely afford to pay 2*s.* 6*d.* for vaccination.

I am, Sir, yours &c.,
London, July, 1875. J. B.

Waterclosets.

A correspondent calls our attention to the paucity of waterclosets in lodging-houses, and states he knows houses with twenty or thirty lodgers, and only one watercloset for the whole number. The evil pointed out is productive of ill consequences in many ways. Medical officers of health should invariably insist that sufficient accommodation in this respect shall be provided in all houses which their duties compel them to enter. It is but a short time since we received a letter from a clerk in a Government office, complaining of very great remissness on the part of the authorities. The accommodation in his office was disgracefully bad and insufficient.

SERIOUS OCCURRENCE AT THE GENERAL HOSPITAL AT GHENT.

ALL the internes, externes, assistants, and substitutes (house-surgeons, house-physicians, dressers, &c.) of this hospital have just left *en masse* under the following circumstances:—It would appear that one of the physicians or surgeons, in consequence of some dispute, the cause of which is not mentioned, called out to the young gentlemen, "You are all fools" (cretins). Thereupon they, being deeply offended, wrote to the hospital committee demanding an apology, and stating that, in the event of a refusal, they would adopt decisive measures. The committee answered that the letter was rude and threatening, and that no notice would be taken of it. Thereupon the students announced that they would quit the hospital; and, in order to avoid any detriment to the patients, they would stay for three days to allow them to obtain substitutes. After this interval the whole of them vacated the hospital, and the committee at once applied to the other students, but no one would accept the advantageous terms that were offered. The practitioners of the town were afterwards applied to, but only four responded, which is a small number to take the place of between twenty-five and thirty students. *L'Union Médicale* extracts these facts from *Le Scalpel*, and observes that such a conflict, such insulting language on the part of an official, and the obstinacy shown by the committee, could hardly occur in Paris.

Mr. David Gibb, (Airdrie.)—The matter shall receive attention next week.

OPERATION ON A HORSE UNDER CHLOROFORM.

To the Editor of THE LANCET.

SIR,—A successful piece of equine surgery, having some interest for members of our ranks, may be worthy of record in your journal.

The subject of this notice is a foal of the cart breed born near this town. He had a rudimentary fifth leg growing from the middle third of the metacarpal bone of the off fore-leg, reaching nearly to the ground. The upper part of the rudimentary leg was an expansion of the true "cannon" bone; at the fetlock joint it possessed a separate articulation, having long and short pastern bones, also a hoof, the whole being about nine inches in length.

This *lusus naturæ* was a patient of my friend, Mr. R. A. Stock, veterinary surgeon, of this town, whose opinion was sought as to the advisability of amputation. His opinion, and one in which I coincided, was that there was a fair chance of success in the operation.

On June 4th, the foal then being five weeks old, a fine, healthy, well-developed, and powerful animal, was placed by me under the influence of chloroform, and Mr. Stock commenced operating by making a long incision nearly the whole length of the small leg; the integuments were thrown back, exposing the whole abnormal growth. The knife was then passed through the joint, two sesamoid bones were dissected out, and a protuberance of the true cannon bone was sawn off with a small bow-saw from below upwards. Several vessels required tying; the integuments were brought together with wire sutures, and the whole of the lower part of the limb was enveloped in a wet bandage. About three ounces of chloroform were required, which nearly proved fatal. Cold water thrown over the head and friction applied to the body, however, speedily restored animation.

Since the operation not a single bad symptom has supervened, the after-treatment consisting of the application of cold water and carbolic-acid lotion. When the sutures sloughed away, the parts were kept in place by bandaging. Four weeks after the operation the wound had quite healed, and the little animal is now as lively as possible, without lameness or stiffness of the fetlock joint.

The point of interest about the case is the apparent impunity with which cold steel can be made acquainted with the joint of an animal, both in the form of scalpel and saw, and the reflection is whether individuals of our own species of the same tender age could go through the same operation with the same impunity. I am, Sir, yours obediently,

Lewes, July 9th, 1875. JOHN G. BRADEN, M.R.C.S.

M.D., (Edinburgh.)—1. We have not heard of there being any assessors; but it is probable that, on an examiner being dissatisfied with a paper, he submits it to the judgment of his *confrères.*—2. We think there must be a good many vacancies; but our correspondent should apply to the Director-General of the Medical Department of the Navy.

Enquirer.—Not legally, but a prosecution could not be sustained.—2. He could not hold such an appointment.—3. We do not know of any such handbook.

A STUDENT'S GRIEVANCE.

To the Editor of THE LANCET.

SIR,—May I be allowed to draw your attention and that of your readers (among them the Council of the College of Surgeons) to the very great length of time that is allowed to elapse between the preliminary examination and the notification of the result to the candidates. This year the examinations were held on the 8th, 9th, and 10th of June, and the results were not made known until to-day, close upon five weeks after. Moreover, this delay, always irksome, is rendered still more so by the authorities not stating some definite time for the communication of success or failure, and by the statement on the official card, to the effect that "the result of the examinations will be made known in about *three weeks.*" As a consequence, one is kept in a state of feverish excitement from the expiration of that three weeks until the card arrives. Now, when we remember that the University examiners, with at least as many candidates, and a far greater range of questions, can make their report upon a previously fixed time within nine days of the conclusion of the examination, does it not seem rather curious that the College of Perceptors cannot put the men out of their misery in less than five weeks? I feel sure that each of the three hundred or so young men who have been kept in suspense for the last few weeks will echo my sentiments when I say that it is a most miserable time; that if absolutely necessary, it is deplorable; and if unnecessary, it is—well, to put it mildly—very hard. I cannot but think that if the attention of the authorities were drawn to it, we might expect some improvement. Yours obediently,

Croydon, July 13th, 1875. C. H. D.

CHEAP PILLS.

THE Charity Organisation Society's *Reporter* publishes an extraordinary letter from a venerable correspondent, now domiciled in a country workhouse. It is a confession of the tricks he played upon a too credulous public while assisting a peripatetic medicine vendor. It is pretty well known that the nostrums which are hawked about the country by the lowest grade of quacks are made up of the very cheapest material that can be used, and it may be said that, as a rule, no deleterious ingredient ever finds its way into mixture or pill. Large fortunes have been made out of bread pills and of water coloured with a little burnt sugar. Whisky and water and gin and water, again, have taken well when coloured. The famous "Balm of Gilead," which brought immense wealth to its illiterate inventor, was composed of gin in which cardamoms had been steeped. There was, however, in patent pills the trouble of rolling the farinaceous matter of which they were made, and it was left for the itinerant doctor whose career is chronicled by our contemporary to obviate this labour. He simply went to a rabbit-warren or sheep-fold, where he found ready-made pills. These excremential products were coated with sugar, put in boxes, and warranted to cure all diseases, and not to contain any of the poisons regularly used by medical practitioners. His receipts, on an average, from the sale of these pills were £10 a week.

M. Hirst.—We regret we cannot assist our correspondent in the matter. We would advise her to advertise in one of the daily papers.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—In your frequent notices of the medical services you seem not to be aware of the great discontent that pervades the ranks of the Indian medical service. The new Medical Warrant that you lauded so highly on its promulgation in December, 1864, has proved to be a delusion and a snare.

The pay and emoluments of the Indian medical officers are much less than they were a quarter of a century ago, notwithstanding the depreciation in the value of money since then, and the increase made to the pay of other branches of the Indian services in consequence.

Present rules press hardest on the very junior and on the comparatively senior members of the service (those under five and those over fifteen years' service). The former, having been "unemployed" (in the pay office sense) during their first two to four years, may consider themselves lucky if they be clear of debt at the end of their fifth year's service; while the latter, having returned from furlough, married a few years previously, find themselves at fifteen years' service, with a rising family to educate, on only 800 rupees a month, with no prospect of being able to retire on a higher pension probably than £365 a year; for there is no longer a Retiring Pension Fund, and not more than one man in ten can possibly qualify for the deputy surgeon-general's pension.

The changes indicated are—the abrogation of unemployed pay to all except those *bonâ-fide* unemployed; the increase of pay of surgeon-majors to 1000 rupees a month at fifteen years' service, with an increment of 50 rupees a month yearly till the attainment of 1500 rupees a month as a maximum; medical officers in civil employ to be put on a separate roster, to have their pay assimilated to that of civil servants, and to be, in fact, placed under the same rules as other military officers in civil employ.

The retiring pensions require to be nearly doubled, and to be made available after seventeen, twenty, twenty-five, and thirty years' service, instead of at the periods now in force. The additional pension for service in the grades of deputy surgeon and surgeon-general should be proportionately available at the end of each year's service, instead of only in a lump sum at the end of the full five years' service, as now. Yours &c.,

June, 1875. PROGRESSUS.

LOVELL *versus* BEHRENS.

THE report of this trial for the recovery of fees has reached us, and we congratulate Mr. Lovell on his success. The subject will receive our special attention next week.

Dr. McRae, (Penicuik.)—We cannot at present call to mind the published cases of such an injury. If our correspondent will run over the index numbers of THE LANCET volumes, he will probably meet with what he requires.

"DROSERA."

To the Editor of THE LANCET.

SIR,—I have not yet had an opportunity of thoroughly reading Mr. Darwin's monograph on the "Insect-eating Powers of the Drosera," and am, therefore, not able to say if he has made any mention of a short note on the subject contained in Dr. Withering's "Systematic Arrangement of British Plants," published in 1801. If he has not, I am sure that he will pardon me for drawing the attention of those interested in the subject to the notice contained under the heading "Drosera," which was written seventy-four years ago, but which only pointed out as probable what Mr. Darwin has demonstrated in so clear a manner. Dr. Withering seems to have failed to produce artificial contraction of the outer leaves; but this was probably because he only scratched them, and did not allow the irritating substance to remain for a sufficiently long time on the plant. This is, I believe, in accordance with Mr. Darwin's experience. The following extract will show that his friend Mr. Whately, probably by more careful manipulation, succeeded better: "Few persons can have observed the Drosera in its native bogs without seeing some of the leaves doubled up; but the cause of this, I believe, was first ascertained by my friend Mr. Whately. In August, 1780, that gentleman, being upon a visit in Derbyshire, and gathering some specimens of the Drosera, examined some of these folded leaves, and, finding a dead insect in each, was prompted to irritate the upper surface of other leaves by touching them with a pin. The effect was a sudden contraction," &c. &c. He goes on to mention several other experiments performed by himself and others; but I have already trespassed too long on your valuable time, so will add no more, but am,

Yours truly,

Penge, July 14th, 1875. WM. DOUGLAS STRANG, M.R.C.S.

Moribund Patients and Death Certificates.

Mr. W. C. Matthews.—The case is not free from difficulty. Our correspondent did right in stating that his attendance on the patient only meant one visit, and that but seven hours before death. Where a medical man is not called in till the patient is moribund, and yet it is evident that the illness has been of some duration, it is almost right to decline to certify. The question of negligence has to be tried in such a case, and this can only be done by a coroner. A medical man exists, not to certify the cause of death, but to prevent the occurrence of death; and if a fair chance is not given him, he should indicate the same either by withholding the certificate or appending a note of the fact. We assume that our correspondent saw no signs of violence, or, doubtless, he would have referred the case to the coroner.

Glass-lid Coffins.

To the Editor of The Lancet.

Sir,—In your impression of the 3rd instant several of the advantages were stated which would be obtained by adopting a system of burial in which the lids of the coffins were made of glass.

In addition to these it may be pointed out that in medico-legal inquiries these coffins would be very useful. In cases of death from burning, from the knife or firearms, from falls from heights, from railway and machinery accidents, from drowning where some time had elapsed before recovery of the body; in all cases, in short, where the body had been much injured or decomposed, coffins of this sort might be used. The glass in such cases would not be painted over till after the inquest; but deodorants, as recommended, could be placed around the body without obstructing the view of it. The duty of the jury would be rendered much less unpleasant, and the feelings of relatives would not be outraged by the coffin being forcibly broken open for the formal purpose of viewing the remains.

As regards decoration of the coffin, this system would be also of advantage. Designs of various kinds could be executed on the glass, and over the face a tint could be given, which would relieve the ghastly colour of death. Or, leaving the glass quite clear, we could strew flowers, real or artificial, over the body, and place wreaths or festoons of these on the coffin outside. We could cast flowers and fresh leaves on the coffin in the grave, and thereby do away with the thought of rough substances coming in contact with the body on the breaking of the glass-lid. When flowers and leaves were not to be had, straw, hay, or shavings might be used for the purpose. Under this plan, also, the sooner would our decaying bodies pass into the freshness and blossom of leaf and flower.

It is strange that the glass-lid has not been adopted in this country in cases where it is not intended to be broken, as here advocated. It has been so used in America, and in several countries with hot climates, for which it is well suited. The remarks that have been made are intended to show that it has many advantages which should lead us to adopt it. If, however, we really wish to employ a plan that will speedily dispose of the dead, and yet not hurt the feelings or health of the living, we must make use of the glass-lid that will easily break, and allow the departed to lie at once in the bosom of our mother earth. I am, Sir, yours truly,

Redcliffe-gardens, S.W., July, 1875. Colin Henderson.

Major-General Shaw, (Portsoy, Banffshire.)—Our correspondent is thanked for drawing our attention to the article. While we must venture to doubt the correctness of the theory as to there being any connexion between the practices to which our correspondent alludes and the occurrence of canine rabies, we concur with him in condemning the cruel custom of mutilating animals, by cropping their ears and tails, under the absurd idea of improving their appearance.

Army Medical Service.

To the Editor of The Lancet.

Sir,—As the state of the army medical department is now under consideration, a few words from an unsettled young surgeon will, I hope, be pardoned.

The pay in the British army is fair, and the work I suppose in time of peace moderate. What strikes one as the great drawback is the expensive mode of living. This, I believe, under the present system is unavoidable. To men with private means it may be acceptable; but probably the majority of men who would wish to enter are not thus situated—in fact, this is the reason why a good many of them have not attempted private practice.

If a separate army medical department were established, I understand the men would live altogether outside the barracks to which they were attached, and that there would be one general uniform for all. If this were the case, the army would hold out great attractions to me, and no doubt to many others also, and I do not see how efficiency would be diminished.

It has been assumed that under the regimental system a sort of social glory is reflected on the army surgeon. This must be difficult to appreciate. Though I spent some time in a large garrison town, I have failed to observe any particular superiority in ordinary combatant officers over ordinary medical men. I remain, Sir, yours &c.,

London Hospital, July 20th, 1875. M.R.C.S. Eng., L.R.C.P. Lond.

A Guy's Student.—Niemeyer's Medicine; and our correspondent would have the advantage of a good translation to compare with his own.

Mr. Ryott.—The letter has been forwarded to the gentleman named, who, no doubt, will give his attention to it.

The following paragraph is taken from the *Methodist Recorder* of July 9th, which we think should receive world-wide circulation:—

"The New Surgical Mode of Extracting Cancer without the administration of chloroform or the aid of the amputating knife, with an account of seventeen examples of the improved treatment, which have been selected from ninety-eight cases of successful operations, out of which number only three recurrences of the disease have taken place. By Dennis Turnbull, M.D., LL.D., Licentiate of the Royal Colleges of Physicians and Surgeons, Edinburgh; 16, Cambray, Cheltenham. Post free for 13 stamps, of the Secretary to Dr. Turnbull's Dispensary (for local poor only), Mr. Wm. A. Norman, 9, Promenade-villas, Cheltenham, which is under the management of a Committee, President, Vice-President, and Treasurer. For full particulars see the Pamphlet. N.B. Under this treatment patients sleep well, and enjoy their daily drive or walks. A stamped envelope will secure special references to persons who have been cured."

The Faculty of Nancy.

Much activity has of late been displayed in the construction of the buildings necessary for carrying on the studies. Several lecture-rooms have already been given up to the pupils, and it is expected that by November the Faculty will be in good working order. As the law for allowing the founding of Faculties by private enterprise is now passed, the official teaching will probably be carried on with the utmost zeal. Competition will stimulate the old and privileged bodies to exertion, from which much good may be expected.

Poor-law Relief.

To the Editor of The Lancet.

Sir,—In reply to "Justice" in your impression of last week, allow me to state that he is only a ratepayer. If R. be destitute he should apply to the relieving officer, who should, in emergency, give a medical order and relief, which the guardians would pass at their next meeting; if not urgent, the application should be put before the guardians at their next meeting. If R. can and does pay for professional attendance, he cannot be regarded as destitute, professional assistance being out of all proportion more valuable than food. The guardians elect a medical gentleman to attend and report on the destitute sick, and it would produce great confusion, and not uphold the position of their medical officer, if they recognised any other medical authority (especially such as is obtainable at five farthings a week). The guardians are not guided by any opinion expressed by "Justice," but by that of W., the gentleman selected by them, and approved by the Local Government Board. Yours &c.,

Framlingham, July 19th, 1875. Geo. E. Jeaffreson, Guardian.

To the Editor of The Lancet.

Sir,—R., the patient, *quâ* the doctor, is an independent gentleman, who not only pays his doctor's bill, but pays it in advance. On representing this to the guardians, "Justice" will find that the Board will release their own doctor from attendance, although they will require a certificate from him that the man is totally disabled. "Justice," whatever his qualifications may be, is unknown to them, and they cannot give out-door relief on his authority. At the same time I do not believe they can make W. attend him. A similar case has occurred to me on three occasions, and the guardians have invariably acted as above, and made the club doctor do the work for which he is paid. W. would be glad enough to leave the case in the club doctor's hands, and sign the necessary certificates. "Justice" must be very hard up for work to wish to retain such a case. Perhaps if he will see the relieving officer himself, he will find the man's statement exaggerated.

Yours truly,

July, 1875. Parish Doctor.

Mr. Henry George Dixon.—The system of medical qualification in the United States is very loose and unsatisfactory. A good English practitioner in the far West would, we imagine, be a great boon, though we cannot say how far the profession is overstocked. If our correspondent will read an article in The Lancet of Jan. 9th, he will gather some information as to the way in which medical education and qualification are managed in the States.

Unqualified Medical Practitioners.

To the Editor of The Lancet.

Sir,—With regard to the above subject, the amended Act respecting registration of deaths might be made of much greater use if duly qualified and registered medical men would take the trouble to sign the initials of their qualifications uniformly, and not write such vague indications as "Surgeon," "M.D.," &c.

The registrars of births and deaths are not supplied with a list of the registered medical practitioners in their respective districts, which should devolve either on the Medical Council, or should be attended to by the Local Medical Associations which exist in most localities; but the medical practitioners, in self-defence, should at least make the district registrars acquainted with those persons who are supposed to be unqualified, that inquiries respecting them might be made.

The making or "causing to make" a false entry in a register book of deaths is a misdemeanour; and as the name and the initials of the medical practitioner are now inserted in the books, I have no doubt it would be easy to obtain a conviction against a person assuming to be a duly registered practitioner. But all these precautions are perfectly useless while qualified practitioners consent to give certificates to oblige men who have not incurred the expense and trouble of a legitimate medical education.

I am, Sir, your obedient servant,

July 20th, 1875. W. H. Butterfield.

Mr. J. F. Porter.—We do not think any good would accrue from the publication of our correspondent's letter.

Dr. Tattersall, (Clayton-le-Moors.) — The last edition of Carpenter or Kirkes; Aitken, Watson, Reynolds's System, or Ziemssen's Cyclopædia of Medicine; and Ringer's work on Therapeutics.

Quæsitor.—The Lancet of February 28th, 1874.

Incorrect Illustrations.

To the Editor of The Lancet.

Sir,—Mr. Spencer Wells, in his argument that "a specific morbid poison must, under all conditions, produce identity of results," uses, by way of analogy, this illustration—viz., "If you sow a grain of wheat you do not get barley or oats; the seed germinates, and you get the same variety of vegetable produce." Now, it is a fact which has been demonstrated by experiment that, under certain conditions, wheat may be made to produce rye; oats may be converted into barley. Dr. Lindley says: "In orchidaceous plants, forms just as different as wheat, barley, rye, and oats, have been proved by the most rigorous evidence to be accidental variations of one common form, brought about, no one knows how, but before our eyes, and rendered permanent by equally mysterious agency." Mr. Wells will, therefore, see that his illustration would have been more useful to Dr. West, Dr. Greene, and others, who contend that the set of symptoms which we call puerperal fever may be caused, under proper conditions, by mental emotion, cold, typhus, typhoid, erysipelas, &c. Your faithful servant,

Sydenham, July 17th, 1875. A Darwinite.

Mr. James Murphy.—The appointments to the public medical services—the British and Indian military and the naval services—are obtained by competitive examination. The colonial appointments are in the gift of the Colonial Office, to which application must be made. Besides these, there are appointments under the Local Government Board and the Home Office. Our correspondent will find much information on the subject in the Medical Directory.

Egbert.—We are unable to answer our correspondent's question. He should consult his solicitor.

G. H.—We believe the question has been decided in the negative.

THE BATHING SEASON.

To the Editor of THE LANCET.

SIR,—Eastbourne was this morning the scene of a very exciting event, which might have proved fatal but for the bravery of a medico, assisted by two of the bathing men. Two girls were bathing, and got out of their depth, one sinking. Immediately a cry was raised. The two men and the doctor plunged into the water, and up to their necks before reaching the drowning girls. One was fainting when brought ashore; the other nearly dead, but I think ere this has recovered, as she received every attention from the hands of her rescuer, who, of course, was drenched from head to foot. I heard, but have forgotten, the doctor's name. I have taken the trouble to address you for two reasons—first, that I think a boat ought always to be waiting on the bathers to prevent such a catastrophe as might have occurred, and more especially to show the Eastbourne Board the necessity of having one off the pier, where bathers swim every morning, without the least chance of being saved if an accident were to happen to them; and for the second reason, to applaud the bravery of a member of the medical profession. Your obedient servant,

July 20th, 1875. OBSERVER.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. G. Johnson, London; Dr. Pollock, London; Mr. Hutchinson, London; Dr. D. Powell, London; Mr. Goyder, Bradford; Mr. Foster, St. Albans; Mr. Solomon, Birmingham; Dr. Smith, Loftus-in-Cleveland; Surgeon-Major Keeds; Mr. Worthington, Benson; Dr. Handfield Jones; Dr. Taaffe, Brighton; Dr. Matthews Duncan, Edinburgh; Mr. Hirst; Mr. Jeaffreson, Framlingham; Mr. Owen, London; Dr. Scott; Mr. Gordon, London; Mr. Oliver; Dr. Gill; Mr. Yeld, Lucknow; Mr. Ellis, Newcastle-on-Tyne; Dr. Collin, Harlington; Mr. Thompson, Lincoln; Dr. Porter, London; Mr. Colman, Brompton; Mr. Cumming, Stirling; Mr. Sutton, London; Mr. Adams, Lymington; Mr. Lloyd, London; Mr. Rogers, Canterbury; Mr. Murphy, Sunderland; Mr. Walker, Norbiton; Mr. Philpot, London; Dr. Tattersall, Accrington; Dr. M'Rae, Penicuick; Mr. Fowke, London; Mr. Parker, Bath; Mr. Gould, London; Mr. Hornibrook, London; Dr. Fraser, Edinburgh; Mr. Glyn, London; Mr. Payne, London; Mr. T. H. Mead, Christchurch; Mr. Deeley, Malton; Mr. Hodges, Leicester; Mr. White, London; Mr. Gray, London; Dr. Decroix, Lyons; Mr. Butterfield, London; Dr. Roosa, New York; Dr. Ryott, Newbury; Mr. A. Sutcliffe, Dunham Massey; Mr. Cresswell, Dowlais; Mr. Smith, Deptford; Mr. Roberts, London; Mr. Benfield, Leicester; Messrs. Calvert and Co., Manchester; Dr. Savage, London; Dr. Edis, London; Mr. Tilsley, Burslem; Dr. Lyon, Glasgow; Mr. Hunter, Bombay; Dr. Hardman, Blackpool; Mr. Purvis, Maemhouse; Mr. Whetford, London; Mr. Lanneman, Tunbridge Wells; Mr. Gwynne, Wotton-under-Edge; Dr. C. Black, Oban; Rev. J. Thomson, Bridge of Allan; Mr. Cowell, London; Mr. Jolly, Penrith; Mr. Gibb, Monkland; Messrs. M. and J. Landau; The Registrar of the Royal College of Physicians of London; Quæsitor; H. F. S.; Vindex; A Sufferer; Parish Doctor; Practitioner; W. K.; E. G.; Medicus, London; Enquirer; M.D., London; A Teacher; A. D., London; The Registrar-General of Edinburgh; An Army Surgeon of Fourteen Years' Service; Fair Play; M.R.C.S. Eng.; A Registered One; Anti-Puff; Egbert; A Darwinite; The Director-General of the Medical Department of the Navy; Dissector; Right *versus* Might; Scilla; A Guy's Student; A Sufferer, Oudh; &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mrs. Macleod, Ben Rhydding; Messrs. Kinmond and Co., Leamington; Mr. Day, Haylake; Mr. Jennings, Coleford; Mr. Stilliard, Birmingham; Mr. Jarmaen, Huddersfield; Mr. Currie, Thetford; Dr. Gray, Bristol; Mr. Wright, Liverpool; Messrs. Smith and Son, Dublin; Mr. Henry, Nassau; Mr. Fyfe, Norwich; Mr. Hine, Swineshead; Mr. H. J. Scott, London; Dr. Richmond, Northallerton; Mr. Lucas, Hitchin; Mr. Jackson, Bamborough; Mr. Tennant, Fence Houses; Mr. Christmas, Hammersmith; Mr. Eastes, London; Mr. Wilton, Sutton; Mr. Godfrey, London; Mr. Mason, Carlisle; Mr. Blackwood, Newport; Mr. Fox, London; Mr. Greenwood, London; Mr. Stuart, Wigan; P., Luton; F. G., Sheffield; N., Eastbourne; Cullen, London; Xema, London; X., London; Beta, West Rainton; D., Rugeley; A. H., Edinburgh; W. J., London; T. J., London; R., Slade; Rusticus, Herne Hill; Medicus, Gateshead; M. H., Brackley; A. B., Runcorn; Rus, Leeds; A. B.; Alpha, Notts; Dispenser, London; G. A. S., Torquay; M. B., Wingham.

Broad Arrow, Examiner, Welshman, Pharmaceutical Journal, Guy's Hospital Gazette, Jewish World, Newcastle Daily Chronicle, Englishman (Calcutta), *Medical Times* (Philadelphia), *Shipping and Mercantile Gazette, Academy, Cork Constitution, Isle of Man Times, Manchester Guardian, Surrey Advertiser, Shield, European Review, Liverpool Daily Post, East London Observer, Huddersfield Daily Chronicle, Metropolitan, Women and Work, Record, Herald of Health, Leeds Mercury, Wisbech Constitutional Gazette, Chester Courant, Islington Gazette,* and *Medical Enquirer* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, JULY 22ND, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
July 16	29·77	E.	58	59	71	63	57	1·08	Overcast
„ 17	29·85	N.E.	56	58	75	65	56	0 21	Raining
„ 18	29·72	E.	62	64	107	78	57	0·29	Overcast
„ 19	29·81	W.	59	60	75	66	60	0·03	Raining
„ 20	29·95	W.	59	60	94	71	59	0·05	Overcast
„ 21	29·93	W.	56	59	83	66	56	...	Overcast
„ 22	29·74	N.W.	57	60	...	...	56	0·41	Overcast

Medical Diary for the ensuing Week.

Monday, July 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ST. PETER'S HOSPITAL. — 3½ P.M. Expected Operations: Three Cases of Lithotrity.

Tuesday, July 27.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 28.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1¼ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, July 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, July 30.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 31.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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Lectures
ON SOME
NERVOUS DISORDERS THAT RESULT FROM OVERWORK AND MENTAL ANXIETY.

By GEORGE JOHNSON, M.D, F.R.S.,
PROFESSOR OF MEDICINE IN KING'S COLLEGE; PHYSICIAN TO KING'S COLLEGE HOSPITAL.

LECTURE II.

Gentlemen,—In my last lecture I referred to some of the more common sources of mental and nervous disorder. In the present lecture I propose to describe some of the consequences or symptoms which may result from overwork, anxiety, or mental shock and terror.

The effects of mental anxiety vary greatly in different cases, the difference depending partly upon the original mental and bodily constitution of the patient, partly upon education, position in society, and habits of life, and very much, too, upon the kind of treatment to which the anxious patient is subjected. But amidst all the variety of circumstances to which I have alluded there are certain general features which characterise nearly every case of overwork and mental worry. These general characters I now proceed to describe.

Amongst the effects of anxiety of mind, whatever may have been the exciting cause, there is not one which is more frequent or more important than that which manifests itself by sleeplessness or by disturbed and therefore unrefreshing sleep. It is very interesting to note the various accounts which different sufferers give of their sleeping hours. One of the most frequent complaints is that the sleep is disturbed by distressing and frightful dreams, which assume a great variety of forms in different cases. The sleeper often fancies that he is falling down a precipice or into deep water, or that he is pursued by some fierce animal in brute or human form, or that he is in some situation of difficulty, perplexity, and danger from which he cannot escape: these are amongst the mildest forms of unpleasant dreaming. In other cases the dreamer has visions of dead relations and friends, or he is haunted by spectres of every form which a disordered imagination can conceive. No physiologist can doubt that in dreams such as these we have the explanation of most stories of ghosts and apparitions. Samuel Taylor Coleridge, who, as we know, at one period of his life was a large consumer of opium, when asked if he believed in ghosts, replied, "No, I have seen too many of them myself." The distress of the dreamer is often manifested to those who are watching his slumber by a pained or terrified expression of countenance, sometimes by profuse perspiration, with violent action of the heart, and laborious or hurried and gasping breathing; sometimes, too, by suppressed moans, or by frequent talking, and not uncommonly by a loud cry of terror. In some cases the dreamer starts out of bed and walks about the room, and he may awake in doing this, or he may be aroused by his own cries; but in other instances, as in the case (No. 2) which I related in my last lecture, it is very difficult to bring him back to a state of complete consciousness. On awaking he often has a vivid recollection of all the circumstances of his dream, and he fears to go to sleep again lest in his sleep he should have a return of the dreadful thoughts and visions; but in other cases he is quite unconscious that he has been dreaming or talking or making a noise; he has only a vague sense of something terrible, and he finds his skin bathed in perspiration and his heart beating violently. This violent palpitation is sometimes a source of great alarm to the patient. I was once called up to one of our medical students, whom I found in a paroxysm of hysteria, with globus in his throat and a dread of instant death. He had led a very quiet life, but he was of a nervous temperament, and had been anxious about an approaching examination. It appeared that he had been dreaming, and when he awoke he found his heart beating violently; this alarmed him, and as he continued to direct attention to his heart, the palpitation increased in violence; this, again, added to his fears, and thus afforded a good illustration of the mutual influence upon each other of mind and body, of head and heart. I found that he had no symptom of structural disease of any kind, and after some time, but not without considerable difficulty, I succeeded in persuading him that he was only in a fright, and that his fears were groundless.

When a patient awakes after a night of disturbed sleep, such as I have described, he usually complains of exhaustion, and will often say that he is more tired in the morning than when he went to bed; a feeling which we can easily understand if we bear in mind that not only has he had no rest—a dreaming brain being an unresting brain,—but he has been exposed to the disturbing and exhausting influence of terror during the greater part of the night. This sense of languor and unrest is in most cases combined with loss of appetite, inability for exertion, depression of spirits, a sensation of pain or weight in the head, and sometimes with an oppressive feeling of drowsiness during the daytime, particularly after meals.

When this restless condition has continued for some time it is almost invariably associated with a peculiar, anxious expression of countenance, and, in particular, with a remarkable appearance of the eyes, which will often enable you at once to detect the general character of the case with which you have to deal, and so will suggest such further inquiries as may be necessary for its complete elucidation. The appearance of the eyes to which I refer is difficult to describe, but it may be immediately and easily recognised when once it has been pointed out and clearly perceived. The anxious eye loses that brilliancy and liveliness upon which so much of its natural beauty depends, and it assumes something of the dull and inanimate appearance of a snake's eye. The iris often appears to be in a more or less fixed and inactive condition, so that the size of the pupil varies but little and slowly under the influence of light or mental emotion. If you watch the bright eyes of an intelligent child under the influence of some pleasing emotion, you will see that there are frequent and rapid changes in the size of the pupil. The dull and anxious eyes of the overworked and harassed man or woman are in striking contrast with the brilliant eyes of the happy child. In cases of long standing the pupil is often very small; and, in some of the worst cases, I have seen the pupil contracted almost to the size of a pin's point. It is seldom that even in these extreme cases there is any intolerance of light; but there is often, in a greater or less degree, dimness or defect of sight, without any appearance of structural change in the eye. I believe, however, from what I have seen, that atrophy of the optic nerve and retina is one of the more serious consequences of long-continued overwork of brain. Quite recently I have seen a very intellectual girl, aged nineteen, who, as a result of excessive mental application in addition to other signs of nervous disorder, suffered from severe *pain* in the eyes, which prevented her from reading. An eminent oculist had examined her eyes, and pronounced them to be free from all appearance of structural change.

I have already intimated that the anxious expression of the patient's face will often give a clue to the general character of the case, and serve as a guide to the true source of the symptoms. I may add, too, that the information which we gain by observing the patient's physiognomy will sometimes induce us to persevere with our inquiry when the answers to our first questions are not such as we expected to receive. For instance, I have often been told by patients who have presented the anxious expression of face which I have described, that their sleep is not only not bad, but indeed they "sleep too well." Now in these cases it will often be found, on inquiry, that although they sleep so heavily that they can with difficulty be aroused in the morning, yet their sleep is constantly disturbed by frightful dreams; consequently they awake unrefreshed, and they are languid and drowsy during the day. The cure for this too heavy but unrefreshing sleep is a dose of chloral or some other soporific at bedtime, repeated for a few nights until the habit of dreaming is broken; the result will often be refreshing sleep at night, and, as a consequence of this, the cessation of the languor and drowsiness which had before continued during the day, after a night of harassing dreams.

I have sometimes been told, in answer to the question

No. 2709.

whether a patient has been disturbed by dreams, that he does not get sleep enough to render dreaming possible. He declares that he lies awake all night. I believe, however, that a patient is very rarely so wakeful as this statement would imply; and that often when he supposes that he has not once closed his eyes he has really slept, but his slumbers have been so frequently broken and disturbed by dreams that he can scarcely distinguish between his sleeping and his waking hours. I scarcely need say that sleep of this imperfect character is almost as unrefreshing as complete wakefulness.

I have yet one remark to make with reference to the character of the dreams. When the exciting cause of the anxiety and restlessness has been some great grief or sudden shock of terror, it will often happen that this continually recurs to the dreamer. Thus the bereaved mother not only dreams of her dead child, but the image of her lost one often appears vividly before her in her dreams. The alarm of fire will be repeated every night for months; and the poor man whose case I related in my last lecture (Case 2) appears to have been terrified during a period of seven years by the nightly recurrence of the ghastly vision of the child whose violent death he had accidentally caused and witnessed. In many cases, however, it is impossible to trace any resemblance between the character of the dreams and the past events of the patient's life.

One of the consequences of mental anxiety, which is as often as any other associated with disturbed sleep, is a more or less complete loss of the appetite for food. In only a very small proportion of the many cases that I have seen have I been told by an overworked, anxious, dreaming patient that he could take his food as usual. In many instances the digestive powers are much impaired; there is pain or a sense of weight or fulness, with flatulence, after eating. In some cases severe stomach pain, with water-brash and occasional vomiting, are complained of; in others diarrhœa is a troublesome symptom. Now I am careful, and I warn you to be careful, not to confound with the cases to which I now refer, others of a quite different kind. I mean cases of dyspeptic and nervous derangement, principally caused by an excessive indulgence in alcoholic stimulants, and a deficiency of nutritious food. Again, there is another class of cases in which dyspeptic symptoms have been excited, or at any rate aggravated, by a too liberal administration of stimulants to some weak and nervous patient who has been exhausted by bodily fatigue, or mental worry, or by an attack of illness. A weak and nervous patient who takes wine, beer, or spirits freely, because, as he says, he has no appetite for food, should be warned that the first step towards the recovery of his appetite and his strength must be an entire suspension or a greatly reduced supply of alcoholic stimulants, and the substitution of milk or some other easily digestible liquid food, until the power to eat and digest solid food is regained.

Returning now to the more immediate effects of mental anxiety, it is not easy to determine whether the loss of appetite is a direct result of the nervous excitement, or whether the restlessness is a result of the diminished supply of nutriment to the brain; but it is probable that the two conditions have a mutual influence upon each other. Probably most persons have experienced in some degree the power of mental emotion to take away the appetite for food and to disturb the process of digestion. On the other hand, the influence of an empty stomach or of a sense of hunger in preventing sleep, and of a moderate fulness of that organ in promoting drowsiness, is well known. One fact which I have frequently observed tends to show that in the class of cases under consideration the loss of appetite is a direct result of a primary disorder of the nervous system: I allude to the beneficial influence of opium. A man who has been more or less restless for many months, and who during that time has had almost a loathing of food, after taking a grain of opium at bedtime for a few nights, sleeps soundly for several hours, and then wakes with an appetite for food; refreshing sleep returns each night, at first with, but soon without, the help of opium, and with this the appetite often becomes voracious, like that of a patient recovering from a fever or from some other exhausting illness. Now it is contrary to all clinical experience to suppose that opium would by any direct influence on the stomach increase the appetite or assist digestion. The tendency which opium has to disturb the stomach and to excite sickness or nausea is one of its disadvantages, which renders it on the whole a less useful soporific than chloral in this class of cases. This well-known disturbing influence of opium on the stomach, and the fact, which I have observed in numberless instances, that the appetite has not returned until the opium has procured sleep, tend to prove, as I have said, that the derangements of the nervous system, in the cases referred to, are first in the order of time and importance, while the loss of appetite and the impaired powers of digestion are consequences of the nervous disorder.

Now let me point out to you that in cases of delirium tremens the order of events is the opposite of that which I have just now described. The delirium and other evidences of nervous disorder are indirect results of alcoholic excess; they are directly due to malnutrition of the brain. I must remind you that the delirium which is caused by the presence of alcohol in the blood—the delirium of intoxication—is entirely different from what is called "delirium tremens." An attack of delirium tremens generally follows a more or less prolonged fit of drinking, during which very little food of any kind is taken, so that the brain and the tissues generally are for a time poisoned and starved simultaneously. Up to a certain point the frequent repetition of the alcoholic stimulus tends to steady the tremulous muscles and to calm the excited brain; but at length the supply of drink is cut off by want of cash and credit, or it may be that the abused and irritated stomach will tolerate no more; then, when the stupefying influence of the alcohol has passed away, the unhappy man awakes to a consciousness of his condition—his money gone, his work neglected, debt and perhaps disgrace incurred; and so, under the influence of a perturbed mind and a starved brain, he has a fit of delirium tremens. Now we have learnt by degrees that the main object of treatment in these cases of delirium *e potu* is not to attempt to force on sleep by large doses of opium or chloral, but to feed the delirious patient. In spite of all treatment by drugs, the wakefulness and the delirium will continue until a certain amount of nutriment has been assimilated by the starved and exhausted brain. Opium and chloral, and even alcohol, cautiously given, are valuable aids; but the substitution of narcotics for food has often been attended with a rapidly fatal result, as I have shown at length in my lecture on Delirium Tremens (published in THE LANCET, April 21st and 28th, 1866). You see, then, that, while in cases of delirium *e potu* sleep follows and is favoured by taking food, in the cases primarily nervous the soporific effect of opium or chloral procures sleep, and then restores the appetite and assists digestion.

Now, to continue the history of our nervous cases, it is obvious that the combined influence of loss of sound refreshing sleep and loss of appetite, with imperfect digestion, must tend to impair the nutrition and lessen the strength. Loss of flesh and strength to a greater or less extent are observed in almost every case when the symptoms have been of long duration. One man who had suffered much from restlessness and frightful dreams, in consequence of business anxieties, assured me that, during a period of two years, his weight had been reduced from 15 st. to 11 st.; and this statement appeared quite consistent with the loose fit of his skin and his clothes. Another man, who had suffered in a similar way in consequence of misfortunes, had lost, as he informed me, from 2 st. to 3 st. weight in two years. This was one of the cases before referred to, in which, after a long period of nearly total inability to eat or to digest food, a voracious appetite became almost a matter of complaint after refreshing sleep had been obtained by the temporary use of opium. Another patient, a woman, who had suffered from anxiety, restlessness, and loss of appetite for several months, had diminished in measure round the waist from 24 in. to 19 in. After taking a grain of opium at bedtime for a few nights she slept well, and began to eat so voraciously that, as she told me, she felt ashamed to eat so much, and her husband was quite anxious about her great and, as it seemed to him, unnatural appetite. The result was that within a month she had gained 3 in. in measure round the waist. These measurements were her own; but the rapid improvement in her appearance was quite confirmatory of her statement. It is obvious that so considerable a defect of nutrition as I have here indicated must react injuriously upon the mental disturbance in which it originated. For there can be no doubt that the depressing and disturbing influence of mental motion will be, *cæteris* *paribus*, in direct proportion to the degree of bodily exhaustion, and more particularly to the malnutrition of the brain. A sure way to excite delirium or other serious form of nervous disorder would be to take an over-anxious nervous man and to bleed or purge or starve him, and thus reduce rapidly his bodily powers. It is painful to think how often and how fatally this mode of practice was adopted when it was supposed that furious delirium was the result of inflammation of the brain or its membranes, and that the proper treatment consisted in the fearless adoption of so-called antiphlogistic measures. And antiphlogistic they certainly were in the literal sense of tending often to *extinguish the flame of life*.

The derangement of digestion, to which I have referred as one amongst the most common results of mental anxiety, not unfrequently gives rise to symptoms referable to the urinary organs—symptoms which often excite an unfounded dread of serious organic disease. Frequent micturition and pain in the back are the symptoms usually complained of, and these are often supposed by an anxious patient to depend on disease of the kidneys or bladder, more especially when the urine is turbid and deposits a copious sediment. On examination it is often found that the urine is excessively acid and deposits lithates on cooling. The acid urine irritates the kidneys and bladder, and thus occasions the pain and the frequent micturition. In other cases the urine is neutral or alkaline, with a copious phosphatic sediment. These states of urine are, of course, not peculiar to nervous and anxious patients; but, since any pain or any unusual appearance of the urine is a source of alarm to these timid subjects, you ought to be prepared to give a correct explanation of the symptoms and to apply the appropriate remedies.

In some instances the pain in the back is very severe, and being much increased by motion, its seat is probably in the lumbar muscles; but I have met with several cases of this kind which have been mistaken for inflammation of the kidneys and treated as such. One of my hospital patients, a carpenter, had severe pain in his back, which he thought was caused by inflammation of the kidney, for he had a similar pain some months before, which was called inflammation of the kidney, and for which he was treated by cupping and other active measures. On that occasion he was ill for several weeks. He had a very anxious countenance, he had been for some time out of work, and he was restless at night. I gave him an opiate pill for a few nights, which made him sleep well, and he quickly lost his pain. He told me that the first attack of pain, like the last, had come on when he was anxious on account of being out of work; I therefore concluded, as he did, that both attacks were of the same kind. He agreed with me, too, in opinion that the opiate plan had been far more successful than the antiphlogistic treatment adopted on the first occasion. Many pains in the loins are quite unconnected with nephritis, and, on the other hand, the kidneys may be seriously diseased without a complaint of backache. A chemical and microscopical examination of the urine is essential for accuracy of diagnosis in all cases of suspected kidney disease. I have seen several cases in which saccharine urine and other symptoms of diabetes have apparently resulted from excessive brain-work and mental worry. This would seem to be analogous to the result of Bernard's well-known experiment on rabbits, in which the secretion of saccharine urine was directly caused by mechanical irritation of the medulla oblongata.

There is, probably, no form of functional disturbance which is a more frequent source of anxiety and alarm to a nervous patient than the palpitation of the heart which is so often associated with mental anxiety and restlessness. I have already referred to palpitation in connexion with the frightful dreams by which the patient is harassed at night. A similar disturbance of the heart's action is scarcely less distressing in the daytime. The cause of this is probably in part purely physical, and partly mental. The nutrition of the heart suffers in common with that of the rest of the body in consequence of broken sleep and the associated disorder of the digestive organs. The tendency to palpitation thence resulting is similar to that which exists in cases of anæmia and chlorosis. The powerful influence of mental emotion upon the heart's action is so well known that it is unnecessary to insist upon it. It will commonly be found that the disturbance of the heart's action bears a relation, first, to the weakness and consequent irritability of the organ itself, and, secondly, to the degree in which the patient's attention is anxiously directed towards the heart. The two main objects of treatment, therefore, are to strengthen the muscular tissue of the heart by sleep, food, and tonics; and to divert the patient's attention from his heart by the assurance that there is nothing in the state of that organ about which he need be anxious. The effect of a favourable opinion and a hopeful prognosis is often very beneficial by calming the patient's fears and restoring his confidence; while, on the other hand, an erroneous diagnosis or an unguarded expression with reference to heart disease may be a source of great additional suffering to the patient, and may greatly retard or entirely prevent his recovery. A poor woman whose natural irritability and nervousness had been increased by great domestic troubles, and who, in consequence, suffered much from palpitation, was told by her medical attendant that she had a diseased heart, and an issue was established over the supposed seat of disease. She had endured this addition to her sufferings for several weeks when she came to the hospital. The impulse of the heart was sharp but feeble, and the sounds were quite normal; there was evidence of a weak and irritable heart, and of nothing more; but it was long before she lost the dread of sudden death, which had taken complete possession of her mind, and which had doubtless been confirmed by the erroneous diagnosis and the injudicious treatment to which I have referred.

It is but seldom that an irregular and excited action of the heart is unassociated with some degree of difficult breathing, and when this is attended with cough an anxious patient will often be tormented by a dread of consumption.

I make frequent allusion to the fears of this class of patients because they constitute so very important a feature of their history, and because it should be one of the chief objects of the physician to convince the anxious patient that his fears are groundless, and that the disease which he so much dreads has no existence except in his own terrified imagination. If, after a careful examination of the chest, we can assure him that his lungs and heart are sound, we shall remove a weight of anxiety from his mind which will greatly contribute to the recovery of equanimity and bodily strength.

Hunterian Lectures
ON
SYPHILIS,
AND ON
SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

BY HENRY LEE, F.R.C.S.,

PROFESSOR OF SURGERY AND PATHOLOGY TO THE COLLEGE.

INOCULATION OF SYPHILITIC BLOOD—(CONTINUED.)

M. ROLLET has collected together and tabulated twenty-seven cases in which syphilitic inoculation was performed on patients who had not previously had the disease. Of these the inoculated matter was derived from primary chancres in eight cases, and the average period of incubation before the appearance of any distinctive syphilitic symptoms was about twenty-four days. In ten of the cases the secretion inoculated was derived from mucous tubercles, and the average period of incubation was nearly the same. From this it appears probable that the disease, whether derived from a primary or secondary source, runs the same course in uncomplicated cases. Now in all the instances hitherto given the first appearances have been those belonging to the adhesive form of inflammation. This I regard as the typical mode of the origin of the disease, where there is no accidental cause of irritation, and where the system is infected for the first time.

Jenner long ago warned the profession against supposing that every inoculation produced from a vaccine vesicle conveyed the vaccine disease. That which did he has carefully described. It is essentially the product of the adhesive form of inflammation. The lymph produced which is fit for reinoculation contains no pus, and, indeed, to the common eye, and even with a microscope of low power, appears to contain no globules. Dr. Beale has, indeed, shown that with a microscope of high power germinal matter may be detected in the vaccine lymph, and in the processes of scabbing and healing no doubt real pus-globules are often formed. But this in no way militates against the fact that the essential character of the action which produces the lymph that in its turn will reproduce the same disease is of the adhesive and not of the suppurative nature. How imperfectly these two actions, so clearly defined by Hunter, have been considered by many continental writers, is demonstrated, in reference to our present subject, by the indiscriminate use they make of the words "vesicle" and "pustule." In many of their writings the "vaccine pustule" is as often mentioned as the "vaccine vesicle." The two kinds of action produced by syphilitic inoculation have, in the same way, been confounded and spoken of as if they were the same and might produce the same results. The works of many continental and of some English authors are full of the descriptions of the origin and course of the so-called syphilitic pustule, of the number of times it may be reproduced, of its value as a means of diagnosis, and the effects of its repeated reproduction on a patient's constitution. Now this form of inoculation is quite distinct from that which we have hitherto considered as having to do with the production of real syphilis. These specific pustules, as they are called, no more resemble real syphilitic inoculations than the abnormal pustules which sometimes follow attempts at revaccination resemble in their pathological effects the morbid process which protects a patient's constitution against the recurrence of the same disease or against the infection of small-pox.

The cases hitherto given all occurred in virgin constitutions, or in those who had not previously had syphilis; and in them we have the opportunity of recording the disease as developed in healthy patients, and in an uncomplicated condition. The actions both in the primary and secondary manifestations originally commence, if they do not terminate, without suppuration, ulceration, or mortification. The disease commences by an effusion of lymph, which becomes organised, and may remain so. The corresponding inguinal glands are affected with the same kind of action. They enlarge, but never suppurate, as I believe, from this disease alone. The subsequent eruption of the skin, again, is of the same nature. First, congestion of capillaries, with some slight formation of new matter; and then different forms of pimples, smaller or larger, distinct or confluent. These all desquamate, and are often covered by scales as thin as silver paper. In their separate and isolated form they have received the name of lichen; when larger, of tubercles; when confluent within a defined space, although distinct at first (as they may be generally observed), the eruption assumes the forms of psoriasis and lepra.

Upon a recurrence of the disease at a later period, or even at its first appearance, in an unhealthy person, the secondary manifestations, instead of being of the adhesive character, may directly present the distinctive characters of suppuration, ulceration, or mortification. These facts did not escape the acute observation of Carmichael; and he accordingly describes (1) the papular venereal disease, (2) the pustular venereal disease, and (3) the phagedænic venereal disease. It is true that he attributes these to different kinds of poison; but that they are essentially the same, and depend upon one and the same disease, appears evident from all these varieties sometimes appearing, as may practically be observed, upon the same person, and from the same infection, at different periods. In particular states of the constitution of the patient there can be no doubt that a primary affection, which would present any of these varieties, would be very likely indeed to be followed by secondary manifestations of the same character.

Thus, in Group vii., Nos. 220, 221, and 222, in our collection, are represented an eruption of papules and of tubercles, the latter passing into suppuration and ulceration.

No. 226 is a coloured lithograph of the forearm, showing a pustular syphilitic eruption. The distribution of the pustules has a corymbous character, and the eruption presents the progressive stages of papule with pustular summit, fully developed pustule, and encrustation with a deep brown scab. In their mature form, and especially in their incrusted stage, the pustules are surrounded with a slightly inflammatory areola. The patient was a young man, aged eighteen, of strumous diathesis, subject to enlarged lymphatic glands, and exposed to vicissitudes of temperature. And the order of succession of the disease was as follows:—In October, a chancre; eight weeks after, a pustular eruption, with periosteal swellings; a month later, sore-throat, with tonsillitis; six weeks after this, a second eruption of pustules; and three weeks afterwards a third and partial pustular eruption.

No. 227 is a plaster cast of the forearm of the same patient.

No. 228 is a model of the forearm, exhibiting a pustular form of syphilis in a retrogressive stage. The surface is sprinkled over with papulæ in various stages of decline, and with a group of thick brownish-yellow scabs; the largest of the scabs measures nearly half an inch in diameter, and a denuded tubercle one-third of an inch.

Both the primary and secondary manifestations of disease may thus be most materially modified, either by constitutional or local causes, or by the tissue in which they appear. The principal constitutional cause which modifies the first appearance of a real syphilitic inoculation is the existence of what I have, for want of a better term, called the syphilitic fever. This fever is recurrent in its nature, and its consequences will often appear after the lapse of months or years, but its effects are manifested in the most marked manner on its first occurrence. Under the influence of this fever, I need not remind my present audience that eruptions in great variety will appear on the skin, without any local irritation being applied; but if, in addition, there be local irritation, a circumscribed spot of inflammation may be determined which the local irritation alone would not have produced. Thus the inoculation of common pus, which, under ordinary circumstances, would have produced no effect, may give rise to a pimple, a tubercle, or a pustule. If the pus so inoculated should contain any irritating matter, then we have the joint effect of the constitutional disease determined to the part, and the local irritation produced as the immediate effects of the inoculation. The way in which the existence of the syphilitic fever in its various degrees modifies a real syphilitic inoculation is a point which, I believe, has not hitherto been sufficiently considered.

The following cases afford some illustration:—

Case 31.—A medical student had a typical chancre, which, in all probability, had something like the usual period of incubation. He inoculated himself from what secretion he could get from its surface, before it had become indurated: the inoculation succeeded—a pimple formed, in the apex of which a small quantity of white lymph appeared, which soon became softened down. Both inoculations subsequently became well developed button-shaped chancres. In this instance, as in the second inoculation in Case 18, the inoculation was performed while the syphilitic fever was in process of being developed. It had the effect of doing away with the usual period of incubation, but not of preventing the typical induration, which it certainly would have done had the inoculation been performed at a later period, as has been recently so abundantly proved by the so-called process of syphilisation.

Case 32.—A woman who had for some years been about town, but who had no present symptoms of constitutional syphilis, was inoculated with the secretion from an infecting sore; a pimple followed the inoculation; at the expiration of a month the pimple was still there, and was surrounded by a faint copper-coloured eruption. The spots occupied the diameter of about six inches, and faded ultimately of their own accord; no other local or constitutional effect appeared as the result of the inoculation. Here the syphilitic fever, as I read the case, was so far exhausted as to have no power of itself of producing fresh manifestations, but had left an impression upon the system which protected it from any fresh constitutional disturbance, and, at the same time, very materially modified the local symptoms. During the existence of the syphilitic fever—that is to say, as long as the patient is liable to fresh manifestations of disease from his first infection—the inoculation of the secretion from a primary or secondary unirritated syphilitic sore generally produces no result, or a slight superficial irritation which soon subsides, or some abortive form of adhesive inflammation. Inoculations of this sort are analogous to those performed with the vaccine matter on patients who are still under the influence of a previous vaccination. I have over and over again inoculated syphilitic patients with the secretion from an uncomplicated, unirritated, indurated chancre, and always with a negative result. If, however, from any constitutional or other cause, there be much irritation about the parts from which the secretion so inoculated is taken, then a result is produced. But it is very different from those which we have previously considered. If, for instance, an indurated sore be irritated by the application of some savine ointment, as in my original experiments upon this subject, then the inoculation succeeds; or if the sore has been irritated by the application of any other diseased secretions, or if it be much inflamed from any constitutional or local cause, then again a result is produced; but that result differs in its essential characters from the typical syphilitic inoculation. There is no period of incubation. There is no well-defined induration produced. There is no enlargement of the corresponding inguinal glands, and no fresh constitutional symptoms. The inoculated spot shows at once the characters of the suppurative inflammation, and not those of the adhesive; any fresh matter that is effused rapidly softens and no longer remains a part of the living body. Unless some phagedænic action takes place there is little or no loss of the natural structure of the part, and when the inoculation heals the cuticle is on a level and sometimes above that of the surrounding parts. In this respect there is an essential difference, in my opinion, between this form of inoculation and that from the local suppurating sore, which I shall have hereafter to describe. In the same way secondary syphilitic affections, unless there be some constitutional or accidental cause of irritation, heal without loss of substance, and the cicatrices of the skin leave no permanent depression.

CASE 33.—Some matter taken from a patient who had a dense circumscribed induration on the inner prepuce, causing phimosis, accompanied by great discharge, and whose body was covered by a secondary eruption, was inoculated from a sore on the abdomen of another patient. A series of seven inoculations were produced. These all commenced as pustules, and produced irregular superficial ulcerations, covered with thick crusts. The edges of the ulcerations were scarcely defined. When they healed the cuticle covering them was on a level with that of the surrounding skin, and the marks of the inoculations were soon entirely effaced, as those of a secondary syphilitic eruption would have been when cured.

The syphilitic diathesis, like the effects of vaccination, may wear itself out more or less completely, and then a fresh inoculation may take place, which may produce fresh constitutional results.

CASE 34.—A married gentleman unfortunately exposed himself to contagion. This was followed by well-marked primary syphilis, for which he was thoroughly treated under my own care. About the time when secondary symptoms might have been expected his general health failed. He lost flesh; was pale and depressed; a slight eruption appeared on the skin of one arm, which, under treatment, very soon subsided. He had no other specific symptom for seventeen years, when he again exposed himself. A small circular abrasion now appeared on the glans penis, which ultimately became developed into a small tubercle, desquamating on its surface, and continuing for many weeks. The glands in the corresponding groin became enlarged and painful. These symptoms were succeeded now for the first time with well-marked circular copper-coloured patches on various parts of the body.

Other cases of this second inoculation of constitutional syphilis I have elsewhere mentioned, and will not here repeat. I shall have to consider this subject again under the head of Syphilitic Enlargement of Glands.

One form of reinoculation, which I have not seen described or referred to by authors, produces a red raised pimple on the mucous membrane, depressed in its centre, and persisting for many weeks. The appearance presented is not unlike a single projection of the surface of a raspberry.

Another most important modification of the results of the application of syphilitic matter depends upon the structure to which it is applied. Hunter showed, as I have said, that the mucous membrane was capable of the adhesive form of inflammation. Lymph may be secreted on its surface as the result of great or prolonged irritation, or effused into its structure, and into that of the submucous tissue. As a rule, however, irritation of a mucous membrane produces suppuration, and the pus-cells are thrown off from the surface, together with any irritating matter that may be mixed with it. The mucous membrane does not then become permanently thickened, nor does it ulcerate. The newly formed bioplasts carry their life up with them and cease to be a part of the living being which produced them.

"It is an invariable effect," according to the Hunterian doctrine, "that when any part of an animal is irritated to a certain degree, it inflames and forms matter, the intention of which is to remove the irritating cause. This process is easily effected when it is on a surface whose nature it is to secrete, but when on a surface whose nature is not to secrete, it then becomes more difficult, and another process must be set up. This is not only the case in common irritations, but also in specific irritations from morbid poisons, as the venereal disease and small-pox. The variolous matter, as well as the venereal, produces ulcers on the skin, but when it affects secreting surfaces, a diseased secretion is the consequence, and this is different in different parts: on the tongue, inside of the mouth, uvula, and tonsils, the coagulable lymph is thrown out in the form of sloughs, somewhat similar to the putrid sore-throat; but in the fauces, and all down the œsophagus, a thickish fluid, in appearance like matter, is secreted. When irritation is applied to a surface whose cuticle is thin, and where there is a secretion naturally, as the glans penis, then it sometimes only irritates so as to produce a diseased secretion." (See Case 8.)

There are three ways, Hunter says, in which a chancre may be produced: first, by the poison being inserted into a wound; secondly, by being applied to a non-secreting surface; and, thirdly, by being applied to a common sore. But infection of a patient's system, Hunter held, might be and often was produced by a gonorrhœa independent of a chancre. He says the matter of a gonorrhœa will produce either a gonorrhœa, a chancre, or the lues venerea; and the matter of a chancre will produce either a gonorrhœa, a chancre, or the lues venerea. Now there can be no doubt that Hunter in his descriptions has confounded together several different affections of the urethra, and has classed them together under the common name of gonorrhœa. Yet he owns the difficulty of distinguishing these, and says—"We see many gonorrhœas that begin without any appearance of inflammation, and I have been very much at a loss to determine whether they were venereal or not, for there is a certain class of symptoms common to almost all diseases of the urethra from which it is difficult to distinguish the few that arise solely from the specific affection." That the very large majority of cases of urethral discharge do not depend either upon syphilis or gonorrhœa may be concluded from the simple consideration of the great variety of causes which will produce such affections. These will be more fully considered hereafter. But if it be conceded that some forms of urethral discharge are really syphilitic, it is no easy matter always to distinguish them from those that are not. Inoculation has been supposed to furnish the means of diagnosis.

THREE CASES OF DILATATION OF LYMPHATIC RADICLES.

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CASE 1.—W. S——, aged nineteen, fetler, admitted on January 11th, 1875. Family history good; father, mother, brothers, and sisters alive and well. No history of previous illnesses. About six weeks ago he had slight catarrh and cough, and noticed a small swelling of his neck. This was soon followed by swelling of the left side of the face and of the upper part of the head and forehead. It then appeared in his hands, and afterwards in his feet and legs. He had at the same time pains in the loins, which were not much felt unless he moved about. His urine at the same time was brown and thick and very scanty, and was passed very seldom. His appetite has never failed; his bowels have been pretty regular. He does not think he has lost flesh. Is anæmic-looking, but skin of trunk and abdomen is markedly brown, except a small patch near left iliac crest, which is white, the demarcation being abrupt between the pale and brown parts. Heart sounds are healthy. No anasarca, but the abdomen is markedly dull for some extent in both flanks, in the left especially; the dulness in left is diminished when he turns on right side. Urine: sp. gr. 1030, deposits red lithates, is highly albuminous. Has simple diet—milk, beef-tea; ordered chop; and, in place of fifteen minims of ipecacuanha wine, and one ounce of citrate of potash mixture, four times a day, which he has had for two days, he is now to have solution of perchloride of iron, fifteen minims, and acetate of ammonia mixture, one ounce, three times a day, taking one drachm of compound jalap powder every morning.

Jan. 18th.—Legs more anasarcous, feet pit markedly; both fundi very pale, discs not well defined; sight is good; he can read a paper.

Feb. 1st.—Urine pale, contains much albumen; deposits a light sediment, containing nothing definite.

18th.—Urine very scanty, loaded with albumen, sp. gr. 1040; pain in loins.

19th.—Left thigh and leg much swollen; the thigh measured 24 in., the right only 20 in. Pulse weak and small; vomiting; urine very scanty and turbid, turns almost solid when boiled, is thick with lithates when cool; deposits numerous slender homogeneous and granular casts, a few also containing some corpuscles.

20th.—Left leg still more swollen, depending part very hard; girth of thigh 25¼ in., left calf 16 in., right calf 12½ in. Right leg does not appear to be at all swollen. Pain is felt in left groin, not down the leg. Intellect quite clear. Urine not more than three ounces in twenty-four hours. Temperature 98·7° F.; pulse 96, weak. Has a warm pack every night.

22nd.—Marked dulness and absence of breathing in lower half, or rather more, of right back; a good deal of blood spit up. Scrotum very much swollen on both sides; right leg not swelled at all. Does not sweat at all in the pack; feels chilly. Urine: twenty-five ounces in twenty-four hours, sp. gr. 1040, thick with lithates. Taking, since the 19th, acetate of potash, half a drachm, in an ounce of water, three times a day and the mixture; hot-air bath.

25th.—Total urine 39 oz., of full colour, clear. A good deal more blood has been spit up. To-day the sputa are dark and muco-watery. Left thigh measures 25½ in.; scrotum still very distended.

27th.—Sweated last night very freely in the hot-air bath; the swollen leg sweated as much as the other.

March 1st.—Expectoration still very blood-tinged. Temperature 98°; urine, sp. gr. 1024, very albuminous. Gallic acid ten grains, glycerine twenty minims, water one ounce, three times a day.

3rd.—Much blood still in expectoration; thigh measures 24½ in.; scrotum more lax. Temperature before hot-air bath 100°, after bath lasting half an hour 100·4°. Skin of left thigh presents a great number of plexiformly arranged streaks running upwards.

11th.—The streaks are now evidently channels containing fluid; they have increased in size, and occupy a considerable extent both of upper and outer part of left thigh and buttock, and also the lower and inner part of the limb for a good way above the knee; they do not extend above the line of Poupart's ligament. They contain a clear alkaline fluid, devoid of corpuscles, slightly albuminous, sp. gr. 1009. A very large amount of this fluid ran from a single needle puncture; two clean sheets were saturated, and 1½ oz. was collected; the flow continued for some days. The expectoration on the 12th was nearly free from blood, and was less. The thigh measured 24 in., the calf 17 in.

On the 15th the total amount of urine was 47 oz. The lower right back only was dull, and a little crepitation was heard, and no other breath sound; the sputa were mucous and rusty. The dose of gallic acid was increased to twenty grains four times a day.

25th.—Left thigh measured 25 in., left calf 17½ in. The lymphatic channels at the upper and outer part of the thigh were so much enlarged that they often seemed to be on the verge of coalescing; some of them contained a red fluid. Smaller lymphatic channels were visible at the lower and fore part of left leg.

April 1st.—Thigh measures 26½ in., the calf 18 in.; left side of abdomen much swelled. The lymphatic channels are very prominent, and distended on upper and outer left thigh, and some have appeared in the same part of right; many of these contain a red-tinted fluid. The channels evidently indent or groove the corium, as is well seen when they are emptied by pressure.

19th.—Right leg has become swollen the last few days, and the scrotum increased; distended veins are seen on the scrotum, but none on the leg. Distended lymph channels are apparent now on upper and outer part of right thigh. Twenty grains of chlorate of potash, half a drachm of glycerine, and one ounce of water, three times a day.

23rd.—Fundus of both eyes pale. The urine, which on the 12th had been 20 oz., rose to 44 oz., on the 26th to 64 oz., on the 29th to 84 oz.

On May 3rd the urine still contained much albumen. There was much fluid in the abdomen.

24th.—Leg is diminishing in size; is bandaged. His general condition is good.

31st.—Urine very slightly albuminous, sp. gr. 1025; leg much smaller.

June 7th.—The leg is now nearly normal, save for the remains of the lymph channels, which are evident as depressions or grooves in the integument. Abdomen collapsed; resonant on right side, dull on left. Is able to walk about.

10th.—Came to hospital looking well, but requesting to have his chlorate of potash mixture, without which he did not feel so well.

Case 2.—Mr. ——, aged about forty-five, for many years a perfect hypochondriac. Always thin, but lately has emaciated greatly; has got cough and expectoration, and his lungs present unmistakable indications of softening tubercle; soft femoral vein swollen, firm, and tender; both feet and legs œdematous, with erysipelatous redness on left leg. On both feet, on the dorsal aspect, there are several enlarged lymphatic channels, extending from near the toes to about the ankles. These are quite like those described in Case 1. He died a few days after this note was made.

Case 3.—R. P——, aged nineteen, builder's labourer, admitted May 19th, 1875. Light hair and complexion, of slight make, hands of a dull red; a pale pressure spot is slowly effaced; he had scarlatina when a child; was not exposed to wet before his illness, but worked in a draughty place. Has felt ill three weeks; his face swelled seven days ago, and his legs and scrotum; the latter has subsided, the face continues puffed. Had sore-throat a month ago; it is not sore now. Skin moist; he perspired in a pack he had last night. Pupils very large. Vomits at times. Tongue furred, red at edges. Pulse 64; temperature 97·4°. Has pain on the right side, below liver, extending across to left. Abdomen full, dull in depending parts. Appetite good; is thirsty. Heart's sounds feeble; no bruit. Left lower back dull, and breathing very defective there; but resonance and breathing are present in the upper half of back. Lower third of right back is dull, and breathing weak; but no râles are heard. Urine: sp. gr. 1030, acid, highly albuminous. There is a congenital hydrocele on the right side; it became more marked four years ago, but he has always had some slight swelling in that region, which disappeared when he lay down. Retinal veins full and dark; the ocular fundi otherwise appearing normal. Simple diet: milk and beef-tea. To take ten grains of alum, twenty grains of sulphate of magnesia, ten minims of ipecacuanha wine, and one ounce of camphor mixture, three times a day; one drachm of compound jalap powder every morning.

May 22nd.—Urine in good quantity, dark with abundant sediment, loaded with albumen; sp. gr. 1032; deposits casts mostly narrow and granular, or homogeneous, slender, very few are corpuscular. Pulse feeble; feels very weak. Made sick by compound jalap powder. Omit pack and powder. Urine three ounces.

31st.—Urine yesterday had to be drawn off; this morning he passed it himself. Yesterday's urine is loaded with albumen, and deposits a notable sediment consisting of homogeneous casts, some narrow, others moderately wide, with abundance of medium-sized glomeruli; some casts consist of granular pigment; no blood-globules seen; ascites considerable. Temperature 97·4°; pulse 84.

On June 1st the urine was very dark, contained a large amount of blood; the corpuscles were numerous and distinct. On the 7th there was still much blood in the urine, the dropsy had increased considerably, the scrotum and prepuce were very much distended. On thighs and lower abdomen there were numerous distended lymphatic channels containing a more or less red fluid. These on the 10th were noted to run down to the line of Poupart's ligament from the integument of about the lower half of the abdomen. On the 16th they were very numerous on the thighs; those on the abdomen were larger, and contained much bloody fluid, which, examined under the microscope on one occasion, exhibited multitudes of red globules. Soon after erysipelas attacked the lower abdomen, the lymphatic channels discharged a very large quantity of serous fluid, he became very prostrate, the temperature rose to 104°, and he died on the 20th. No remedies appeared to be of any avail.

Post-mortem examination.—Lower extremities anasarcous; dilated superficial lymphatics on inner and outer side of both thighs; erysipelatous necrosis of skin of lower part of abdomen.—Thorax: Lungs non-adherent, slightly œdematous; bronchial tubes full of frothy secretion; a patch of apoplexy at base of right lung, great congestion at base of left. Heart healthy, except one or two minute patches of atheroma about aorta.—Abdomen: A large quantity of purulent-looking fluid in peritoneal cavity; under the microscope the fluid presented rather a small number of corpuscles, and those which were visible were smaller than pus-cells and less granular; some traces of peritonitis. Lymphatics well marked in mesentery in lumbar region; mesenteric glands enlarged. Neither receptaculum chyli nor thoracic duct enlarged. Left external iliac and common iliac veins, and the right iliacs at their junction and at the entrance into the inferior cava, were plugged with old organised clot; clot of more recent formation existed in the lower part of left posterior tibial veins. Liver, spleen, pancreas normal. Kidneys extremely hyperæmic, with smooth surfaces, cortical part enlarged, pyramids dark, some whity mottling in cortex; conjoint weight eighteen ounces; supra-renal capsules congested in their medullary portion. Ileum presented solitary glands very much enlarged; the mucous membrane was hyperæmic. The lymphatic glands in the groins and about Poupart's ligament were slightly, if at all, enlarged.

Remarks. — The special symptom which characterises these cases must be, I think, rare. I have not to my recollection met with it before. But little notice is found of it in authors. Hasse, indeed, says, when writing on septic inflammation of the lymphatics, that "during life we observe that the lymphatic glands become turgid, while the course of the lymphatic vessels is indicated by a network of flat red stripes." The last three words convey a better notion of the appearance seen in my patients than the descriptions given by some writers of cases of cystiform or general dilatation. Wilks and Moxon do not seem to have met with the alteration in question; they only mention the occurrence of great varicose distension of the lymphatics of the thigh producing cyst-like knots, in consequence of some more or less obvious cause of obstruction. Pelters (Schmidt's *Jahrb.*, vol. cxv., p. 183) records a case of remarkable dilatation of the lymphatic glands of the right groin, small and large intestine. The glands were converted into cyst-like cavities, tensely filled with a yellow fluid, and the afferent and efferent vessels were also much dilated. The cause of the dilatation was considered to be obstruction to the circulation from valvular disease of the heart, especially mitral stenosis, and cirrhosis of the liver producing considerable ascites. A case is reported from the clinique of Prof. Kussmaul (see *Medical Times and Gazette,* vol. ii. 1861, p. 119), where the lymphatics of the abdominal parietes were much enlarged. The patient was an old woman, who had been tapped several times for ascites depending on cirrhosis of the liver. "From the middle region of the abdomen a multitude of cord-like vessels of the thickness of quills, which looked like rows of pearls, and were much twisted and prominent, proceeded downwards towards both inguinal regions. In this course they gradually flowed into one another, and ended in a few large vessels of the thickness of the little finger, which disappeared in the inguinal region. These vessels commenced in the middle and upper part of the abdomen, in spots of different size, which were transparent, and not prominent; they were probably vessels flattened by great tension, and might easily have been confounded with the cicatrices to be found on the abdominal parietes after numerous pregnancies. These also existed in this case. The right diagnosis of these spots, which were not connected with each other, was in this case only made after the small (short?) but very wide canals had been discovered, which were filled with lymph almost to bursting. On puncturing these vessels a yellow, opalising, neutral fluid escaped, which contained a trifling quantity of albumen, and on one occasion showed an acid reaction." The legs were only slightly œdematous, and the lymphatic vessels of the lower extremities were not dilated. Kussmaul attributes the distension of the lymphatic vessels to the reflux of the lymph being prevented by the colossal accumulation of serum in the abdominal cavity; but he recognises the anomaly of the lymph vessels of the lower limbs not being dilated. The opinion of anatomists seems to be now pretty well decided that lymphatics originate in intercellular spaces, comprising under this term the spaces existing between the fasciculi of connective tissue, or between the elements of the tissues, and even the serous cavities. The lymphatic vessels are believed to open into the latter by orifices termed stomata.

Now the vessels which were so enlarged and apparent in my patients were certainly not the ordinary superficial lymphatics figured by Mascagni, for these run in the subcutaneous connective tissue beneath the corium of the skin, while those I noticed were quite superficial, and, though they grooved the corium notably, were either quite on its surface immediately beneath the epidermis, or in its more superficial layer. They appeared, in fact, to be rather dilated lymphatic radicles than actual vessels. But that they truly belonged to the lymphatic system cannot, I think, be doubted. For (1) the fluid in them was in pretty rapid motion, as shown by the quantity collected from a single puncture; (2) this fluid had quite the character of lymph; (3) the vasoid cavities, while observing a sort of plexiform arrangement, took a general direction upwards, and disappeared at the region where the superficial lymphatics pass down to join the deep—behaving, in fact, both on the surface of the abdomen and the thigh, like recognised lymphatic vessels do; (4) the venous obstruction which was present in all the cases affords a special reason for considering the fluid to be lymph, inasmuch as, the return of blood by the veins being barred, there was no other channel left for the fluid effused from the capillaries to take but the lymphatics.

But, admitting that the fluid was lymph, that the vasoid spaces containing it communicated with the lymphatics, and that venous obstruction had a very material influence in causing the formation and enlargement of these channels, I cannot but think that some other less evident cause must have been in operation. For obstruction of veins by thrombosis, or phlebitis, or pressure of tumours, is no uncommon event, and gives rise to considerable œdema, as in phlegmasia dolens, yet without any apparent distension of lymphatic channels. Perhaps, indeed, this does actually occur in all cases, or in most; but, inasmuch as the vessels affected are subcutaneous, and not supracutaneous or subepidermal, as in my cases, the alteration is not noticed. The peculiarity of my instances would then consist simply in the situation of the vessels or lymph-spaces affected by dilatation. The results of dissection in Case 3 are of great importance, as showing that pressure on the thoracic duct or enlargement of the lymph-glands may be quite absent in the condition we are considering. Conversely, it may be remarked that in the affection termed "adenia," characterised by great hypertrophy of the lymphatic glands, there is no dilatation of the afferent or efferent vessels. Grave disease of the kidneys existed in two of my cases, but caused anasarca only in one, so that this state cannot be credited with much effect.

Green-street, W.

VACCINATION GRANTS.—The following gentlemen have been awarded grants for efficient vaccination:—Dr. W. Hutchinson, Chipping Norton, £10 9s.; Dr. H. H. Phillips, Reading, £8 19s.; Mr. J. A. Bright, Glastonbury, £9 11s. (second gratuity).

ON THE TREATMENT OF HÆMORRHOIDS, AND THE COMPARATIVE MERITS OF THE OPERATION BY THE CLAMP AND BY THE LIGATURE.

By JAMES R. LANE, F.R.C.S.,
SURGEON TO ST. MARY'S HOSPITAL.

In a paper by Mr. Henry Smith in the last two numbers of The Lancet on the treatment of hæmorrhoids and prolapsus of the rectum by the clamp and cautery, founded on his experience of 400 cases, he alludes to certain criticisms of this procedure, and of his mode of advocating it, which have from time to time appeared. Amongst other things he says: "Just to show the extraordinary nature of the opposition which has been urged against the operation, I may state that one well-known surgeon wrote a long letter to The Lancet denouncing the operation. Luckily for me, but most unluckily for himself, the writer let it appear that he had never once made trial of the operation."

Finding that I am the surgeon alluded to, and that these observations refer to a paper published in The Lancet of Sept. 2nd, 1865, I feel it necessary to say a few words in reply, for the purport of my remarks is here completely misrepresented.

I have never "opposed" or "denounced" the operation with the clamp. In the paper referred to I was, on the contrary, very careful to disclaim all intention of depreciating it, believing it to be a sufficiently effectual method of dealing with the complaint, though I could not admit that it was better, and there was not a shadow of proof that it was safer, than a properly conducted operation with the ligature. My observations were directed against the unfair comparisons made by Mr. Smith between the two operations, and the extravagant laudations which he was constantly in the habit of bestowing on the one at the expense of the other—laudations which equalled, if they did not surpass, those which the profession had been accustomed to hear for some years previously from the same authority respecting the extraordinary merit of nitric acid in the treatment of this disease.

I also protested against the peculiar pathological doctrines enunciated by Mr. Smith in support of his views, when he asserted that "it is impossible for any surgeon conscientiously to tell his patient that there is no danger whatever after the ligature; but this may be *most truthfully stated* with regard to the operation with *my improved clamp*, if the most ordinary precautions are adopted to prevent bleeding." And again, when he said, "It is *not possible* that either tetanus or pyæmia, the two most formidable results of the ligature, can occur after this operation, because the condition which produces the former affection does not obtain—viz., the presence of an irritating substance round the nerves for several days; and pyæmia and other inflammatory affections will be effectually prevented by the exposed surface being deprived of its vitality and the veins being blocked up by the cauterisation." I ventured to point out that burns were a class of injuries by no means exempt from a liability to be followed by tetanus; and that it was an entirely new idea that the application of the actual cautery to cut surfaces was an effectual guarantee against pyæmia and "other inflammatory affections."

It is all very well for Mr. Smith to say, in effect, that as I had then never practised the operation with the clamp myself, I could not possibly know anything about it, and therefore that to any remarks of mine "no answer need be made." I submit, however, that it was not necessary to have performed this operation to appreciate the fallacy of the statements above quoted, or of the argument that, when a sloughing wound is made in the interior of the rectum with the actual cautery, the patient will be convalescent in one-third of the time required when a slough is made in the same situation with a ligature. I spoke, however, from the careful observation of a considerable number of cases operated on with the clamp by my colleagues. Since then I have repeatedly practised that method myself, and have witnessed it in the practice of others; but I see no reason, after ten years, to alter the opinion which I then expressed, that it is not safer or in any way better than a properly managed operation with the ligature.

The result of Mr. Smith's experience of 400 cases forms, without doubt, a very valuable contribution to practical surgery; and when we learn that out of this number he has only met with four deaths, it will, I trust, help to allay the vague apprehension which exists, even in the profession, respecting the risks attending operations for this disease. But I contend, at the same time, that he has not yet succeeded in demonstrating the superiority of the clamp and cautery over the ligature; and I do so on the following grounds. I have myself operated with the ligature, at St. Mark's Hospital and elsewhere, on more than 800 cases, with only three deaths; while Mr. Allingham, in his book published in 1871, states that he had then operated on 400 cases, without any death at all. With respect to pyæmia, no death from that cause has occurred in my experience, and Mr. Allingham states that 3210 cases in St. Mark's Hospital have not furnished a single example of it, though he refers to four cases of death from that cause in the practice of other surgeons after the operation with the clamp and cautery. I have no desire to maintain that the ligature possesses in this respect any peculiar advantage over the clamp, for I believe the tendency towards pyæmia will, in the long run, be found to be about equal in both; but the facts which I have stated effectually dispose of the peculiar immunity from pyæmia formerly claimed for the clamp by Mr. Smith, and also of his recently expressed opinion that "the complete sealing up of the vessels produced by the hot iron is the very best safeguard against pyæmia we can have." I am quite at a loss to see how vessels are more completely sealed up by cautery than by ligature; in fact, if the argument is worth anything, the ligature ought to be superseded by the cautery in surgical operations wherever practicable, in order to diminish the liability to pyæmic infection.

The most serious objection to the operation with the clamp is its liability to be followed by hæmorrhage. Mr. Smith himself now candidly speaks of this as "the result against which the surgeon has most to guard, and unless he takes very great care it is an occurrence very likely to take place." He mentions cases in which it took place to a rather serious extent immediately after the operation, and others in which it occurred a few days afterwards, when the bowels were relieved. In the latter it probably arose from the vessels being reopened in consequence of the slough being detached or disturbed during the passage of the fæces over the wounded surface—an indication that they are not so efficiently closed by cauterisation as when they are securely embraced by a ligature. A lesser degree of hæmorrhage seems to be not unfrequent, for we are told that "sometimes a good deal of blood is passed on the first action of the bowels, and on examination it is found that the greater part of this evacuation consists of dark coagulated blood, which had evidently slowly escaped into the bowel after the operation, and had remained there until the action took place," another indication that all the divided vessels are not completely closed by the cauterisation.

Were it not for the danger of hæmorrhage there would probably be little to choose between the two modes of operation; they are, in fact, only different ways of doing the same thing. From what I have seen I believe them to be as nearly as possible equal as regards the danger to life, and also as regards the ultimate result, the subsequent pain, and the time required for recovery; and I have seen nothing to justify the assertions that the method with the clamp is in any of these points superior to the other. But the danger of bleeding, which is confessedly a real one, is sufficient, in my opinion, on Mr. Smith's own showing, to justify the condemnation of the operation with the clamp in all cases where the disease is far advanced and large vessels are involved. One of the fatal cases which he records is significant. It is that of an elderly gentleman with very severe prolapsus. A very vigorous application of the cautery was necessary to arrest the bleeding, and the patient died on the fifth day from peritonitis. Mr. Smith does not doubt that the peritonitis was produced by the excessive employment of the cautery, and thinks it possible that he may even have injured the peritoneum. Surely in any case where there is a chance of such severe cauterisation being required, the operation with the ligature must be the safer of the two. I have myself never hesitated to use it in the most extensive cases of disease, and have never yet had occasion to repent having done so. I have only to add, in the words of Mr. Smith, slightly altered, that if he does not yet see the merits of the treatment by the ligature so clearly as I do, I can only hope that his conversion may arrive in time.

Norfolk-square.

ON FATIGUE.

By G. V. POORE, M.D.,
ASSISTANT-PHYSICIAN TO CHARING-CROSS HOSPITAL, ETC.

THE recent discussion in the pages of THE LANCET on the effects of overwork, to which Dr. Wilks, Dr. George Johnson, and Dr. Savage have contributed their experiences, has induced the author of this paper to reduce his views on the same subject to a definite form, in the hope that they may prove interesting.

Work results in fatigue, and fatigue is a regular and constantly returning symptom experienced by all of us. Periods of functional activity invariably alternate with periods of repose, during which the waste caused by the exercise of function is repaired. We are indebted to Sir James Paget for having pointed out in his Croonian Lecture, delivered some years since before the Royal Society, that "rhythmic nutrition" is a law of nature; but, although the truth of this dogma is recognised on all hands, and may be said to be axiomatic, it has hardly received that careful consideration at the hands of practical physicians which it deserves.

Our whole life consists of a series of vibrations—periods of tension alternating with periods of relaxation; and, although the rapidity of these vibrations varies immensely, they are recognisable in all our acts, be they voluntary or involuntary. Let us look first to the "vibrations" of an organ the movements of which are placed entirely beyond our own control—the heart. Now, the rate of vibration of the heart is 72 per minute, and if the total period of each vibration be divided into ten parts, it will be found that four of these parts are devoted to the process known as *systole*, which may be looked upon as labour; three are occupied by the *diastole*, which, although hardly labour, is nevertheless exercise of function; and the remaining three parts are occupied by the *pause*, during which the heart apparently enjoys absolute rest from any exercise of function, and may be considered to be in a condition analogous to sleep. May we not apply the rate of action of this organ, which has been regulated for us, to our voluntary acts, and may not the heart be made to give the key-note, as it were, to many questions, personal and social? If we divide the day of twenty-four hours into ten equal parts, and give four of these to active work, three to functional exercise of other kinds, and three to sleep, we shall find that nine and a half hours' work, seven and a quarter hours' "relaxation," and seven and a quarter hours' sleep, is what a normal man may perform without injury to himself. "Eight hours' work and eight hours' play, eight hours' sleep and eight shillings a day," is said to be the dream of the trades unions, but, if they are guided by the heart, they ought to add an hour and a half to the period of labour, and take three-quarters of an hour from each of the other divisions of the day.

To continue with the consideration of our "vital vibrations," I may remark that it is universally ordained among civilised nations that once in every seven days there shall be a remission of labour and a change of occupation; and we further recognise the fact that it is highly advisable for those who are occupied in monotonous pursuits to break away from them at least once a year, and indulge in that variety of work which we call amusement. Monotonous repetitions of the same act are acknowledged, on all hands, to be the most potent causes of fatigue. "It aint the untin as urts im," said *Punch*'s horse-dealer, "it's the ammer, ammer, ammer on the ard igh roads;" and in this remark there was undoubtedly much practical wisdom which is very generally applicable.

Fatigue occurs directly we attempt to alter the rhythm of our vital vibrations by prolonging the periods of tension at the expense of the periods of relaxation, or by demanding for any length of time a quickening of the normal rate of vibration; and it is not unreasonable to suppose that every organ of the body has its "normal rate of vibration," if we could only determine what it is.

We recognise the fact that athletes who "over-train" run risks of cardiac troubles and loss of wind; that the man who, from any cause, is unable to sleep runs a serious risk of permanent impairment of health; and when we find patients pursuing their avocations too zealously we know that, if such offence against the laws of nature be persisted in, general paralysis or other form of "break-down" is likely to be the result.

Fatigue may be general or local, and both forms may be either acute or chronic.

That fatigue in all its forms is due to impaired nutrition there can be little doubt, and we shall find that the symptoms of chronic fatigue are often the prelude of definite and recognisable degenerative changes.

As to *general fatigue*, it is recognisable with ease both in its acute and chronic forms. There is a disability for performing either mental or physical work, and this disability is noticed first in work requiring attention and sustained effort, and, lastly, in those acts which have become automatic. The symptoms of general fatigue are referable usually to the brain and nervous system.

As to *local fatigue*, this, again, may be acute or chronic, and the symptoms of it are referable usually to the muscles; but we must always bear in mind that muscle and motor-nerve are one and indivisible, and that recent experiments have given great probability to the idea that every muscle is connected with a certain definite spot in the brain. When, therefore, we speak of a sense of fatigue we must necessarily be in doubt, notwithstanding the fact that the symptoms are referred to the muscle, whether brain, nerve, or muscle, one or all of them be really at fault. The symptoms of acute local fatigue are (1) *loss of power* to a greater or less extent. By too frequent or too prolonged stimulation the irritability of muscular tissue becomes exhausted, and it either refuses to respond or responds but feebly to the stimulus of the will; our power of adjusting the force of contraction to the act to be accomplished is lessened, and accuracy of movement and delicacy of co-ordination become impossible. (2) *Tremor* is a symptom of acute local fatigue, which everyone who has been called upon for extraordinary muscular effort must have experienced. (3) *Cramp-like* contraction is the symptom of local fatigue which disturbs our rest after a hard day's walking or riding, or muscular efforts in the ball-room or elsewhere. (4) The *pain* of fatigue is familiar to most of us, and is readily distinguishable from other forms of pain.

Local fatigue is caused far sooner by prolonged and sustained muscular effort than by repetitions of short muscular efforts having due intervals of relaxation between them. Anyone who has attempted to hold out a weight at arm's-length knows the impossibility of a long continuance of the effort, and it is proverbially true that standing in one position is to most people far more tiring than walking, the reason apparently being that in standing the muscles which support the body are subjected to a prolonged strain, while in walking we use the muscles on either side of the body alternately. The great increase of working power which we obtain by this alternating use of the muscles would seem to be one of the chief reasons for the bilateral symmetry of the body. Not only is sustained effort a far more potent cause of fatigue than repeated effort, but we find that, when fatigue supervenes, actions requiring sustained effort, be they physical or mental, are the first to fail, while automatic actions endure the longest, and in this respect local fatigue resembles general fatigue. It is quite possible to exhaust a muscle by artificial stimulation, and if one of the small interossei muscles of the hand be continuously faradised, it will be found that in a short time its power of contracting under any form of stimulus will be absolutely abolished. It is tolerably certain that the brain can have no share in artificial fatigue thus produced, and there seems good reason to suppose that in some people of energetic temperament the irritability of a muscle may be exhausted while the power of mental stimulation remains unimpaired.

Chronic local fatigue has causes and symptoms similar to those of acute local fatigue, and there can be little doubt that this condition is a common cause of many of those chronic maladies which seem to result from overwork, and which are characterised by irregular muscular action. That some cases of writer's cramp, torticollis, and hammer-palsy, are due to chronic fatigue of the muscles employed, there can be little doubt. Duchenne and Mr. Brudenell Carter have pointed out how, in cases of short sight, the prolonged strain of the internal recti has caused troubles of vision and even cerebral symptoms; and quite lately Dr. C. B. Taylor, of Nottingham, has shown reason for including in the category of "fatigue diseases" a peculiar form of nystagmus occurring amongst miners, who try their eyes by working in the dark, and the author has little doubt that, attention having been directed to the symptoms and effects of fatigue, additional light on the subject will be forthcoming.

Wimpole-street.

CONCLUDING REPORT
OF A
CASE OF INNOMINATE ANEURISM.

LIGATURE OF THE LEFT COMMON CAROTID ARTERY, FOR ANEURISM AT ITS BIFURCATION.

By FREDERICK ENSOR, M.R.C.S.,
SURGEON TO PORT ELIZABETH HOSPITAL, SOUTH AFRICA.

THE readers of THE LANCET of February 6th last will have noticed the report of a case of innominate aneurism treated by ligature of the carotid and subclavian arteries simultaneously. As it may be considered one of some surgical interest, and an example of a mode of treatment as yet on its trial, I think it right to publish the ultimate result of the case.

The operation was performed on Sept. 8th, and up to date of last report the man was going on favourably. The subclavian wound had firmly healed, and there was but a little stain of discharge from a granulating spot in the line of the carotid incision. The patient had little or no pain, the impulse was less, the bruit was less marked, and there was very trifling impediment to his deglutition, and he was allowed to go about the ward.

On Oct. 24th he very imprudently went out of his room with simply his night-dress on, remaining some half an hour out of his bed in the cold. The next morning he was taken with shivering, and had rheumatic-like pains generally. The pulse rose to 95, the impulse became very marked above the clavicle, and a little bleeding came on from the lowest part of the carotid wound. Ordered a mixture of carbonate of ammonia, chlorate of potash, and tincture of aconite, half a minim, every four hours.

Oct. 25th.—Pulse 88.

26th.—Pulse 80; impulse less. No pain.

27th.—Pulse 80.

28th.—Pulse 76. To take the mixture at eleven, four, and nine o'clock.

29th.—Pulse 76. Mixture at eleven and nine o'clock.

30th.—Pulse 75. Bowels too relaxed. To take two minims of tincture of aconite, twenty-five minims of chlorodyne, and one ounce of infusion of gentian, twice a day.

31st.—Pulse 92. Cough very troublesome last night, and after a paroxysm free hæmorrhage came on from carotid wound at 9 P.M. Applied lint soaked in tincture of iron, and strapping, and gave a dose of solution of morphia. This morning lies in a sleepy state. No more hæmorrhage; tumour pulsating forcibly; marked œdema of left hand; some œdema of feet.

Nov. 1st.—Pulse 95. Hæmorrhage again last night after a bad fit of coughing.

2nd.—Pulse 96. No hæmorrhage.

3rd.—Pulse 96. Coughs up a tenacious mucus.

4th.—Pulse 88; impulse feeble.

5th.—Pulse 86. Hæmorrhage at 5 o'clock this morning.

7th.—Pulse feeble. No particular pain in chest. Has had a little œdema of right eyelid for the last two or three days, and to-day the cornea looks cloudy, and is apparently perishing.

9th.—Cornea has given way; vitreous and lens escaped; eye collapsed. Face a little drawn to left; swallows without much difficulty.

10th.—Hæmorrhage again at 8.30 when in the act of smoking; arrested by the same means as before. Has no difficulty of breathing if he turns his head to the right, but it comes on if he turns it to the left.

11th.—Pulse weak and intermitting; complains of no pain, but, putting his hands together, says "his breath is like that."

12th.—Died comatose at 10 o'clock this morning.

Necropsy, six hours after death.—Body thin, but not emaciated. Base of neck above the collar-bones bulging, a plug of coagulum presenting at lower part of carotid wound. In removing the sternum and sternal end of clavicle careful dissection was needed to avoid tearing the parts immediately beneath. The ascending aorta was generally dilated, and arising from it was a semi-solid tumour, formed by the arteria innominata, the size of a small orange. Pericardium filled with fluid. Upper part of right lung symptoms of recent pleurisy. The right subclavian artery was obliterated, and adherent at ligatured part to the first rib. The aneurism had given way just below the ligature of the carotid; the pneumogastric nerve was flattened out on the aneurism. Adhesion of descending aorta to spine, tearing at one point, where a distinct little aneurism, size of a walnut, had corroded the bodies of the tenth and eleventh vertebræ. Lungs were adherent in parts from recent pleurisy, and filled with frothy mucus, but not consolidated. Dura mater adherent in several parts to hemispheres; pia mater opalescent, and evidences of chronic irritation as seen in hard drinkers; excess of fluid at base of brain. Brain-substance pale and soft. The "posterior communicans" artery on right side obliterated, or rather reduced to a fine fibrous thread. Liver very contracted, with marks of old inflammation on its capsule.

The man survived the operation sixty-five days. I think that, had it not been for his imprudence in exposing himself to the cold night air and setting up the acute attack of pleurisy, he would have survived longer; the paroxysm of cough put more strain on the circulation than the weakened artery could bear. But that he would have lived much longer is very improbable, as there was a spot on the posterior aspect of the aneurism which was as thin as a kid glove, and which would have soon given way. I think the man's life was prolonged by the operation—a questionable benefit. I have no doubt he was spared much suffering, both by the operation and by the use of aconite; for had it been left to nature, the tension and erosion of unyielding tissues would have caused constant severe pain, whereas from the time of the ligature of the arteries the pain was diminished in a marked degree; and the end was certainly a euthanasia in comparison with that which I have seen in other cases of aneurism.

In a younger subject, and with as distinct a diagnosis of innominate aneurism, I should not refuse a similar operation; but the diagnosis as to whether the arterial change is limited to the innominate is difficult—that it should be so limited is improbable.

As far as my experience goes, I believe that chronic alcoholism and syphilis are the two most important causes in bringing about that condition of artery which results in aneurism.

ALCOHOL AS A GENERANT OF THERMO-ELECTRIC CURRENTS IN THE SYSTEM: ONE OF ITS MODES OF ACTION.

By JOHN MULVANY, STAFF-SURG. R.N.

SOME years ago, when the application of ice to the spine became popular, I performed a series of experiments for the purpose of ascertaining its mode of action. Commencing on the lower animals, and studying its influence on the bloodvessels of the brain, with the sympathetics integer or interrupted in their continuity, I soon became cognisant of the initiation of thermo-electric currents by thermal disturbance.

Searching for manifestations of electricity in man from a like source, I was obliged to experiment on an individual whose appreciation of a glass of grog made him willingly submit to the discomforts of the spine-bags; and in him I accidently discovered that the deviation of the magnetic needle employed was always augmented by an ethylic potation. The same effects were also visible in other subjects, but my galvanometer was too imperfect to attach much importance to the phenomenon. When, however, four years later (1871), chance gave me access to a flash galvanometer belonging to the Indian Government, an instrument of the most marvellous delicacy, the circumstance recurred to my mind, and, having obtained the assistance of one of the ablest operators in the Indo-European telegraphy and a medical gentleman in the same department, I proceeded to investigate it in a manner the least compatible with error.

The existence or non-existence of electrical currents in the body first engaged our attention.

We observed that the formation of circuits was always attended by a manifestation of electricity; that this was not constant in point of force, but began soon after reaching its maximum to oscillate, the flash passing and repassing zero until it reached a point at which it remained stationary; further, that the maximum and stationary forces, though pretty constant in the same circuits in the same individual at different times, exhibited inequalities in strength in closely adjacent circuits and in different subjects, which could not be accounted for by extent of circuit, resisting media, or action on the poles, chemical or calorific. The dissimilarity in this respect witnessed in natives of India and Europeans was exceedingly curious and interesting, as will be seen by the subjoined specimen. In the respective circuits indicated the deflection to the right was as follows:—

	From tip of tongue to sinciput.		From tip of tongue to nape.
In a Mussulman	3°	......	8°
In a Goanese	2°	......	5°
In an Irishman	10°	......	22°
In a Scotchman	22°	......	25

Having accumulated a sufficiency of data to enable us to form an estimate of the influence of posture, rapidity of the circulation, direction of the head, ascertained the force of the earth-currents, and calculated the reducing currents from above downwards, we proceeded to try the effects of alcohol.

Mr. J——, aged thirty-three, being seated in a chair, a circuit was formed between the tip of the tongue and the nape of his neck. When sufficient time was allowed to the flash to cease oscillating and attain its stationary point of deflection, he took one ounce of brandy in three ounces of water. The electrodes were maintained *in situ* during deglutition, as well as throughout the entire observation, to guard against the error which might arise from the breaking and reforming of the circuit, and the flash was carefully watched. Before grog the galvanometer showed 15° right deflection, and during the twelve minutes immediately following, it did not register any appreciable alteration; but when thirteen minutes had elapsed, it suddenly showed a considerable access of electricity, which, with its subsequent behaviour, will be seen recorded in the following table:—

Before grog ... ... 15° right deflection.

	Minutes.		°	Minutes.		°	Minutes.		°
After grog.	12	...	15	25	...	32	35	...	23
	13	...	26	30	...	25	36	...	23
	14	...	40	31	...	23	37	...	23
	15	...	25	32	...	23	38	...	23
	16	...	20	33	...	23	39	...	23
	19	...	25	34	...	23	40	...	23
	20	...	22						

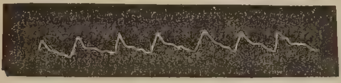
At this period heat and fatigue obliged us to bring the experiment to a close. So closely did the results observed in others resemble those just detailed that it will suffice to briefly allude to two of them.

In Dr. G——, aged twenty-eight, strong and healthy, an ounce of brandy raised the deflection from 14° to 60°; and at the end of half an hour it remained stationary at 45°. In a Goanese servant it augmented the stationary deflection 10°—i.e., from 2° to 12°. The maintenance of a strong current for such a long time as thirty to forty minutes removed any suspicion of its being excited by chemical action on the poles; whilst its force served to eliminate terrestrial currents from amongst its sources (these were never higher than 3°); and as muscular quietude was as far as possible ensured and emotional excitation entirely out of the question, especially in the Goanese, an utterly unimpassioned subject, there is, I think, but one interpretation applicable to these experiments—viz., that the electrical currents indicated by the galvanometer over and above the stationary forces were clearly owing to alcoholic action. Their connexion is one of cause and effect. The phenomenon was, in fact, but a simple transmutation of force—a conversion of heat into electricity. And as the dynamics of organised as well as of inorganic bodies are precisely similar, and their forces equally modifications of motion; moreover, as heat and electricity are radically but expressions of different conditions of the same all-pervading ether, and herein so intimately allied in nature that they are mutually convertible, such a transformation can be conceived to take place within the body as readily as without it, and be equally appreciable under suitable conditions. That these conditions obtain in the system may be inferred from the analogy which a circuit of dissimilar nerves bears to one of dissimilar metals, and from the fact of the pupil dilating and contracting by the currents derived from the application of cold and heat to the neck when the radiating fibres of the iris have been paralysed by section of the sympathetic, and from other considerations that may be learned from the following experiment, which, in conjunction with Drs. M'Callum and Farrel, of Dunnville, Ontario, I performed in 1867. Having exposed a portion of the right hemisphere of a rabbit, and observed the effects of heat and cold applied to the spine, I rapidly performed section of the corresponding sympathetic about an inch and a half above the lower cervical ganglion. The pupil contracted to the size of a pin's point, the plica semilunaris passed over a great portion of the eye, and the brain protruded through the opening to a considerable size. Ice was now applied to the shaven neck. The protruded brain passed inwards with a jerk, the pupil dilated, and the semilunar fold was visibly retracted. Hot water having been substituted for the ice, all the former conditions were restored. We now passed a magneto-electric current through the cerebral portion of the divided nerve to the brain, and observed the brain recede, the pupil dilate, and the plica shrink in a manner precisely similar to that occasioned by the cold. The rapidity with which the radiating fibres of the iris, though paralysed by section of their motor nerve, responded to the application of heat and cold, together with the fact of the sympathetic having been cut above the cilio-spinal region, clearly indicated that their muscular element was not affected primarily by cold in its simple physical capacity as a negation of heat, nor secondarily through the circulation by vaso-motor action. Moving the ice downwards, the pupil ceased to be affected when applied below the sixth cervical vertebra; the involuntary muscular tissue of the iris, the vital magnetometer, showed by its non-action that the current took another direction, passing through a circuit below what may be called the cerebral one. *Ex uno disce omnes.* When, therefore, in the vital as well as in the metallic circuit, inequalities of temperature, local accessions or deperdition of heat, disturb that mutual harmonic ratio between the ultimate elements and their interpenetrating ether which conditionates electric equilibrium, currents are excited which in the one case, as in the other, will have a definite direction flowing from the part most elevated in temperature. When alcohol is taken, the principal site of disturbance will be in the encephalic centres, and its source the heat liberated by the condensation which ensues when it osmoses into the brain-cells; for as alcohol, in virtue of that marked electivity it exhibits for nerve-tissue, especially for the brain, passes from the circulation to be stored up in that important organ to an extent equivalent to $\frac{1}{134}$ of the weight of the whole cerebral mass (Lallemand, Perrin, and Duroy), the watery element of the brain-cells is brought within the sphere of its chemical affinity, and as water enters into their composition in an inordinately high ratio—80 to 85 per cent.,—a considerable action will ensue, and condensation, with a liberation of heat, will be the physical resultants. As in the apparatus of Marcus or Melloni, the heat set free will be transformed into electricity, which will flow from the site of thermal exaggeration—that is to say, outwards, or in the direction it would take if a parallel condition were brought about by lowering the temperature at the opposite point of the circuit, which may easily be done by the application of cold to the spine. This is a powerful thermo-electrical excitant—so much so that, as will be seen by the following exemplum, it is capable of reversing the character and direction of the current when this happens to be negative. Bared to the waist, and the stationary forces of sundry currents noted by the superintendent of telegraphs, Dr. G—— threw a fine spray of ether on my spine. The following results were noted:—In a circuit from tip of the tongue to the sinciput, before the application of ether, the deflection was 10° left; after, 25° right. From tip of tongue to nape of the neck, before the application of ether, the deflection was 22° left; after, 20° right. From tongue to sixth cervical vertebra, before the application of ether, the deflection was 20° left; after, 13° right. Thus in this instance it changed the character as well as the deflection of the current, causing the flash to travel down to zero on the one scale, and attain a permanent altitude on the other. In persons whose primary deflection was right, the rise was instantaneous; in no case did the accession of force fall less than 10°.

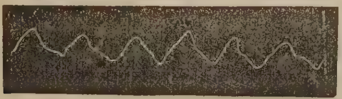
The application of hot water reversed the currents, and caused left deflection, showing beyond a doubt that, however else local applications of heat and cold may act, they undoubtedly give rise to thermo-electric currents. But marked as were these effects of heat and cold, those of alcohol were not less so. An equally significant manifestation of thermo-electricity ensued on taking a glass of brandy-and-water as that already witnessed when ether had been used. Negative deflection was again changed into positive, the character of the current was reversed, and the stationary force at the end of half an hour showed the passage of a positive current of 10° force.

It is, I think, in this action of alcohol that many of its beneficial effects as a medicine are to be sought. The currents generated in consequence of its action on the watery constituent of the brain-cells go to supplement enfeebled nerve-power, to strengthen the action of the heart and equalise the circulation. This is well illustrated by the following sphygmographic tracings taken on myself when suffering from debility from heat and a recent sunstroke. No. 1 represents a pulse of 110, with low arterial tension, and heart weak and prone to palpitate on slight exertion. No. 2 depicts the same pulse reduced to 98 two hours after 4 oz. of port wine had been taken, and shows the arterial tension raised as expressed by the rounding of the apicial angle and leaning upstroke, and the heart strengthened, as shown by the greater height to which the lever was elevated at the moment that the freedom of transmission through the capillaries was lessened. Had it acted simply as a cardiac stimulant, leaving the lax capillaries unaffected, or had it in the smallest degree augmented the then existing relaxation of these vessels, the heart's action would have been accelerated; or had it, on the other hand, simply confined its action to contracting the capillaries and raising arterial tension, the heart would not show an immediate accession of force as it did. But it acted on the entire circulation, contracting the peripheral capillaries, and thereby diverting the blood from the centrifugal direction impressed on it by the circumambient heat and humidity; it threw a fuller stream inwards, and rendered more active the circulation through the chylopoietic viscera and the internal organs, and thus brought about those conditions which are favourable in a high degree to nutrition and hæmatosis.

No. 1. Before wine.



No. 2. Two hours after wine.



Hence, though alcohol cannot be considered to act in the ordinary manner of foods, and does not contain a particle of those nitrogenous elements which on assimilation go to repair the loss sustained through disintegration, its *rôle*, if judged by its results when given under appropriate conditions, is certainly that of a food.

In order that its administration be opportune there should be clear evidence of derangement of function springing from enfeeblement of the organic system of nerves, for then not only will the adventitious aid given by the thermo-electric currents it excites be profitably appropriated to the restoration of healthy function, but the brain-cells, owing to the condition of languor and hebetude which impaired nutrition entails on them, will admit a portion of their water to be abstracted with impunity; indeed, it is not difficult to imagine that such an abstraction, if temporary and slight, will not only be innocuous, but positively advantageous, by the brisker action, osmotic and exosmotic, incited by the presence of alcohol for the purpose of effecting its removal, and the restoration of the abstracted water giving a fillip to nutrition; whereas in health, when function, nutrition, and blood and nerve influence are harmonised by structural integrity, such an abstraction must interfere with their normal working, and the electric currents generated under these circumstances, being superfluous, will fail to compensate for the interference with the steady elaboration of nerve-power. Should the accession of force through electrical agency be the exact counterpoise of that lost by the nervous channel, the detriment will be transitory; but should the dose of alcohol be large, not only will danger arise in proportion to the extent to which the cells become exhausted of their water, but also to the extent that their vital functions are replaced by physical ones; for, judging from analogy, thermo-electric currents set in motion in the brain, if too powerful, will overpower and suspend its functions, just as the too powerful stimulus of exciting passions acting on its cineritious substance would do, did not an hysterical paroxysm, spasm, or convulsion act as a safety-valve; or as the cognate electricity developed by a battery, if passed through the vagi in sufficient strength, stops the heart's action, or suspends the play of the diaphragm acting on and through the phrenic.

The similarity of the galvanometric effects produced by the internal use of alcohol and the external use of cold is strongly suggestive of its applicability in cases where cold shower baths would be serviceable, but are not attainable; such as in great and moist heats. And here its moderate use is not only justified by theory, but the theory is verified by the results. During a long sojourn in the Indian Ocean and the Gulf of Persia I had ample opportunities of observing that those who became teetotalers lost in weight, *élan*, and muscle; the gastrocnemius visibly diminished in bulk; and fatigue became so easily induced that I found these men philosophising on the inutility of tiring themselves by scrambling up the mountains of Seychelles, instead of dashing at them *en étourdi* as their comrades did. Periodical weighings of some of the officers of my ship and myself gave the most indubitable testimony that the use of alcohol in a mean temperature of 85° tends to keep up the weight of the body. In one instance a reduction of seven pounds took place in fourteen days in an officer who only exchanged habitual temperance for teetotalism. The falling away in strength he experienced at the same time; and this, its tangible equivalent in weight, somewhat alarmed him, and caused him to resume his former habits. The recuperation of weight was as rapid as had been its loss. In temperatures of 85° and upwards, with an absence of wind, or at most but gentle zephyrs being felt, and with an atmosphere from 75 to 90 per cent. saturated with humidity, the elastic pressure of the atmospheric vapour often equivalent to 1′ and upwards of mercury, evaporation is so greatly impeded that perspiration pours from the skin in such a copious stream that it constitutes a serious source of enfeeblement. On one occasion I calculated, by placing a piece of blotting paper under a glass on the chest of a messmate, seminude, under a windsail, temperature 93°, that he was at the time sweating at the rate of 1 gallon and 1⅛ gill for the twenty-four hours. Such a drain as this from the blood necessarily interferes with nutrition, and reduces the weight of the body. And experience has taught me that in circumstances such as these—namely, when rapid loss of weight is an attendant on copious perspirations—alcohol may be safely used in moderation. As it is under these conditions that I met with a permanent left deflection of the galvonometer —conditions benefited by alcohol,—I would be inclined to regard the presence of this phenomenon as an index of its suitability. Valuable information of similar purport may be gained by using the stethoscope and sphygmograph; for the circulatory system and the organic system of nerves are so interrelated that the condition of the latter may, to a great extent, be realised from the working of the heart and small arteries.

Southsea.

AN IMPROVED METHOD OF TREATING CERTAIN CASES OF CATARACT REQUIRING EXTRACTION.

By JAMES VOSE SOLOMON, F.R.C.S.,
SURGEON TO THE BIRMINGHAM EYE HOSPITAL;
PROFESSOR OF OPHTHALMIC SURGERY IN QUEEN'S COLLEGE.

IN some ophthalmic works which discuss the cure of senile cataract, the presence of a deep-set eye is given as a reason for the selection of depression or reclination in preference to the operation of extraction. I imagine no surgeon who has had experience in such cases will deny that a deep-set eye occasions some embarrassment in the making of the corneal section with a Graefe's or Beer's knife, especially where anæsthetics are not employed.

In a case recently operated upon at the Birmingham Eye Hospital, I improvised a simple and effective method of overcoming the difficulty under consideration by making with a pair of sharp scissors a perpendicular incision through the substance of the lower lid of about three-eighths of an inch in length and one-sixth of an inch from the commissure. Steady continuous pressure by means of a small sponge restrained the bleeding within innocent limits. The front of the eye having been now made easy of access to the knife, the section of the cornea was completed without difficulty, and the lens safely delivered without accident. No anæsthetic was employed. The lid was not sutured, but dressed with cerate instead of dry rag, and two turns of a narrow domett roller. The patient, a collier of sixty-eight years, recovered without a single painful or unfavourable symptom, and was discharged cured on the fourteenth day of the operation, with a clear black pupil, good vision, and perfect cicatrisation of the tarsal cartilage.

The above plan should have preference to any that interferes traumatically with the condition of the commissure, from the impossibility of its inducing abnormal contraction of the palpebral aperture or inversion of the lid (entropion) —accidents of no mean importance.

The operation of *reclination* has fallen into undeserved neglect, and, as a consequence, eyes are destroyed which would have had a good chance of vision if it had been selected for performance instead of extraction. A resort to it would be advisable where there is extensive fatty degeneration of the cornea and other tissues, and in subjects in whom the arteries have become seriously spoilt by atheroma, also in those who are affected with tertiary syphilis of old date. In the last two pathological conditions, intra-ocular hæmorrhage is the complication to be dreaded after the removal of the lens, or even upon the mere evacuation of the aqueous humour (no hypothetical case); in the first, death of the corneal flap within eighteen hours of the performance of the extraction is not uncommon.

Birmingham.

IN London last week 1471 deaths were registered, including 35 from measles, 96 from scarlet fever, 11 from diphtheria, 58 from whooping-cough, 22 from different forms of fever, and 138 from diarrhœa. No death from small-pox was reported. It is satisfactory to observe that the fatality from diarrhœa is declining, but the same cannot be said of scarlet fever. Two fatal cases of diphtheria occurred in St. Bartholomew's Hospital. The death-rates of some of the continental cities have lately been very high, Berlin, as usual, leading the list with a mortality of 48 per 1000 annually.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF RHEUMATISM; RECOVERY.

(Under the care of Dr. SOUTHEY.)

FOR the notes of the following cases and the accompanying remarks we are indebted to Mr. George Hastings, house-physician.

Two patients, lately lying side by side in Faith ward, suffering from rheumatism, presented such marked similarity in history and symptoms, both of which were anomalous, as to raise the suspicion that they were not ordinary cases of rheumatism, and were therefore of more than usual interest.

J. C——, aged forty-three, a married woman, was admitted on the 26th of April, giving this account of herself:—Eight days ago, after a violent domestic quarrel, her husband turned her out of the house, and she passed the whole night on the door-step. On her readmission in the morning, and after she had got comparatively warm and comfortable, fits of shivering came on at intervals. The next day the right wrist became almost suddenly swelled and very painful. This continued to be the great source of suffering until the time of admission. A copious vaginal discharge, accompanied by pain on passing her water, had been present for three weeks. It may here be mentioned that the husband is at this time suffering from a severe attack of gonorrhœa, and is being now attended by a medical man in the neighbourhood.

On admission, eight days after the onset of the pain and swelling of the wrist, she was fairly nourished, but anæmic; complexion fair. Right wrist-joint red, excessively tender, and much swollen. General hyperæsthesia over the whole of the body, but no tenderness or swelling of any other joints. There was an abundant purulent discharge from the vagina, with pain and scalding on micturition. Tongue coated with thick yellow fur; bowels confined. Complained of great thirst, with loss of appetite, and continued sleeplessness on account of pain in the wrist. No cardiac complication or history of previous rheumatism. Temperature 100° F.; pulse 90, feeble. The urine on examination was found to contain a small quantity of pus. The patient was ordered quinine, with iodide of potassium; a local application of chloroform and belladonna for the wrist, and an astringent lotion to the vagina.

The note of May 19th says: "Her general condition has improved, but the pain and swelling of the wrist-joint has not yielded to the treatment, and continues in a chronically painful and stiffened condition, in spite of varied local applications. Some slight pain is complained of in the right shoulder on extension of the arm. The vaginal discharge, however, has ceased."

June 3rd.—The patient has steadily improved since last note, although no especial alteration in treatment has been made. Was discharged at her own request, with no pain, but some stiffness of wrist, and very much improved in health.

E. P——, aged thirty-one, single, general servant, was admitted on April 15th into Faith ward with the following history:—Nine days before admission she had several long shivering fits, and on the following morning found that the left wrist was swelled and very painful. At the same time some slight pains were present in the ankles and calves of legs. She had had a thick vaginal discharge and scalding pain on micturition for three weeks.

On admission, she was a well-nourished, fair woman. On examination, the left wrist-joint was found much swollen, hot, very tender, and covered with a deep red flush, extending on to dorsum of hand. No tenderness or swelling of other joints. Heart-sounds clear and natural. No previous attack. Temperature 99·4° F.; pulse 76, fair volume.

For three days after admission she had retention of urine, and was only able to void it in a hot bath once a day, the urination being attended with very great pain and scalding.

The urine, when examined a few days later, was found to contain about one-sixth pus.

The treatment ordered was similar to that of the other case.

By May 20th the intensity of the pain had passed away, but the hand and wrist-joint remained stiff and useless; great pain was also produced on any attempt at movement, no relief being obtained from fomentations, shampooing, or blisters. Discharge from vagina almost cured.

May 28th.—Has a slight attack of facial erysipelas, with moderate pyrexial symptoms, lasting five days.

From that time the stiffness and uselessness of wrist have rapidly disappeared without any local treatment.

Patient discharged well.

The points of analogy in these two cases are certainly clear:—The sudden invasion with rigors, so rapidly followed by severe local inflammation of only one joint, and that joint the wrist in each case. The presence of vaginal discharge of three weeks' duration, almost positively gonorrhœal. The absence of any complication or metastasis, of high or vacillating temperature. The more than usual chronicity and resistance of treatment, both local and constitutional, each being first attacks, and the trifling but curious coincidence of their accidental position side by side.

On careful examination of the notes of 202 cases of acute rheumatism in the female, treated in St. Bartholomew's Hospital, in not one is the presence of any vaginal discharge coincident with rheumatic inflammation of joints mentioned, or any history of the whole stress of the inflammation from beginning to end falling upon one joint alone.

MILLBANK PRISON HOSPITAL.

PERSISTENT HEADACHE; PARTIAL APHASIA; DEATH BY COMA.

THE following case is reported by Mr. Henry Brietzcke, F.R.C.S., assistant-surgeon, with remarks by Mr. R. M. Gover, medical officer.

The discussions which have taken place with reference to the researches of Drs. Hitzig and Ferrier, and the remarks recently made on the subject of intracranial disease, impart a special interest to the following case, which to some extent illustrates several points which have been of late brought prominently forward.

T. F——, aged fifty-two, a prisoner under sentence of seven years' penal servitude, was admitted into hospital January 12th, 1875, complaining of pain in the head on the left side, which, he stated, commenced suddenly five weeks before. On examination, there was a distressed look, and a tendency to shed tears. The man was well nourished, of a short and stout build, slept fairly well, and took his food well. When describing the pain he said it was severe, and always in the same spot, and that the skin was sensitive in that region. At this period there were no other symptoms.

On the 7th of April he stated that his sight was leaving him, also his hearing, and that he wished the "Lord would take him." The voice was muffled as if he was deaf, but he could hear when spoken to in a low tone.

With the ophthalmoscope the optic disc on the right side appeared very white, with an irregular margin and slight deposit of pigment on one side, and the retinal veins were large. In the left eye the retinal veins were much larger, but the disc was not irregular. Iodide of potassium was prescribed.

On May 28th he was seized with peculiar shudderings, occurring at intervals of about ten minutes, and with cramps in the legs, partial anæsthesia of face, neck, and upper extremities, but no loss of motor power. At this time slight ptosis of the left eyelid was noticed. A day or two after this the ptosis was more marked and the shudderings appeared to be started by a whiff of cold air or a scratch with a pen. The tongue was foul, and he vomited frequently. On the 2nd of June his condition was as follows: Slight drooping of left eyelid, but the other muscles of the eye supplied by the third nerve act well; pupils natural; no loss of sensation in the face, but the expression is different. Patient complains of numbness in the right arm; when he tries to walk he staggers, especially when the eyes are shut, but he does not fall or drag a leg; tongue foul; vomiting not entirely subsided.

June 3rd.—To-day he is in tears, and says he cannot speak well; he talks sensibly, but hesitates, and has some difficulty in selecting certain words. The shape of the mouth is slightly altered, especially when he talks; tongue furred; pulse quiet and regular; temperature 100·6° F.; second sound of heart prolonged; urine loaded with lithates; no albumen; cerebral macula moderately well marked.—*Ophthalmoscopic examination*—Left eye: Fundus red and cloudy, completely obscuring optic disc and vessels.—Right eye: Dark patch on outer and upper aspect of disc, extending nearly half round circumference. There is a hesitation in speech, and he takes some time to express himself, but he does not use the wrong word, and remembers his age, date of conviction, &c.

4th.—Complains very much of his right arm; it is not paralysed, but he continually rubs it, as if it were painful. He cannot express himself as he wishes, apparently forgetting the words "arm," "pain," "shoulder," but uses the first syllable of the latter, tries hard, and says "Oh dear!"

From this time delirium at intervals supervened, the temperature rose to 102° F. daily, and coma gradually set in, with subsultus and involuntary evacuations, and death took place on the 10th.

Necropsy, twenty hours after death.—The body was well nourished. Head: Veins of scalp full; vessels on surface of hemispheres full; a small quantity of yellowish serous fluid beneath arachnoid on surface of both hemispheres. On removing the brain, the dura mater covering the posterior part of the anterior fossa of the base of the skull on the left side—viz., the upper surface and posterior border of the lesser wing of the sphenoid—stripped off easily, was thickened and evidently diseased, and the part of bone described was roughened and bare, the anterior clinoid process was denuded, and felt sharp and irregular. On examining the base of the brain, the divided end of the internal carotid artery on the left side was gaping, its walls thickened, and involved with the middle cerebral artery in a dense and irregular membrane, which consisted of the dura mater and arachnoid adherent and incorporated. This thickened part corresponded in point of position with the bare and rough bone. The divided end of the carotid artery on the opposite side was collapsed and natural. The fissure of Sylvius and island of Reil were normal on both sides. The left middle cerebral artery ran through the thickened dura mater and arachnoid, but it was quite pervious, and, on slitting it up and examining with the microscope, its coats were normal, and there was no atheroma. The third nerve on the left side was involved in the thickened dura mater, and passed through it, but was not in any visible degree atrophied; the left sides of the pons Varolii and medulla oblongata were somewhat softer in consistence than the right, and this change extended to the fifth and sixth nerves, as well as to the eighth and ninth at their superficial origin. The softening, though slight, was clearly made out; there was some fluid in the lateral ventricles, but this was not excessive in quantity. The convolutions, corpus striatum, thalamus opticus, and other centres, were quite healthy in appearance. The lungs were engorged, small scattered deposit of tubercle, with pleuritic adhesions. The pericardium was closely and firmly adherent, and could not be separated without tearing the cardiac tissue, and the lymph was evidently of old formation; muscular tissue of left ventricle thickened, but firm in consistence and ruddy in appearance; valves healthy. Other organs healthy.

Remarks.—The first symptom of decided importance, as indicative of intracranial disease, was the very severe unilateral headache, with the significant accompaniment of slight ptosis on the same side. The character and severity of the headache aptly illustrate the remarks recently made by Dr. Moxon on this subject, and it is important to observe that this was the only symptom which was well marked during the earlier history of the case. The absence of other symptoms may without doubt be attributed not only to the limited extent, but to the site of the morbid processes then in operation, removed, as it was, from the great motor centres. One of the most interesting features in the case was the stationary character of the symptoms, and the absence of any indications of progressive organic change up to within a few days of death; and it may be well to draw attention to the complete absence of paralysis, with the exception of the partial ptosis, up to the time at which coma set in. The aphasia was due, not to any difficulty in the mechanical act of articulation, or in the origination of ideas, but it resulted from an inability to seize upon or arrange the words corresponding with the thoughts he evidently wished to express. It will be noted that the left middle cerebral artery, though involved in the thickened dura mater, was pervious. There was no apparent lesion of Broca's convolutions, or of the corpus striatum, or of any of the great nuclei in the neighbourhood. The alteration in the consistence of the pons and medulla, which was confined to the left side, was probably acute, and unconnected with any vascular lesion or obstruction. It is probable that the disease was specific, that it commenced in the dura mater, and extended to the subjacent bone, producing caries. The lesion was situated in close proximity to the fissure of Sylvius, and the part of the brain about which so much has been written with regard to the faculty of speech, but although it was sufficient to produce a temporary aphasia, it had not extended into the cerebral substance or reached the motor centres, and this may account for the absence of paralysis. The third nerve was involved either in the outer wall of the cavernous sinus, or, more probably, in the sphenoidal fissure, as the branch which supplies the levator palpebræ was principally affected. The ophthalmoscopic appearances were very interesting; possibly pressure on the third nerve produced alteration in the nutrition of the eye through the lenticular ganglion, and thus caused an appearance as of a cloudy vitreous. The adherent pericardium was not diagnosed during life; the only note made was to the effect that the second sound of the heart was prolonged.

EDINBURGH ROYAL INFIRMARY.

SURGICAL CASES.

(Under the care of Mr. Joseph Bell.)

For the notes of the following interesting cases we are indebted to Mr. Holland J. Cotton, house-surgeon.

Case of Compound Comminuted Fracture of Lower Jaw; threatened Spinal Meningitis; Recovery.—Harriet L——, aged seventeen, a servant-girl of weak mind, was admitted on the 28th November, 1874, suffering from a compound comminuted fracture of the lower jaw on the left side, a lacerated wound over the patella, and a bruise over the lumbar region of the spine. The patient, in a state of temporary frenzy, had thrown herself from a window four storeys high, in one of the best squares of the city, but her fall was happily broken by coming in contact with the sloping roof of an out-house. Mr. Bell, who was sent for at once, found a lacerated wound, fully three inches long, over the left horizontal ramus of the jaw, which itself was shattered into several fragments and protruding from the wound. The cavity of the mouth was opened into, and several teeth were broken and hanging loose. Having removed all loose fragments of jaw, but with as little of the periosteum as possible, Mr. Bell brought the upper and lower fragments together by boring the bone and passing stout silver wire through it. The bleeding was easily stopped, although the facial artery was completely torn across. A portion of dental nerve too, which was lying exposed, had to be removed. The wound was then sewn up, a drainage tube being passed right through into the mouth.

For the next three nights the patient was in a most critical condition, suffering from convulsive attacks of the muscles of the face and limbs, and presenting most of the symptoms of spinal meningitis. At the suggestion of one of the physicians to the hospital, forty grains of the bromide of potassium were given five or six times in the twenty-four hours, with an occasional dose of chloral at night, instead of the fifteen-grain doses of bromide of potassium and chloral thrice a day which she had previously taken. This in a few hours had the desired effect of subduing the constant twitching movements and removing the sleeplessness. The patient having thus been brought fully under the influence of the drug, the large doses were discontinued, and only a moderate dose administered whenever twitching of the muscles or great restlessness occurred. The wound meanwhile progressed favourably enough, being daily washed with a weak lotion by means of the tube which communicated with the mouth. There was much swelling of that side of the cheek, and there was a copious fetid discharge. The wound over the patella healed slowly, but was quite superficial, whilst the bruise over the spine was followed by no discolouration from ecchymosis. For days after, convulsive movements, however, could at once be brought on by firm pressure over one spot along the spine; and though the patient was eminently hysterical, yet these movements were evidently involuntary.

The after-progress of the case was slow, the fragments of jaw still crepitating, and occasionally causing considerable pain. A sinus remained; but at length (nearly two months after the accident) the two pieces of silver wire, which had held the fragments together, along with several spicula of dead bone, were expelled from the external orifice. By this time the jaw was consolidating rapidly, much new bone being thrown out, and little inconvenience being experienced therefrom. In another month the sinus had almost completely healed, and the patient ceased to attend the hospital, her jaw being firmly united, and her face wonderfully little distorted.

Case of Acute Necrosis of the Ulna; Removal of the entire Shaft; rapid Reproduction; Recovery.—Marion M——, aged eight, was admitted on the 31st of December, 1874, suffering from acute necrosis of the right ulna, and an incipient lumbar abscess. On the eighth day of the same month she had complained of shivering and headache, then of pain in her right forearm; and on the third day a red line was noticed stretching up the inner side of the limb, with swelling as far as the elbow. A doctor was called in, and he, after a week's attendance, incised the arm in two places and evacuated some pus; but finding that the patient was daily getting worse, and that an abscess was threatening to form over the right dorsum ilii, he sent her to the infirmary.

On admission the child was very weak, and looked excessively ill, complaining of much pain in the arm and back. On Jan. 2nd Mr. Bell removed the whole shaft of the ulna, which was necrosed, leaving the periosteum entire as far as possible, and at the same time he evacuated some serum from the lumbar swelling by means of a trocar. The patient improved rapidly after the operation, regaining her appetite, and looking quite a different child. The lumbar swelling disappeared, whilst in the arm much new bone was thrown out, and the wound granulated healthily.

On Jan. 30th she became an out-patient, and came occasionally to have her arm dressed. The whole shaft of the ulna had been reproduced, and the movements of pronation and supination were practised daily. For some weeks after a sinus remained, through which occasionally spicula of bone escaped, but this finally healed up; and the patient was dismissed with an arm capable of perfect movements, the ulna being slightly thicker than that of the other arm. Of the lumbar swelling nothing remained but a thickening of the crest of the dorsum ilii.

Reviews and Notices of Books.

Traité de Thérapeutique Médicale, ou Guide pour l'Application des Principaux Modes de Médication à l'Indication Thérapeutique. Par le Dr. A. Ferrand, Médecin des Hôpitaux de Paris. Paris: Baillière.

The relations of therapeutics are twofold. Its province is to determine the application of remedial agents to diseased action. On the one hand, therefore, it has to consider the disease, and on the other the remedy. Its study may be approached from either side. It is commonly taught in conjunction with materia medica. This method has a certain convenience, but it is founded on a connexion which is not, perhaps, the most important of its relations. A separate monograph on the action and use of each drug necessitates a minute subdivision of the subject of therapeutics, and a disjointed and most unsystematic treatment of each part. It is upon this plan, however, that most treatises have been written, as, for instance, those of Pereira, Garrod, Gubler, Stillé, &c.; but the method has never satisfied the earnest therapeutist. The fragmentary and disjointed presentation of the subject, like a reflection from broken water, conveys a very imperfect idea of its scientific form; hence many attempts have been made to unite the scattered elements. Groups of remedies have been considered together, a common description of their action being given, and thus by describing together cognate subjects, and avoiding unnecessary repetition, better system has been secured. But it is evident that any discussion of therapeutics from the side of drugs must leave one half, and that the more important half, of the subject very imperfectly treated. What to administer under any given circumstances must always depend as much, or more, on the occasion as on the substance to be given. In each disease, in every variety of each, the needful remedial agent or the mode of its administration may vary, and it is in the due recognition of the significance of each indication for treatment that the more refined part of the science and art of therapeutics consists. It is this part which admits, we are told, of the most systematic treatment—which can be raised with most completeness to something like scientific dignity. This part of the subject is considered, it is true, in the systematic treatises on disease, but it is there subordinated to diagnosis and pathological anatomy, and is not discussed with that width of generalisation which its importance and capabilities deserve. To effect this is the object of Dr. Ferrand's treatise.

A little consideration will render it clear that the indications for treatment which different diseases afford are of so varied a character that any attempt at their generalisation must produce a system of considerable complexity. This is unquestionably the case in that which is unfolded in the work before us. The various "indications" for the treatment of disease may be grouped in three classes—those afforded by the nature of the malady, by its form, and by its local manifestation. These are termed respectively the "nosological," "physiological," and "anatomical" elements, all of which are presented by each case of disease submitted to treatment. As therapeutical indications these elements differ in value. The nosological element, the essential nature of the disease, is its effective, or rather its realised, cause. The physiological element is due to the reaction of the system against the malady, and determines the form of the disease. The local seat, secondary in point of time, which constitutes the third element, is of little value as an indication for treatment, since it is only a secondary fact in the constitution of the malady, and is of less significance as to the remedial agent to be chosen than as to the place and mode in which it should be used. The "nosological" element is intimately united to the idea of the specificity of disease, and furnishes an indication of greater value, as is shown by the instances in which there exists a specific remedy for a definite disease. But the rarity of the instances in which this is the case, and the purely empirical mode in which alone the indication can be utilised, narrow the part it can play in general therapeutics. The "physiological" element, that which determines the form of the disease, is the true ground of therapeutical indication. It is so termed because it rests on the physiological properties of the tissues, the reaction of which determines the form of the disease, but in its employment the effects of functional and of nutritive changes have to be carefully distinguished. We know the substances which, in a physiological condition, accelerate or retard the activity of this or that organic system; we know how far these substances preserve that property in the various derangements of these systems, to what extent they will excite or calm their elementary functions, and we can obtain, to a considerable extent, by the administration of this or that agent the effect we desire.

The practical application of these principles to various diseases involves of necessity the discussion at some length of many details in their pathology and symptoms. This constitutes indeed the main bulk of the volume before us. Various classes of maladies are successively considered—first, nervous affections, cerebral, spinal, and sympathetic; next, vascular affections; and, subsequently, troubles of secretion, of nutrition, alterations of the blood, inflammations, fevers, infectious diseases, constitutional affections, toxic states, and parasitic diseases. The several indications referring to each of these "elementary troubles" are successively studied: first, the signs which characterise each, the variations in intensity which it may offer, the consequences it may entail, its essential pathology, the various remedial agents which may influence it, and the more immediate indication in each case for their employment.

As an example of the system, the third part may be taken, the subject of which is the indication for treatment drawn from disturbances of the vascular system. The first chapter is devoted to the "indication furnished by vascular congestion." The elementary type of vascular congestion is first described—i. e., the general characters of the morbid process. Its "pathology" is then discussed, the nervous and other agents concerned being briefly spoken of. The second section is devoted to the "therapeutical indication," which is, in this case, the diminution of the afflux of blood in the distended vascular system; and the means by which this object may be attained are successively discussed—(1) hygienic methods, as food, posture, cold; (2) moderating remedies which may lessen the force of the blood and lower the temperature; (3) "contra-stimulant remedies," which, acting through the nervous system, seem to cause anæmia of organs; (4) stimulant treatment, when the congestion is associated with a sluggish circulation behind the affected part; (5) astringent treatment, local and general; (6) direct evacuant treatment, as by local depletion; (7) indirect evacuant treatment, as by purgation. An article follows on the "mediate indications" for treatment, furnished by the pathological state in which the congestion arose, as specific, diathetic, or degenerative disease. A final article on "application" contains sections on the various forms and seats of congestion, and their appropriate treatment: general congestion, and congestion of brain, spine, lungs, stomach and intestines, rectum, liver, spleen, kidneys, uterus, on congestions in fever, and on those secondary to diseases of the heart; and under each head the appropriate treatment is described. The remedies given as appropriate to renal congestion are to furnish the organs with the elements for ready secretion, by diluent drinks and milk, avoiding irritating substances, as alcohol, and giving salines and diuretics with great caution, favouring secretion from skin and intestine, and employing, when necessary, revulsive measures, as sinapisms, &c. In a similar manner, and at almost equal length, the phenomena of anæmia and hæmorrhage are discussed in their several relations. The other sections are treated in a similar manner.

The system thus sketched is elaborated in the work at detailed and cumbersome length, but with a completeness and a patience on which the author must be congratulated. The system itself is perhaps as thorough as the present state of our knowledge will permit. In working it out, however, the Materia Medica side of therapeutics has been necessarily altogether subordinated, so as to reduce the practical usefulness of the book far below its value as an exposition of the theory of therapeutics. Some portions of the subject, also, closely connected in theory, are separated here, but this is perhaps inevitable from its wide and varied relations.

The Surgeon's Pocket-book: being an Essay on the best Treatment of Wounded in War. By Surgeon-Major J. H. PORTER, late 97th Regiment, Assistant-Professor of Military Surgery, Army Medical School, Netley. London: Chas. Griffin and Co. 1875.

THE materials of this handbook formed the essay for which a prize was awarded by Her Majesty the Queen of Prussia and Empress of Germany in the year 1874, and they have been specially adapted for the public medical services.

Its conspicuous merit consists, in our opinion, in the skill displayed in the selection and arrangement of its information. It contains little that is absolutely new perhaps, but the information, which is of the most practical kind, has not been put together, as is too often the case, with little discrimination or judgment, but with an evidently honest intention of giving the military and naval surgeon an epitome of the latest and best views, and the most trustworthy methods, of treatment of the wounds and injuries incidental to warfare. To write a good book on a subject of this kind is really a far more difficult task than is generally imagined, for its author must not only have been an industrious and critical reader, but a sagacious and good observer of what the requirements of the army surgeon are under circumstances and in emergencies which try the practical ingenuity and judgment of a man in a way that they are never likely to be tried in civil practice, where there cannot be the same demand for promptitude and decision, where every appliance is at hand, and where the after-treatment of an operation can be carried on leisurely, and without the dangerous risks that have to be encountered in the field from overcrowding, insufficient food, hurried dressings, and frequent changes of locality. The author has not written a manual on surgery, of course, but limited himself to those subjects which concern the military and naval surgeon, including a variety of matters about which medical officers will find it very useful to have a ready guide in field practice. Without being too diffuse, the author has not erred on the side of being too dogmatic. He has given the different views and varieties of practice inculcated by different authorities where these are not agreed, leaving the reader to exercise his own judgment. He has drawn on the writings of German, French, Italian, and American surgeons, as well as those of this country, for the materials of his book, which is besides well illustrated, and altogether a very creditable and useful production.

Popular Natural Philosophy. Translated and Edited from Ganot's "Cours Elémentaire de Physique," by G. ATKINSON, Ph.D. Second Edition. London: Longmans. 1875.—We are glad to notice this little book, which will prove useful to a wide circle of readers and teachers, since it represents about the amount of knowledge required for the Matriculation examination of the London University. It is divided into eight books, treating respectively of the General Properties of Matter, Hydrostatics, Gases, Acoustics, Heat, Light, Magnetism, and Electricity. It is admirably illustrated, and throughout most clearly written. It ought to be in the hands of the higher classes of all our public schools, and if the principal facts it contains were early demonstrated by experiment to those about to become members of the profession we should have a far larger number of accurate observers, and much fewer loose theories than at present.

GLASGOW IN 1874.

THE annual report upon the "Vital, Social, and Economic Statistics of Glasgow for 1874" has recently been issued by Mr. W. W. Watson, the City Chamberlain, and contains invaluable materials for a careful study of the growth and sanitary condition of this important city. The population of Glasgow, which in 1801 was but 77,385, was estimated at 508,109 in the middle of 1874. Between 1811 and 1821 the increase of population was equal to 46 per cent., whereas in the last two decades, 1851–61 and 1861–71, it did not exceed 20 and 21 per cent. respectively. The marriage-rate in 1874 in Glasgow was equal to 19·7 per 1000, and corresponded with the rate in 1873; the birth-rate was 39·4 per 1000, a rate which considerably exceeded that which prevailed in any recent year, except 1872; the death-rate was also exceptionally high, and equal to 31·2 per 1000; excepting 1871, so high a death-rate has not prevailed in any year of the past decade. In referring to this excessive death-rate in Glasgow last year, it may be noticed that Mr. Watson has revived a now all but exploded false theory, when he says, "We must not lose sight of the fact that a very high birthrate, such as is exhibited above, leads of necessity to a heavy death-rate, from the very large proportion of the infantile deaths which occur in a dense manufacturing population." This fallacy, which was not long ago put forward by Dr. Letheby, was recently so conclusively exposed in a paper read before the Statistical Society that it is surprising to find one of its fellows reproduce it without any allusion to the controversy to which it gave rise. It has been proved beyond all doubt that in all populations in which high birthrates prevail the effect upon the death-rate of the large proportion of infants and young children is more than counterbalanced by the high proportion of young adults, among whom the rate of mortality is low, and by the small proportion of persons aged upwards of sixty years, who are liable to a death-rate nearly as high as are children under five years of age. Sanitary condition being equal, the deathrate in Glasgow ought to be lower than in the rural portions of Scotland, where the birth-rate falls below 30 per 1000. The explanation of the high rate of mortality in Glasgow in 1874 is, however, not very difficult to discover. The remarkable severity of the weather in the latter part of November and throughout December caused almost universally high death-rates. Glasgow suffered to an exceptional extent, even for a large town. During October 1274 deaths were registered, while the number rose to 2101 in December. The greatest sufferers were adults and elderly people; among children and young people under twenty years of age the deaths in December exceeded those in October by 26 per cent., between twenty and sixty years the increase was equal to 119 per cent., and among persons over sixty years to 208 per cent. As regards the causes of death in 1874, we find that bronchitis and pneumonia killed 3332 persons, against 2934 in 1873, and that the fatal cases of scarlet fever showed an increase of 1072. Much has undoubtedly been done in Glasgow in recent years to improve its sanitary condition, and it would be manifestly unfair to take the result of so exceptional a year as 1874 as evidence that no real improvement has taken place. Mr. Watson very properly calls attention to the marked decline in the deaths from typhus in recent years. In 1864 and 1865 the fatal cases in Glasgow were 1138 and 1117; the average annual deaths from this disease in the ten years ending 1874 declined to 479, and the numbers in 1873 and 1874 were but 79 and 114 respectively. When we observe, however, that the annual death-rate from the seven principal zymotic diseases was equal to 7·4 per 1000 of the population in Glasgow in 1874, whereas it was but 3·3 in London, and averaged 4·5 in eighteen of the largest English towns, the sanitary work that has still to be done in the largest Scotch town is but too painfully apparent. We shall anticipate with much interest the report of Dr. James B. Russell, the medical officer of health for Glasgow, upon the exceptional mortality during 1874.

THE LANCET.

LONDON: SATURDAY, JULY 31, 1875.

The case of George Blampied, lately tried at Maidstone, shows in clear contrast the medical and the legal views of the mental condition that involves irresponsibility. It is of the last importance that this contrast should be well understood. And although the law as laid down by the judge (Brett) on this occasion was, as might be expected, exactly what has been well known to the medical profession, it is desirable from time to time to reproduce it on every occasion of its practical application. We will therefore briefly state the case, quote the judge's exposition of the law, and offer some comments that appear to be called for in the interests of humanity and justice.

George Blampied, a man of middle age, was indicted for the murder of James Catt. They were both employed in the dockyard at Chatham. A few months before the deed in question they had had an altercation, but had since been on apparently good terms. On the 16th of April they were at work together on the same mast, about six feet from each other, and the prisoner was using an adze. Suddenly those who were near the two men heard the sound as of a blow, and heard the deceased cry out "Oh! oh!" A workman ran to the spot, and found Catt lying down and the prisoner standing close to him with the adze in his hand. Another witness who came up saw the prisoner move from the deceased. This witness cried out, "He has killed Jemmy." On which the prisoner said, "No, he has killed himself"; and afterwards he added that Catt had taken up his adze and killed himself. The inspector of police said that the prisoner called to him and said he had something to report, and went on to say, "I have been employed in the masthouse, and when I turned round, James Catt, who was employed with me, took hold of my adze and struck himself on the head with it, seriously injuring himself." The inspector said, "He's dead, then?" The prisoner replied, "No, I don't know about that." "Where is he?" asked the inspector. "At the surgery," said the prisoner, adding, "he was a good mate, a good workman, and a good fellow." The inspector read over to the prisoner his statement, and he said it was correct.

These, then, are the bare facts. The homicide was undoubtedly the act of the prisoner. When arraigned, he pleaded "Not guilty." The defence set up was that he was insane. In support of this plea, the surgeon who attends in the dockyard stated that in April, 1874, the prisoner had been under his care for a few days for swimming in the head, and again for a few days in October for melancholia. The surgeon of the police at Chatham, who saw the prisoner in custody the day after the occurrence and conversed with him, stated that he asked the prisoner, "Do you know what you are here for?" He said he had knocked his mate on the head, "and the stupid fellow fell down dead." "Then you killed him?" said the surgeon. To which the man replied, "I knocked him on the head, and he fell down dead." This witness stated that in December, 1868, he had signed the certificate for the removal of the prisoner to Barming Lunatic Asylum as a lunatic, where he remained until December, 1872, when he was discharged as cured. Mr. Joy, the medical attendant of the gaol, stated that since the prisoner had been there he had had frequent opportunities of seeing him, and had conversed with him constantly, and he was of opinion that he was of unsound mind, mad upon the subject of religion. He thought, he said, it was a sudden act—an act committed from a sudden impulse.

The medical attendant of the Lunatic Asylum at Barming stated that the prisoner's grandfather was insane and also one of his sisters, and that when he was received there in 1868 he was suffering from melancholia caused by religious delusions. He was discharged as cured, and was believed to be cured, and the certificate of his discharge was absolute and unconditional.

The judge put the question to Mr. Joy—"Do you think that he knew, when he struck that blow with the adze, that it was likely to kill the man?" Mr. Joy replied—"No doubt he knew that, but I believe the act was uncontrollable." To the evidence that the man had been in a lunatic asylum, the judge observed that he did not see how this affected the question. "The man," he said, "may be mad—I assume that he is so in the medical sense of the term; but the question here is whether he is so mad as to be absolved from the consequences of what he has done. He is not so absolved, though he is mad, if he was not so mad as not to know what he was doing, or not to know that he was doing wrong." And, in summing up, the judge said, referring to the report of the judges on M'Naughten's case, "this had been declared to the House of Lords by the judges of England many years ago, and by the law so declared judges and juries were equally bound." It is unnecessary to cite the well-known terms of the report. Their purport is expressed with sufficient accuracy in the passage quoted.

It being granted, then, that it made no difference whether Blampied was mad or not, it is superfluous to insist upon the evidence that he was mad. We may, therefore, merge his particular case in the general question. We may start with the fact that the law of England, like that of all other civilised countries, recognises that irresponsibility is the inherent attribute of insanity. The admission of the plea of insanity establishes this point. *Primâ facie*, then, to establish insanity is to establish irresponsibility. Upon medical science it falls to make good this *primâ facie* case. And, having done this, it is the universal contention of those who have made lunatics and insanity their study by clinical observation and other methods of research, that they have done enough. They know the absurdity of attempting to reconcile reason and unreason, health and disease. They know that insanity, where it exists, leavens the whole mass. They know that a diseased organ cannot work healthily. Observation tells them that man, complex though he be, cannot be sane and insane—that is, responsible and irresponsible at the same moment. Cases, indeed, there are, but they are not common, in which monomaniacs, as they are called, may appear sane until their particular delusion is hit. But it is a gross and dangerous, albeit a popular error, to conclude that these persons are really sound even in part. They are more or less under the dominion of their craze; it underruns the whole current of their thoughts, and may at any moment sway them irresistibly.

We do not know that the illustration has ever been used, but it seems not inappropriate to apply the creed of phrenology as the foundation of the legal doctrine of combined sanity and insanity. If we suppose the mind to be made up of distinct faculties—as perception, comparison, volition, and so forth,—each faculty having its own separate organ, it is easy to conceive that one of these faculties may suffer alone when its particular piece of brain is diseased. Lawyers, then, are phrenologists. We do not know how far they will thank us for this suggestion. It is, however, the best explanation that can be offered of their theory. They will find no support for it in true science. In truth, they do not appear to care to base their theory upon science of any kind. Their famous creed is pure dogmatism—an admirable example of the absolute *sic volo, sic jubeo.* When Mr. Justice BRETT emphatically said that the law, as he expounded it, "had been declared to the House of Lords many years ago, and by the law so declared judges and juries were equally bound," he really uttered what may challenge criticism. In the first place, what the judges declared was their interpretation of the law, and not the law itself. We hold ourselves at liberty to question whether this interpretation is the just one. In the next place, the fact that this declaration was "made many years ago," whatever the consecrating effect time may give in the legal estimation, is rather presumptive of error. Science is in its nature progressive; and this, a scientific question, clearly demands reconsideration. Law, on the other hand, built largely upon precedent and authority, is in its nature stagnant. But it must in the long run yield to the force of knowledge, and remodel its doctrine and practice in conformity with science.

The declaration of the judges hangs upon an impossible postulate. No man that has been at one time sane, and therefore trained in accordance with the modes of thought of his fellow-men, can, even on becoming insane, be freed altogether from the influence of that training. The sense that killing is wrong may remain. And it is transcendently absurd to look for a man so demented as not to know that striking another on the head with an adze is likely to injure or to kill him. Such a man can hardly be found in a lunatic asylum, and, *à fortiori,* can hardly be found out of one. He is not a creation of nature, but a legal fiction. Carried to its legitimate applications, the legal doctrine would abrogate the law of irresponsibility on the ground of insanity. The doctrine is therefore judges' law, not statute law.

Had juries invariably accepted this doctrine, and acted upon it, the exhibition would long before this have been so revolting that it must have been revised. Fortunately, juries, supported more or less by public opinion, have been, intermittingly, it is true, engaged in tempering this doctrine in practice. This moderating influence is always at work. The judges may still assert what they declared "many years ago." But it is less easy to induce juries to obey them. Through juries science often speaks. Sensible men will, in spite of strong dictatorial charges, take their medical and other scientific instruction from experts, and not from lawyers. In this way the famous interpretation of the law has been deprived of much of its evil force. It is becoming practically obsolete, and must at no distant date be given up even by the lawyers.

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AT the Marylebone County Court a case was decided on the 20th inst. which is important in that it defines to some extent the fees to which a medical practitioner is entitled for his constant attendance upon an important case after surgical operation. The facts are briefly as follow:—

In the night of the 1st of March of the present year, a little boy five years of age, the son of Herr BEHRENS, the well-known bass singer of Her Majesty's Opera, was lying at the point of death from diphtheritic croup and laryngeal obstruction. Dr. WILBE, of Finchley-road, who was in attendance, summoned Dr. RICHARDSON, who came and immediately performed tracheotomy. The operation gave direct relief, but as it was foreseen that in the course of the case there would be great difficulty in keeping the artificial opening clear of secretion and false membrane, and as Dr. WILBE's professional avocations prevented his own constant attendance, the services of Mr. T. OTLEY LOVELL, who lived near, and who had assisted Dr. RICHARDSON in a similar previous case, were obtained. In order to give every possible chance of success at a moment so critical, Dr. RICHARDSON fitted up and left at hand his apparatus for artificial respiration after tracheotomy, in readiness to be used at any moment should the natural respiration cease, and Mr. LOVELL was left in responsible charge to carry out whatever was decided on at the different consultations that had to be held. In this duty he was relieved at intervals by his brother, also a qualified practitioner; and it was proved in evidence that the attendance thus rendered by the Messrs. LOVELL extended over one hundred and thirty-two hours. In the course of this time the tracheal tube was repeatedly blocked by secretion, and but for the constant and skilled attention of the watchers the child would have been suffocated; at one moment, in fact, the natural respiration of the patient actually stopped, and the application of the artificial respiration by Dr. WILBE and Mr. LOVELL brought back life when to all common observation the child was dead. In the end a complete recovery rewarded the anxious efforts of Dr. RICHARDSON and his colleagues. At the close of their attendance Mr. LOVELL sent in an account for his services, at the rate of five guineas for every twenty-four hours of attendance. To this Herr BEHRENS objected on the ground that the sum was too heavy; whereupon Mr. LOVELL at once reduced his terms to three guineas for each twenty-four hours, the sum total of his account being seventeen pounds seven shillings and sixpence for the whole attendance. This reduced account Herr BEHRENS still refused to pay, and hence the action at the County Court before which Mr. LOVELL, by his counsel Mr. PATERSON, contested his claim. In the defence no pretence was made that the plaintiff was unable to pay, neither was the sum named for the service rendered now pleaded as excessive, but an attempt was made to show that the whole period of one hundred and thirty hours was not passed by the plaintiff and his brother in the sick room. It was urged that in the course of the attendance the patient was left for twenty-six hours, so that technically the attendance extended to one hundred and six hours only. The evidence of the Messrs. LOVELL proved that, except for short intervals, when they went home, and even then were ready to be called, they never left the patient unattended; and Dr. RICHARDSON came forward to give hearty testimony to the devotion and perseverance with which they had carried out every detail that had been entrusted to them. He also, together with Mr. TIMOTHY HOLMES, Dr. CLEVELAND, and Mr. WEBB, expressed to the Court the opinion that the original charge of five guineas for each twenty-four hours of attendance was a fair amount, and that the reduced fee of three guineas was most moderate. An effort to depreciate the value of the services rendered by Mr. LOVELL signally failed. "Do you mean," the advocate for the defence asked Dr. RICHARDSON, "that you took Mr. LOVELL into your consultations?" "Certainly," was the answer. "But you do not mean to say you accepted any suggestions from him?" "Yes, some very useful suggestions," was the instant reply. In the end the jury, after hearing the advocate for the defendant, the counsel for the plaintiff, and the summing up of the judge, decided at once for Mr. LOVELL for the full amount, and costs were allowed.

We have stated these facts at some length because they afford a decision on which what may be called the minimum fee for constant day and night attendance by a medical practitioner may in future be based. This point has never, as far as we know, been decided before. An attempt was made by the counsel for the defence to extract from Mr. HOLMES and Dr. RICHARDSON that the fee in such a case was a mere fancy sum; and the latter gentleman's fee for the operation and after-visits, which the plaintiff said he had not yet paid, was adduced in order to show that it was very much less than it would probably have been if the child whose life was saved had been the son of a wealthy man. But the argument did not prevail, and what we must consider a minimum rate of charge to persons who, though not wealthy, are certainly able to pay for important professional services, when they can be brought under the hand of the law, was thus defined.

A conspicuous feature in this trial, and one we cannot omit to name, was the summing up of the judge, Mr. Serjeant WHEELER. With singular lucidity of statement and decision his Honour told the jury that, in a judgment such as was before them, they must take into consideration, not merely the time of the service rendered, but the importance of the service. He had calculated that, for the duties performed in the hundred and thirty-two hours during which they had been substantially in attendance, the Messrs. LOVELL had asked for the sum of two shillings and sevenpence per hour. A surgeon working night and day at this rate, in ordinary practice, would not earn more than a thousand a year, and it could hardly be expected that, for a service so purely exceptional as had here been rendered, a less than ordinary fee should be demanded. In a word, if his Honour had understood practically what it is, in the way of service, to carry out the details of treatment of a terribly infectious disease for a hundred and thirty-two hours, to see for that time the peril of the patient, and to hear for that time the anxieties of parents and friends, he could scarcely have expressed with better feeling and judgment the weight of the responsibilities that attach to the professional attendant, or the spirit in which those responsibilities should be received. We venture, in the name of the profession, to thank Mr. Serjeant WHEELER for his kindly appreciation of us and of our labours. It is not often we receive so much consideration, and it is the more welcome in the present instance because it comes to us with the weight and calmness of judicial authority.

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IN a letter to *The Times* of July 22nd, Mr. GEO. POLLOCK directs the attention of the public to the relative dangers of ether and chloroform as general anæsthetics. Whatever comes from the pen of Mr. POLLOCK is certain to secure attention, for the *vis familiæ* which has made his name so thoroughly a household word in this country is characteristically present in every sentence. The fact makes it the more regrettable that Mr. POLLOCK should have chosen the leading journal for his letter, in preference to the journals that are strictly devoted to the discussion of topics of a purely scientific and professional order. It is the wanton fate of all medical scientific communications made to the general newspaper that they call forth at once a number of weak and very irrelevant statements and opinions on which the public can form no correct judgment, which in the end excite alarm, and which confer no trace of reliable knowledge. The public finds itself suddenly in the midst of an argument without being supplied with the premises, and without being familiar with the authorities on whom it may rely. In one sentence, uncompromising in its reading, Mr. POLLOCK asserts that, while the administration of chloroform is by no means "unfrequently fatal, even when administered by experienced hands," the other anæsthetic—ether—"may be used most freely, is devoid of danger when pure, and has never been known to destroy life." In another sentence Mr. POLLOCK informs his readers that this "is a big subject," and, in continuance, he suggests significantly that it is a subject which judges, coroners, and magistrates may have to deal with in connexion with the practice of the professors of the healing art.

We believe that Mr. POLLOCK has stated one side of the "big question" with too much emphasis; and that he has omitted to mention many facts on the other side which would materially modify any opinion that would be delivered by a judicial mind upon all the facts. The relative safety of ether and of chloroform, as at present understood, is, as we have already admitted on former occasions, in favour of ether. This has been the experience of all of us who, from the first introduction of anæsthesia, have followed the history of the subject. SNOW, who commenced by administering ether and moved from that agent to chloroform, admitted the greater safety of ether; and, with his usual fondness for simile, described ether as the tinder-box and chloroform as the lucifer-match—by which he meant to convey that ether is the clumsiest and at the same time the safest agent. But these admissions, which after all are based on imperfect data, are very different, as they deserve to be, from the out-and-out statement that ether administered for anæsthesia has never destroyed life. Within a few months after its introduction—viz., in July, 1847—a pure death from ether took place at the Hôtel Dieu d'Auxerre; and in the course of the same year other deaths, assumed to be from ether, and certainly on as good evidence as has been often assigned since in relation to deaths attributed to chloroform, were reported in this country. The effect of these untoward events at the time they occurred was startling, and shook the confidence of the profession in the use of ether so seriously that if chloroform had not been introduced we doubt whether general anæsthesia would have held its ground at all. Chloroform came, we had almost said, to the rescue, and with its employment a given and calculable mortality. At length the mortality, made matter of certainty by repeated experiences extending over twenty-six years, having created a natural alarm, the discarded ether has reassumed to some extent its original position, to receive in its turn its original estimate, to be proved much less handy and much more expensive than chloroform, and to be attended with death from or during its action. Within a period of a few months, in this kingdom alone, a youth has died simply from the effects of ether; two adults have died during its action, if not from it; and more than one case, of all but fatal character, has been observed.

It follows, then, that the absolute safety of ether is not proved, and though we incline to think that it is safer than chloroform, the wish that it is may, after all, be the parent of the belief. In plain truth we have no data on which to base a perfect conclusion. Ether has been administered in so infinite a number of times less than chloroform that it is impossible to reckon the relative mortalities from the two agents. If we were to compare the chloroform administrations by a hundred to one over the administrations of ether we should certainly not be exceeding the mark, and although we believe that chloroform kills at the rate of one to every two thousand five hundred who inhale it for anæsthesia, we are able to arrive at this approximate number by a calculation only of a number of cases of which no tithe has been presented on the side of ether. We doubt whether up to the present time one hundred thousand administrations of ether could be shown; and if all the deaths during its administration for that number of times were recorded, they would still afford insufficient data for comparison with chloroform. We deal, therefore, with no more than a general impression when we say ether is safer than chloroform. Such an impression is commonly correct, but it is not exact, and in accepting it a considerable licence must be permitted, for it may be wrong. Any way, the time has not yet arrived for putting it forward in the light of a proven fact of science, nor will the time arrive until the practice of the administration of ether shall become as universal as is now the rival practice of the administration of chloroform.

We are driven unwillingly to make these comments on Mr. Pollock's forcible letter. Neither ether nor any other known general anæsthetic yet discovered is absolutely safe when it is administered to the extent of completely destroying sensibility, and it is but fair to all our brethren, who, guided by the worthiest and best intentions, are obliged to administer the different agents for extinguishing pain, to declare this truth.

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It is satisfactory to know that the attention of the practical mind of Mr. Cross has been directed to the case of the child Emma Plain, who was attended by an unqualified practitioner at a dispensary in Islington, and who died under the treatment there received. In answer to Mr. O. Lewis, the Home Secretary said "his attention had been called to the verdict of the jury at the inquest upon the body of Emma Jane Plain, aged nine months—viz., that while they found that the death was from natural causes, they pointed out the fact that the deceased received medical treatment at a dispensary in Copenhagen-street where medicines were administered by an irresponsible unqualified medical practitioner. This was an unfortunate case. All he had to say about the state of the law was that the question now raised by the hon. member was discussed at the time of the passing of the present Act, whether absolutely unqualified practitioners ought to be allowed to administer medicine. The law was, that if an unqualified person held out, in any shape or form, that he was a qualified practitioner, he was liable to punishment; otherwise not. As the question was one which came within the province of the Lord President of the Council, he would call his noble friend's attention to it."

It is to be hoped that the Lord President will not think the evil illustrated by this case a slight one or one unworthy of the attention of the Government. It is, in truth, a very extensive and extending evil. A similar case has been brought to light in an inquiry by Mr. Donaldson, the deputy coroner for the Eastern Division of Middlesex. In this instance an infant child named Herbert Wilson became ill, and was taken by its mother to Bethnal-green Dispensary. The fee necessary for a week's attendance—viz., 2s. 6d.—was paid. The child was visited by Mr. Smyth, and was supposed to recover under his care. It fell ill again, however, and was taken by the mother to the Hospital for Children, where the medical officer seemed to advise her to have attendance at home. Thereupon she sent to the dispensary again. On this occasion she was attended by a properly qualified medical man, instead of Mr. Smyth, who was unqualified, but who told the jury that he was part proprietor of the dispensary, and had "a properly qualified medical man, Mr. M'Gill, who did half the prescribing, and the remainder was done by himself as assistants would do." We hope Mr. M'Gill feels flattered by occupying this relation to Mr. Henry Beardmore Smyth. Finally the child was seen by Dr. Sarvis, the medical officer of health for Bethnal-green, who considered it to be labouring under pneumonia after measles, of which it died. Whatever Mr. M'Gill's feelings may be in regard to his relations with Mr. Smyth, it is a serious thing, at variance with the interests of the people and with the intentions of the Legislature, that they should be thus deceived at a quasi-medical institution purporting to supply them with duly qualified medical attendance. Mr. Beardmore Smyth himself says that half the work is done by himself, and that he is not qualified. Just as Mr. M'Gill might speak of having an unqualified assistant, Mr. Smyth speaks of having a qualified medical man. This case is different from that of a general practitioner who has an unqualified assistant acting in strict subordination to himself. Here the unqualified man is part proprietor, and does half the work. We are not going to argue that if this child had been attended throughout by a properly qualified medical man, the insidious accession of the pneumonia would have been perceived and prevented. Such cases are difficult enough of treatment even for qualified medical men; how much more so must they be to the unqualified. But the point of these cases is that, in a way not contemplated by the framers of the Medical Act, the public are in fact deceived by the use of certain words on signboards or on brass-plates. The Medical Act forbids specifically the false use of titles, such as that "of Physician, Doctor of Medicine, Licentiate in Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner or Apothecary," or any other name, title, or description implying that the person using them is registered under the Medical Act, or that he is recognised by law as a medical man. Men like Mr. Ker and Mr. Henry Beardmore Smyth know this very well, and avoid the use of such titles. But they set up a sign on their house, and call it a "dispensary" or a surgery, and announce hours of consultation and terms of attendance; and it is amply proved that whole classes of people, whole neighbourhoods, are deceived by these expressions into thinking that they are receiving the advice and the medicines of men with the *imprimatur* of the State upon them. It is for statesmen to consider whether the law cannot be so amended as to make it illegal to give misleading titles to houses or buildings, or in any other way to get money out of people for medical purposes under false pretences. A surgery implies a surgeon, a dispensary a qualified medical practitioner capable of giving medical advice, and such words mislead the public almost as effectually as the false use of personal titles. The members of the medical profession are greatly injured by such devices, and it is hard that they should be, considering at what a cost they purchase medical titles and privileges. This may seem a slight matter to our legislators, but they cannot disregard the proof or think lightly of the fact that cases of serious disease are taken to perfectly unqualified practitioners under the delusion that they are regular medical men, and that the present state of the law is such as to permit of such deception being practised with considerable chance of impunity.

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The Middlesex magistrates, in the exercise of their wisdom, determined, at their last meeting, held on July 22nd, to refer to the Parliamentary Committee an amendment of the Coroners' Act. The chairman, Captain Morley, trusted that the Committee would recommend that coroners should be appointed by the Crown, that they should be paid by fixed salary, that they should be barristers-at-law, that the Courts of Quarter Sessions should have the power of refusing to pay the costs of unnecessary inquests, and that the coroners should be set in motion by the police and should direct their warrants to police constables. If the Middlesex magistrates would have the prudence to extract the clause for suggesting barristers as the judges most fitted to inquire into causes of death, and the modesty to add a clause that would exclude themselves and all other magistrates from interference with coroners, the recommendations would be of value. But whether Parliament will ever be persuaded to take the power of election of coroners out of the hands of the people, and place it in those of the Crown, is a question which the Middlesex magistrates may take time to consider. It will fill up with advantage all the time during which their own magisterial existence is permitted and sustained.

Annotations.

"Ne quid nimis."

THE NEW CHILDREN'S HOSPITAL.

On Monday the new Children's Hospital in Great Ormond-street, which has just been completed after designs by Mr. E. M. Barry, was thrown open for a "private view," and was visited in the course of the day by large numbers of persons.

There is not room for two opinions as to the very high architectural merits of the new buildings, which cannot be said to belong to any one style of architecture, but combines many of the best qualities of Byzantine and Tudor. The material is of red brick, and much use has been made of terra-cotta for ornamentation. Although the building is ornamented in the highest degree, ornament has almost everywhere been made subservient to utility, and the public will have no cause to complain that their money has been frittered away upon purposeless decorations.

The building is oblong in form, and consists of a central block (which contains, in addition to the hall and staircase, the chapel, operating theatre, ward kitchens, and officers' rooms) and two wings, which are entirely devoted to the patients' wards. The wards are floored with teak, which is to be semi-polished; the walls are of glazed brick of different colours, and the ceilings are of white Parian cement. Beneath the white ceiling, and at no great distance from it, hangs the gas-lamp of seven burners, which in a very short time must blacken the white Parian which at present looks so cleanly. Why some modern form of gas-lamp which carries off the products of its own combustion was not chosen we are unable to say. The heating is partly by hot-water pipes, and partly by a Galton's stove in the centre of the ward. The ventilation is by the windows, of which there is a row on both sides, and by special ventilating apertures above and below them, and also in the ceiling. A great feature in the construction of the wards are the balconies which flank them on either side, and which will serve as charming airing-grounds for the little patients. The closets, lavatories, and sinks are quite outside the wards in octagonal towers, which have their own arrangements for ventilation, and which are one of the chief ornamental as well as sanitary features of the building. In the roof of each closet, just over the gas-jet, is the aperture of a flue which runs in the wall of the turret to its uppermost chamber, which is elevated several feet above the general level of the building. Ventilating shafts from the soil-pipe of each closet are also carried in a similar manner to the upper chamber of the turret, which is kept always heated by a stack of iron pipes, which are in constant connexion with the hot-water service of the hospital. In this way a constant up-draught is maintained, and a thorough ventilation of the closets and soil-pipes is ensured. In winter the wards are supplied by a constant stream of heated air passing through shafts which are in direct communication with the open air into the centre chamber of the Galton's stoves, which stand in the centre of the ward. The drains of the hospital enter the main sewer at two points, which are each guarded by double traps; and between the traps there is a ventilating shaft, which runs with the other sewer and closet ventilators to the upper heated chambers of the towers. The attic storey is devoted to the nurses' bedrooms, which struck us as being none too large, the cubic space provided for two nurses being on a rough but liberal calculation about 1400 ft.

There are all the best modern appliances for the saving of labour in the shape of pneumatic bells, speaking-tubes, cooking-ranges, dust-shoots, coal-lifts, and dinner-lifts, the attention paid to details of this kind having been most minute. The mortuary and post-mortem room are not complete, and the resident officers' apartments were not open for inspection.

The out-patient department, with the dispensary and kitchen, is in the basement, and every effort has been made to facilitate work and prevent confusion. The hospital provides accommodation for 112 patients, and contains special wards for whooping-cough and cases of infectious fever which may occur among the inmates, as well as private wards for cases requiring absolute quiet or special attention.

One of the great attractions to the visitors on Monday was the chapel, which is a perfect gem of ecclesiastical decoration, in which alabaster, mosaics, stained glass, and metal-work vie with each other to charm the eye. This chapel is the gift of an anonymous benefactor, and no part of its decoration has been paid for out of the ordinary funds of the institution. There can be no doubt that in its new building the Children's Hospital will pursue its career of charitable and scientific utility for which the public and the profession have alike been its debtors for the past twenty-five years.

NURSING.

THE publication of a Report from the Sub-committee of the National Nursing Association recalls our attention to this very important subject. This report shows in detail, and most truthfully, how many lives in all grades of society are annually sacrificed because persons cannot be found to carry out skilfully and faithfully, as well as tenderly, the advice and directions of the physician. This want affects rich and poor alike. Many of those who live in palatial establishments, and are able to obtain anything and everything that money will buy, have experienced the sad fact that the lives of those nearest and dearest to them have been lost because the careful conduct of the nursing was not properly provided for. And the same want exists in the homes of the poor. If we compare ever so roughly the work done in the out-patient and internal departments of our large hospitals, and consider that the patients prescribed for in the former are wholly without the means of obtaining one important essential to recovery—skilled attendance,—it will show, if no other reason existed, that a large proportion of the advice and medicine given is hopelessly wasted. The report, which appears to be chiefly the work of Miss Florence Lees and Mr. Rathbone, aims high, and a programme is sketched out that will require much continuous labour and skill to carry out successfully. A training school is proposed in close connexion with a hospital, a district home in the vicinity of the hospital, and responsible to the training-school, which home shall, so to speak, nurse the district immediately surrounding it, and also send out nurses to other districts. A year's hospital training and three months' work in the "head quarters" district home are to qualify for the certificate of competency. It appears to us that, in the first instance, a beginning might be made by requesting all the chief hospitals, both in London and the provinces, to receive a certain number of probationers, who would, under proper supervision, acquire the rudiments of their art, and after an interval proceed to the training-school for special as well as practical study. Of one thing we may be sure, and it is that all hospital authorities should aid and second, as far as possible, the efforts of this Association. The work will of course be conducted apart from all sectarian or special religious proclivities, so that on this score no opposition can be fairly raised by the governing body of any institution. But we would repeat in effect the observations made in May of last year, when the Association was commencing preliminary arrangements, that, in our belief, the raw material for nurses is not so abundant as appears to be generally supposed. Nursing is laborious and risky, and involves a large expenditure of patience, tact, and temper. But the best material for the manufacture of good nurses will probably be found among the middle classes, in which there are hundreds of well-bred and fairly educated women who, in making this work their study, may ennoble it and themselves at the same time, and relieve a vast amount of human suffering in all walks of life.

THE CHESTER INFIRMARY.

Two questions of some delicacy and much interest have been discussed at a special general meeting of the governors of the Chester Infirmary. One took the form of a proposal to reduce considerably the number of recommendations for in- and out-patients allowed to subscribers, in consideration, first, of the greater cost of everything used by the sick, and, secondly, of the principle (happily becoming more and more recognised) that true charity consists in supporting an institution where the neediest are helped in preference to the less needy. In the case of hospitals, clearly the only judges of the fittest cases must be medical men. To the credit of the governors of the infirmary, this proposal was carried.

The next question came up as a result of the resignation of Dr. Waters as a physician of the infirmary, after an honourable service of twenty-five years. It had reference to the qualifications of candidates for the post of physician to the hospital. The bye-laws require that the candidates shall be graduates of certain universities. The rules which prescribe the qualifications of physicians in country infirmaries —and in London hospitals, too, for that matter—are just a little out of date in this advanced period of the world, and in this age of reciprocity in British medical qualifications. In some London hospitals, for example, it is of no use for a graduate of London or Edinburgh to apply for a physicianship unless he is also a Member of the College of Physicians of London. This rule is good for the London College, but bad for the hospitals, and perfectly indefensible on principles of justice. It is a relic of protection and a bygone period. The Chester rule seems far more defensible. A guarantee of some extra examination and education is demanded, but it is accepted from any quarter of the kingdom in the natural form of a degree in medicine, which can scarcely now be acquired in Britain without some pains and merit. A more doubtful law, though only of custom, has hitherto obtained in Chester. For a long time the *lex consuetudinis*—not the written law of the hospital—has required the holder of the office of physician to abandon general practice and practise as a pure physician. Such a law may operate very hardly in a provincial town. As a rule, hospital physicians should gradually abandon competition with general practitioners. Such is the *prestige* and privilege of their position that it is obviously both fair and dignified that they should tacitly take it for granted that they are not expected to practise as general practitioners; but to expect a young physician all at once to abandon general practice for an infirmary appointment is unreasonable. Such self-denial is not expected of hospital surgeons. There are some towns in which eminent hospital surgeons give advice and medicines on very low and undignified terms. The law of custom in Chester was nearly universally condemned. We think rightly so. Henceforth no meritorious general practitioner will be hindered from competing for a physicianship by the alternative of having summarily to abandon his practice, perhaps the work of many years of toil.

THE DISPOSAL OF THE DEAD.

OUR Transatlantic neighbours, if not original writers, are very excellent and industrious compilers, and we have before us an article on the relative advantages of cremation and burial that, as to the bibliography of the matter, assuredly rivals any treatise on the same subject that has up to the present time been published in this country. The author, Dr. J. F. A. Adams, of Pittsfield, Massachusetts, describes *seriatim* the history of cremation in ancient and modern times, intra-mural interment, and interment at the present day, the object being to show whether cremation is a practicable and safe method, and if so, whether the evils necessarily resulting from burial are so great as to demand a change. Time and space do not permit us even to recapitulate here the historical aspects of the article, though they are exceedingly interesting, and well worthy of perusal. The author having described the various methods of cremation as proposed in modern times, and particularly those devised by Sir Henry Thompson and Siemens, concludes that it may be made a complete, rapid, and inexpensive process, in no way offensive to bystanders, nor liable to contaminate the general atmosphere. It is enough to state that the history of intra-mural interment and its effects is largely drawn from the reports of Mr. Edwin Chadwick, Professor Brande, and others, made between 1843 and 1851, "the effect of which was so convincing that a change was at last brought about by legislative enactments." The notes on interment as practised in the present day include the regulations prescribed by law for the depth of graves in all European countries as well as in America, and the special rules in force in England. An effort was made by the author to discover the influence wrought by extramural graveyards on the quality of the well-waters surrounding them, as influencing the origin and spread of epidemic disease. Categorical questions referring to these two specific points were sent to upwards of four hundred scientific persons in the States and in this country. An analysis of the replies is given, and some (notably that by Mr. P. H. Holland, Medical Inspector of Burials for England and Wales) are printed in full. As a result (and an important one as bearing upon cremation) the author is "greatly surprised at the small amount of evidence we have been able to gather of any positive injury known to result from burial-grounds." Five cases only of possible or probable harm done by proximity of dwelling-houses to cemeteries are cited as having occurred in America, and two or three only "possible" cases in other countries. Great stress, of course, is laid upon the recorded opinions of Mr. Holland and Dr. Cameron of Dublin, both of whom are, as our readers know, firm believers in the absolute harmlessness of burial if properly performed. The third question put to correspondents related specifically to analyses of well, brook, or other water obtained from the vicinity of cemeteries. The deduction drawn from fifteen analyses was that wells in or near cemeteries enjoy an especial immunity from contamination, inasmuch as their position renders them less likely than others to be tainted by privies, drains, and cesspools. The author says that Fleck's examination of Dresden wells has led him to the same conclusion, and adds, "We have been unsuccessful in obtaining a single example of disease presumably induced by water contaminated by the proximity of burial-grounds, although the evidence that a great amount of disease, especially typhoid fever, is induced by drinking water polluted by drains, privies, and cesspools, is constantly accumulating." In other words, a living man in sound health is far more to be dreaded as a disease-producing agent than is a dead man buried with ordinary care.

Dr. Adams, obviously enough, arrives at the conclusion that "cremation is an innovation not demanded in this country (i.e., the United States) on sanitary grounds, but there is no reason why its adoption should not be optional with all persons." The article, as we indicated above, should be read carefully by all interested in this question. *Audi alteram partem* is a sound motto. We think the sum total of data and opinions upon which the author bases his conclusion inadequate for the purpose, and not sufficiently exact. The historical are, in fact, better than the sanitary and statistical parts of the essay, which is included in the Sixth Annual Report of the State Board of Health of Massachusetts.

Last week Dr. A. J. Bernays, Professor of Chemistry at St. Thomas's Hospital, called attention in *The Times* to a modification of Mr. Seymour Haden's plan of burial, proposed by the writer in a lecture delivered in October of last year. Assuming that the English public will never give a general consent to cremation, Dr. Bernays believes that the best way of bringing about harmless decay would be by burning the soil, if clay, so as to render it permanently porous, and enclosing the body in a coffin made of perforated iron plate, with a lid of the same material. Such a coffin would resist pressure for several years, and the signs of oxidation on the part of the iron would communicate themselves in a visible manner to the drainage from the cemeteries. The bottom of the grave is to be covered with charcoal, and filled in with the burnt clay to the depth of six feet.

THE ARMY MEDICAL SERVICE.

THOSE who have repeatedly scanned the published reports of Mr. Hardy's utterances with the view of extracting something hopeful in regard to the future of this service, need scarcely be reminded that anything which may have been promised has been expressed in very general and vague terms, and always with a view of getting rid of some troublesome deputation, or of affording an answer to some questioning M.P., or to avoid, as on a recent occasion, a division on a motion. As we have said more than once, Mr. Hardy appears brimful of good intentions, but he takes very good care to conceal the shape and character which these are likely to assume. His intentions may be, after all, only apparent. He has certainly told us what we are not to expect, and that is about all. Moreover, even if Mr. Hardy had at this moment drawn up an excellent Warrant, which is very doubtful indeed, it will have to surmount a sea of difficulties and opposition before it sees the light. A correspondent reminds us that many years ago an excellent Warrant was in type, but a large number of medical candidates was forthcoming, and the type was thereupon, we suppose, at once broken up, for no Warrant appeared. Under the late administration we all know what happened. No one would think of calling the last Warrant an excellent one. The moral of all this is that before young men enter the army they should know positively and definitely what is to be done, and not trust to a vague sort of hope and belief that something or other will be done. In the present state of uncertainty as regards all that concerns the Army Medical Service, that of the Navy unquestionably holds out the best prospects. There is, of course, considerable difference of opinion as to the merits of the late Naval Medical Warrant, but we consider that it is, on the whole, a good one, and our judgment in this respect has been strengthened and confirmed by all that we have heard. Mr. Hardy having stated that he has no objection to the probable number of vacancies in the Army Medical Department being stated at the time when the competitive examination is announced, we shall soon know whether the number of candidates does not fall short of the requirements of the service.

THE TROOPS AND THE WEATHER.

THE Autumn Manœuvres that have just terminated have been carried out under conditions of weather of a very exceptional kind. The rain has been so persistent and occasionally heavy as to have resembled the rainy season of a tropical climate more than an English July. The troops have had anything but a good time of it. After marching in rain, and returning to camp fatigued and soaked to the skin at the end of a day's work, they have found their tents flooded, the ground so damp as sometimes to compel them to stand up all night instead of lying down, and with no change of garments. Still their health has been very good, the amount of sickness being insignificant. The meeting of the National Rifle Association at Wimbledon from the 12th to 24th inclusive, will also long be remembered as the wettest on record; indeed, we heard of a placard having been displayed by some humorous individual advertising that a swimming match was to be held. The discomfort and the interference with enjoyment were doubtless great, but the wet exercised no injurious influence upon the health of the men. The average daily sick, out of an average strength of 2906, was only 5·44, or about 1·80 per thousand; the total number receiving treatment being only 24, and the majority of those were slight cases of cuts, sprains, burns, and other accidental injuries. The volunteer hospital was empty during the whole period. Surgeon-Major Owen calls attention in his report to the fact that in 1867, also a wet season, the sick-list was small. Diarrhœa, the most frequent camp disease, may, he thinks, be attributed generally to heat, exposure to the sun, variations of temperature, increased thirst, and irregularities of diet—causes which are in a great measure avoided in wet weather, spite of its disadvantages. In 1868 it was exceptionally hot, and, with an average of 2159 campers, the applicants for treatment were 439, of which number 309 were for diarrhœa alone. The sanitary condition of the camp this year has been very good.

DEATH FROM CHLOROFORM AT QUARRY BANK.

A WOMAN, aged twenty-one years, died at Quarry Bank, on July 7th, while under the influence of chloroform, administered for the operation of puncturing an abscess in the abdomen. The patient was under the care of Mr. Ker, of Cradley Heath, who had diagnosed a circumscribed abscess, and was about to operate when violent vomiting came on. The chloroform was withdrawn until the vomiting had ceased, and the patient meanwhile became partially conscious. Before the chloroform could be again administered she gave a gasp and died. The chloroform was given by Mr. E. Sainthill Pearse, who agreed with Mr. Ker in believing there was circumscribed abscess, and that the operation was necessary. Mr. George Ashmead, of Brierly Hill, who made the post-mortem examination, deposed at the inquest that the heart of the patient was healthy and the cavities empty, that the lungs were extensively diseased, that a large cavity containing pus existed in the right lung, that the left lung was consolidated, and that there were extensive pleuritic adhesions. The liver was softened, and a quantity of pus was found in the peritoneum as the result of peritonitis. Mr. Ashmead was of opinion that the pus in the peritoneum was not circumscribed during life, while Mr. Ker believed it was, and that the syncope, from which the patient died, was from rupture of the abscess into the peritoneum. The jury returned a verdict that the deceased died from suffocation, caused by impeded circulation of the blood; and the coroner, who looked upon the operation as a forlorn hope to relieve a dying woman, said that it was worse than useless to spread an alarm throughout the country as to the use of chloroform when it was considered that the deceased was in such a state that she might have died at any moment. Not the slightest blame, he added, could be attached to the surgeons who attended. While we agree with the remarks made by the coroner on this case, and without desiring to impute the least blame to the gentleman who operated, we cannot help pointing out that it was a case for local rather than for general anæsthesia. The puncture into the abscess might have been made by the local method without the infliction of any pain, and all danger of sudden death from anæsthesia prevented. It is indeed difficult to imagine a more favourable opportunity of employing the local and safe measure for a painless operation.

ST. BARTHOLOMEW'S HOSPITAL.

THE anniversary dinner of this hospital was given by the hospital stewards on Wednesday evening. The company was large and distinguished, including Professor Owen, Sir Charles Reed, the President of the College of Physicians, the President of the College of Surgeons, Mr. Brudenell Carter, Dr. Cameron, M.P., &c. &c. The chair was ably filled by the treasurer of the hospital, Sir Sydney Waterlow. When we say that nearly all these gentlemen and others spoke from their respective points of view, we need not add that the proceedings were of unusual interest, and that a very good account was given of the hospital. It is interesting to think of this institution, originating with a prior of the twelfth century, showing no sign of decay or of age, but still at the front, whether regarded as a school or a hospital. Under the able administration of Sir Sydney Waterlow, the practical religion and administrative capacity of the nineteenth century is represented as it was by Rahere in the twelfth. "There are diversities of gifts, but the same Spirit."

CALCUTTA MEDICAL COLLEGE.

THE annual distribution of premiums and diplomas to the students of the Medical College took place at the Senate House of the Calcutta University on the 15th ultimo, when Dr. Norman Chevers, the Principal of the College, delivered an able and interesting address. In the report for the preceding year allusion was made to the very great loss which the College and Hospital had sustained in the retirement of Dr. Fayrer, C.S.I., after having been connected with those institutions for fifteen years. Dr. Fayrer is succeeded by Mr. S. B. Partridge, F.R.C.S., in the Professorship of Surgery at the College, and he becomes at the same time the senior surgeon to the Hospital. The death of Surgeon-Major Dr. Chakarbatti, one of the physicians to the Hospital and Professor of Clinical Medicine and Materia Medica, who had taught in the College for twenty-four years, was a source of sincere regret to all. Dr. Chakarbatti was a native of India, and was one of four students sent by the Government to complete their education in London, under the care of Dr. Goodeve, and being a man of much energy and ability he attained considerable eminence as a physician. The number of students educated at the Calcutta University and Hospital is very large, and it is not easy to over-estimate the amount of real practical good that is done in this way. To take a case in point. On the occasion of which we are speaking the Principal of the College presented to Assistant-Surgeon Ghose, a former student of the College and Hospital, the sanad, or patent, of Rai Bahadur, with which title he had been invested by the Government of India in recognition of a long series of services of an arduous and distinguished kind; *apropos* of which we may mention that Dr. Ghose is a very dexterous operator, and has performed lithotomy nearly 500 times, and that he has enriched the museum of the College with 200 of the stones removed by him.

THE QUEEN AND THE PROFESSION.

The profession ought to be, as we have no doubt it is, highly gratified by the kindly feeling which Her Majesty invariably manifests towards those members of it upon whom has devolved the honourable and responsible duty of guarding Her Majesty's health. A few years ago, when Sir James Clark died, the notice of his death, which appeared in the *Court Circular*, was accompanied by most gracious expressions of regard on the part of the Queen; and now, again, Sir Charles Locock's memory has been honoured by the expression of Her Majesty's genuine regard for the deceased baronet. Such sympathy between the Sovereign and the physicians of her Court shows that the profession to which they belong must hold an honourable place in the estimation of one who is looked upon as the sole fountain of honour, and it further shows how highly Her Majesty appreciates those who amidst the anxieties of extensive practice have shown themselves loyal and zealous in her service. It is but too often the case that doctors fail in obtaining from their patients any expression of gratitude even for services which have involved much hard work and abnegation of self, but it will never be said that Her Majesty forgot to render to her servants that which alone makes labour sweet, and which is always highly prized by those who are fortunate enough to earn such noble expressions of goodwill and affectionate gratitude.

THE MEDICAL DISTRICTS OF ISLINGTON.

This question still gives most unnecessary trouble to the Islington guardians and to the aggrieved medical officers. We have repeatedly referred to the extreme inequality of the area and number of cases of the respective districts; men with very extensive districts and a large number of cases getting the same salary, or nearly the same, as men with limited districts and a much less number of cases. The chief sufferers are Dr. Gardner and Dr. Ducat; the former having 600 cases in a quarter, and the latter 260 or 270, and a district covering 834 acres. These gentlemen would probably be both easily contented with a little addition to their salary, or the transfer of a portion of their work to the care of a neighbouring medical officer. Instead of this, the guardians propose to ignore Dr. Ducat's complaints and leave him to grapple with his enormous district, which in winter or in times of epidemic will make a very heavy demand on his time and strength. This is an odd way of dealing with a reasonable complaint. Dr. Gardner's case is to be met by equally dividing his district and proportionally reducing his salary. He will still be left with a larger number of cases and a smaller salary than those officers in the more fortunate districts. It really looks as if the guardians meant to punish these medical officers for making perfectly just complaints. We are sorry that Dr. Bridges should have suggested such an unsatisfactory mode of redressing the grievances of hard-working and meritorious servants. We trust that both he and the guardians will abandon a false position, and take the simple course of transferring a portion of the work of the Highbury and St. Peter's districts to other more lightly worked officers, or, if this be inconvenient, make an addition to the salary of Dr. Ducat and Dr. Gardner. The *Islington Gazette* most strongly denounces the present proposals, and it may be well taken to represent the feeling of the intelligent portion of the ratepayers.

THE HAMPSTEAD FEVER HOSPITAL.

The Select Committee of the House of Commons on this question met again on Friday last, the 23rd inst., when evidence was given by Captain Barry, Dr. Steel, Surgeon-Major Bostock, and Dr. Jervis on behalf of the Asylums Board; the object of their evidence being to rebut certain objections to the present site which had been raised by the Hampstead Residents' Committee, and to state some grounds of objection to the proposed new site.

This closed the evidence on both sides, and on Tuesday the Committee met again to consider their report, which was presented to the House on Tuesday evening by Mr. Sclater-Booth, the chairman of the Committee. Just before going to press we received the report of the Committee:—

"Having considered all the circumstances, the statements of opinion, more or less conflicting, and the ascertained facts of the case thus submitted to them, the Committee are of opinion:—1st. That the action of the Asylums Board has been strictly in accordance with their duties, powers, and responsibilities, as derived from the Metropolitan Poor Act, 1867, and from the sanction and control of the Local Government Board so far as it was incumbent on them to be guided by that department. 2nd. Without disputing the fact that some alarm was experienced and some possible risk encountered in the immediate neighbourhood of the asylum during the period of the small-pox epidemic, that such mischiefs have been much exaggerated; that they are not of necessity incidental to the existence of the hospital, but only due to the carelessness of persons entering or leaving the same, or to the imperfect control which follows overcrowding, or otherwise may at times have been occasioned. 3rd. That on the whole there is no reason why this particular district should claim the interference of Parliament for the removal from it of an inconvenience to which it has become subject by reason of the due execution of the provisions of a wise and beneficent law."

We defer our remarks on the report until next week.

METROPOLITAN POLICE-CELLS.

The subject of the metropolitan police-cells was brought before the House of Commons last Friday by Sir W. Fraser. We have recently reported specially on the condition of these cells, and it will be remembered that our report was favourable. Sir W. Fraser stated that men charged with being drunk were placed in a cell to lie on an asphalte floor or on a bench without a ledge. Our Commissioners, however, found that in all the cells they visited a sloping wooden floor was provided for persons incapably drunk, and on which they seemed peacefully to recline in their drunken slumbers. Sir W. Fraser also commented on the hardship of a "technically innocent man" being submitted to the "torture" of the police-cell for thirty-six hours. Our Commissioners, from an inspection of the police records, found that such instances were extremely rare, and that, as the accommodation was amply sufficient, it was easy to secure such isolation. Moreover, in all bailable offences security was at once taken, and the prisoner released. Sir H. Selwyn Ibbetson, in reply, quoted the statements of our Commissioners, and added that proper provision was made for exceptional cases of overcrowding.

EPITHELIUM OF THE ALVEOLI OF THE LUNGS.

DR. E. AUFRECHT describes the changes undergone by the epithelium of the alveoli of the lungs in broncho-pneumonia. He finds that near the focus of the disease the cells are much swollen, and have become opaque in consequence of fatty degeneration, and broken down, so that only fragments of them remain. In other places they have fallen away bodily, leaving a delicate network, which appears to be a modification of the cementing substance by which they are normally retained in position and connected together. This network can be readily separated from the alveoli, and can then be seen to be composed of extremely fine elastic fibres, which are but slightly acted on by acetic acid. The nodal points of the fibres exhibit nuclei. The appearances presented in disease have led him to examine the normal relations carefully, and he arrives at the conclusion that even in the perfectly healthy lung the alveoli are covered with a network of elastic fibres, containing nuclei in their nodal points, and the meshes of which contain the epithelial cells of the alveoli.

SMALL-POX AT STOCKPORT.

SMALL-POX has been unduly prevalent for some weeks past at Stockport. Last Saturday, at the Borough Court-house, the sanitary authorities summoned Mary Doulin for wilfully and unlawfully exposing Margaret Carey whilst in her charge, and who was suffering from small-pox; also, as being a keeper of a common lodging-house, for neglecting to give notice to the authorities that she had a person suffering from infectious disease; and for letting lodgings without having had them previously disinfected after the reception of an infectious patient. The case was fully proved against the defendant, but the Mayor stated that, as this was the first case brought under the notice of the bench, they would deal leniently with it, and, instead of the penalty of £20, they would inflict a mitigated penalty of 10*s.* and costs for the first offence, and 5*s.* and costs for the second and third. If any further cases were brought before the bench they would be dealt with more severely. We commend the action of the Stockport sanitary authority in dealing so promptly with the infringement of the Act. At this time, when both scarlet fever and small-pox are so prevalent, it behoves the authorities of all towns to be on the alert, and enforce to the fullest extent the powers at their command to ensure the isolation of infectious cases.

THE POLLUTION OF RIVERS BILL.

WE prophesied many weeks ago that the Pollution of Rivers Bill would not be passed this session. It is now definitely numbered with the innocents to be massacred. We hope it will be satisfactory to some that the Premier expressed his regret that it was not possible to proceed with the Bill this year, although it is but faint consolation for those who suffer in purse and person in consequence of filth-impregnated streams. The statesman who pledged himself on the hustings to inaugurate a new policy of sanitation which would distinguish this Government from preceding ones cannot be said to have fulfilled his promises. He found in his struggle a powerful ally in the profession who hoped to see their rights vindicated and their importance acknowledged under the promised new era. What has been done? The time has been frittered away in quibbling over paltry Bills, while measures of deep national interest have been ruthlessly strangled. We hope that next session the Government will present a Bill based upon wider principles, which, whilst more stringent in character, will bear less heavily and unjustly on individual interests.

HEALTH OF GARIBALDI.

SULPHUR-BATHS are proving as efficacious in Garibaldi's case as in that of the Pope. The General, who is really a greater invalid, though a much younger man, than Pio Nono, takes them at Cività Vecchia itself, under conditions more favourable to their efficacy than if he remained "imprisoned" in a Roman Palazzo. A fortnight ago he could hardly move his head or bend his fingers. Now he can do both, not only without discomfort but with ease. He makes his morning meal (*colazione*) his chief one; drives out every day in an open carriage; and sometimes ventures on a short sea-voyage in a yacht. Old sailor as he is, he gains strength by contact with the briny element, as Antæus did from mother earth; and he has resumed his sanitary study of the Campagna with an energy peculiarly gratifying when we consider how much the lives of generations yet unborn may owe to that of Joseph Garibaldi.

THE PORT OF LONDON.

ON Friday, the 23rd inst., the Port Sanitary Committee of the Corporation of London made the annual visit to their extensive district, under the presidency of Mr. Hora, the chairman. The members were accompanied by Mr. Simon, Mr. Netten Radcliffe, Dr. Sedgwick Saunders, Dr. Harry Leach, port medical officer, Dr. Whitcombe, surgeon to the hospital ship *Rhin*, and many others. Mr. Simon, in acknowledging one of the toasts proposed, took occasion to comment upon the futility and absurdity of the old system of quarantine, the importance of using all means to carry out a practical and efficient substitute for it, and the energetic way in which the Corporation had undertaken and exercised their duties as sanitary authority of the Port of London. It will be remembered that Mr. Simon worked in the City as medical officer of health for upwards of seven years, previous to his appointment as medical officer to the Privy Council.

ST. THOMAS'S HOSPITAL.

WE have to record with regret that the family of one of the resident medical officers at St. Thomas's Hospital have been attacked with enteric fever, that two fatal cases have occurred, and two other children have been dangerously ill. It is a work of supererogation to point out that this must indicate local defects in connexion with the drainage system of the hospital. Having regard to the fact that the professional staff of St. Thomas's includes the medical officer of the Local Government Board and two of the most eminent authorities on the continued fevers, it is simply astounding that, as far as we can learn, no active steps have been taken in the matter. It is, in the interest of the public, proper to inquire whether any of the above authorities have been consulted, and if so, what was the result thereof.

THE Secretary of State for War will be asked in the House of Commons to obtain the opinion of the officers who superintended the recent summer manœuvres as to the power of bearing fatigue and exposure manifested by the troops engaged, especially of such of the army forces as were enlisted during the last three years respectively as compared with the soldiers of more mature age and earlier enlistment.

THE University of Rome recently instituted a special chair for Aural Diseases, and its first occupant, Professor Emilio de Rossi, has just issued his annual report. Out of 187 patients in the wards, 127 were cured, and by methods which are sometimes as ingenious as they are novel in the department of otology.

A short time back we pointed out a serious and dangerous defect in the condition of the Shoreditch Workhouse. In consequence of the want of adequate mortuary accommodation, decomposing bodies were frequently brought into proximity with the wards of the infirmary, thereby endangering the health of the patients. Last week the matter was brought before the notice of the House of Commons, when Mr. Sclater-Booth, in reply to a question, stated that arrangements were now being made which would obviate any further difficulties in this respect. It should be known that one of the provisions of the Public Health Bill, now passing through Parliament, confers on the Local Government Board the power of compelling local authorities to provide mortuaries where necessary. There are crowded districts in the metropolis and the country where the need of mortuaries is most urgent. We trust the forthcoming Act will effectually remedy such grievances.

It has been notified to us that two scholarships, of the annual value of £80 each, tenable for four years during residence, will be awarded in October next at Exeter College, Oxford, for proficiency in Natural Science. There is no limit of age for these scholarships. The examination will be in biology, chemistry, and physics, and candidates will be expected to show proficiency in two at least of these subjects. The scholars elected will be expected to read for honours in biology in the School of Natural Science. Candidates who are already matriculated members of the University must have passed Responsions, or the equivalent examination of the Oxford and Cambridge Schools Examination Board.

A growing feeling of the need of hospital accommodation more proportionate to the size of the town of Wakefield than that which has hitherto been supplied by the Clayton Hospital and Wakefield General Dispensary has culminated in the passing of a resolution, at the annual meeting last week of the friends of the institution, to secure a site which has just offered whereon to erect a new building. The idea seems to have awakened considerable enthusiasm amongst the more wealthy residents of the town, and £1500 was raised towards its realisation before the meeting broke up.

The death of Dr. Peter Mere Latham is announced, at the advanced age of eighty-seven. The deceased was Physician Extraordinary to the Queen, and formerly one of the physicians to St. Bartholomew's Hospital. He was a son of Dr. John Latham, a former president of the Royal College of Physicians, and also physician to St. Bartholomew's Hospital. Dr. Latham graduated at Oxford, and took his M.D. degree in 1809. He was elected a Fellow of the Royal College of Physicians in 1818, and has filled most of the offices in that institution.

Dr. Inglis has formally resigned his office as one of the honorary physicians of the Worcester Infirmary in consequence of being censured by the executive committee for on one occasion not getting a colleague to see his outpatients when he himself was called to the country, but leaving them to be seen by the resident house-surgeon. If this action of the executive committee is not disavowed by the general body of governors, so much the worse for the future of Worcester Infirmary.

The Vestry of Kensington at their last meeting, by a unanimous vote, raised the salary of their medical officer of health, Dr. Dudfield, from £300 to £400 per annum, with expressions of approval of that gentleman's services, creditable to themselves, and which must have been peculiarly gratifying to their officer.

The following appears in the *Glasgow Herald* of July 26th. As this is the first occasion for many years on which Glasgow University has recognised an extra-mural lecturer, it seems worthy of insertion. "The Glasgow University Court have agreed to recognise, as qualifying for graduation in the University, the course of lectures on Systematic Surgery to be delivered by Dr. Hector C. Cameron in the Glasgow Royal Infirmary."

The prevalence of scarlet fever in Warrington has induced a member of the Town Council to urge upon his colleagues the necessity of erecting in the borough a hospital for the reception and treatment of infectious diseases. Alderman Burgess, in advocating the adoption of this course, stated that one medical man in the town had under his professional care no fewer than twenty-five patients suffering from scarlet fever.

We understand that the Town Council of Liverpool have decided to erect a cholera hospital in the Mersey, and have applied to the Local Government Board for authority to borrow £15,000 for the purpose. Last week Colonel Cox held an inquiry in the town on behalf of the authorities at Gwydyr House, when evidence demonstrating the necessity of such an institution was given.

The medical officer of health for Wolverhampton, Mr. J. H. Love, in his annual report of the condition of the town during the past quarter, states that puerperal fever was very prevalent in the period. The death-rate of children under five years of age was high, and the mortality from chest affections seems to have been above the average.

Cholera appears to be increasing at an alarming rate in Syria. The latest weekly return approximately gives the number of persons attacked in that period as 500, a large proportion of whom died.

The bust of Dr. Hughes Bennett, by Mr. W. Brodie, will be presented to the Senatus of the University of Edinburgh by Dr. Andrew Clark, on behalf of the subscribers, on Monday, August 2nd, after the graduation ceremony.

Correspondence.

"Audi alteram partem."

PUERPERAL FEVER.

To the Editor of The Lancet.

Sir,—In your leader of the 24th inst. on the late discussion on Puerperal Fever you made a practical and, I think, most useful suggestion—"That this discussion should be supplemented by the record of carefully investigated local epidemics or series of cases, or even *isolated cases*, arising under circumstances that admit of precise analysis and estimation in their bearing on cause, nature, and treatment." You even infer the weak point of the debate was the want of practical experience of the speakers, and regret that more general practitioners did not take part in the discussion, and respond to Mr. Wells's invitation and desire which he expressed in his opening remarks, when he said his object was "even to elicit rather than to impart information; to call forth the stores of knowledge now latent in the Society; to ask for the result of observation." The following facts it was my intention to have communicated to the Society on the last night of the debate, and my name was given as one of the intended speakers. An urgent professional engagement frustrated my intention. In response to your suggestion I send you the following brief notes of two cases of puerperal fever occurring in my practice in 1870 and 1871. The first case bears on Dr. Hicks's statement, who said:—"My observations have gone to show that in certain cases there is no rash, and that there are none of the prominent symptoms of scarlatina, in cases of puerperal fever where scarlatina has been unquestionably mixed up." The second case proves beyond all doubt the nurse was the origin of infection, and shows the connexion between erysipelas and puerperal fever, and again confirms what is now, I believe, a universally accepted fact—the danger and liability of conveying puerperal fever if exposed to, or suffering from, erysipelas. A friend of mine, a hospital surgeon, told me his father died from erysipelas shortly after having attended two fatal cases of puerperal fever which had caused him very considerable anxiety.

On Monday, June 27th, 1870, I was sent for to attend Mrs. D——, aged thirty-one, in her fourth labour. On my arrival I found the child born; the labour had been both quick and easy, but the placenta was slightly adherent. She progressed satisfactorily up to the fourth day, when she complained of pain under the heart and distressed breathing, and expectorated a little red-coloured sputa. The abdomen was not at all tender, and no fever. She had a small thready pulse, and suffered intensely from thirst. The symptoms gradually increased in severity, especially the distressed breathing, which amounted the last day or two to violent attacks of orthopnœa. She died on Sunday, July 3rd, the seventh day of her confinement. The leading symptoms were great difficulty of breathing, anxious countenance, intense thirst, small, feeble pulse, acute pain under the left nipple, violent palpitation of heart, slight distension *but no pain of abdomen.* She had a little cough and a little phlegm, which was once or twice slightly tinged brown. This case occurred in a school. Scarlatina had been in the house off and on for months. Her little boy was ill at the time she was confined, and died on the 18th of July, from scarlatina maligna, the twenty-fourth day of illness. On July 2nd (the day before Mrs. D—— died) I attended Mrs. G—— in her fifth labour, which was more tedious and painful than usual. On the second day she had scarlatina anginosa, and on the twenty-second acute rheumatism. The attack of scarlatina was rather severe, the rheumatic fever very so. The former in no way differed from the usual course; the rash was bright scarlet, and was followed by free desquamation. The throat was troublesome the first week. She had one or two alarming attacks of syncope while suffering from rheumatic fever, and auscultation discovered cardiac murmurs; but these were functional, as they disappeared as convalescence was established. Her recovery was delayed for two or three months. I have since attended her in three labours, which were natural, and she made a good and early recovery from each. I would add I certified in good faith that Mrs. D—— died from pleuro-pneumonia, pericaditis, four days, seven days after a natural labour. Subsequent painful experience has left not a doubt in my mind that the case was one of true malignant puerperal fever, and that scarlatina, being in the house, was the probable cause. I attended several other women during the same time, without a bad symptom, excepting Mrs. G——, who contracted scarlatina, probably, I fear, conveyed by myself from Mrs. D—— or her child, the latter at that very time ill with scarlatina of malignant type. Mrs. G——'s baby and all her children (three in number) caught the disease, but not until after the rash had appeared for some days on my lying-in patient; the baby and also one other child dying after a few days' illness. The eldest child recovered. For some time I believed, what I tried to convince the mother, that although the disease showed itself first in her, yet it was her children from whom she caught the disease; the scarlatina poison was first in their blood, and it was the peculiar condition pertaining to the puerperal state that caused the rash to appear first in herself. I ought also to mention that Mrs. D—— was seen by two other medical men, who diagnosed her case as one of low typhoid, and *not* puerperal fever, and neither did I think it was until some months afterwards.

On Monday, about 2 A.M., Feb. 13th, 1871, I was summoned to attend Mrs. S—— in her third labour. On my arrival I found the child born, and the nurse exultingly showed me the placenta in chamber, saying at the same time, "You need not have brought your newspaper, as all your work is done for you." I found the pulse good, uterus contracted. I bandaged her and returned home in about half an hour. I had not attended any case of puerperal fever that year, nor was I attending at that time any infectious case. Mrs. S—— progressed satisfactorily until the third day, when the disease was ushered in with a severe convulsion, and she died on the eleventh day, Feb. 23rd, 1871, from puerperal peritonitis. The prominent symptoms were, an attack of convulsions lasting about an hour, on the third day; great pain in the uterus, which was enlarged and very dull on percussion; retching and vomiting of at first green, and latterly coffee-ground-like matter; countenance pinched and anxious; lost all interest in baby; milk arrested; lochia natural and not offensive; pulse was quick, but until the last two days not thready, as in other case; the respirations were short and hurried, latterly very quick. She complained of less acute but more continued pain as death approached, and was conscious almost to the last. There was not much fever; temperature never exceeded 100°. The nurse who delivered this woman was taken ill after the first week, and had to go home and was attended by the parish doctor, Mr. Spurgin, who kindly wrote to me stating that he had attended Mrs. C——, the nurse who delivered my patient who died from puerperal fever, and that she (the nurse) died from erysipelas on Feb. 28th, five days after the death of the woman she had delivered, and whose death was caused by puerperal peritonitis. Mr. Spurgin, in his letter to me, states that he attended Mrs. C—— from Feb. 24th till her death on the 28th. I was also consulted a short time afterwards by a poor woman who was suffering from phlegmonous erysipelas of arm and hand, and who said she thought she had poisoned her hand through washing the linen and diapers of the poor woman I attended who died in her confinement.

It has fallen to my lot to have seen several cases of puerperal fever, and in almost all I have at some trouble investigated the probable cause of infection, and the result of my experience, observation, and thought is that puerperal fever is in nine cases out of ten of zymotic origin, and that each case may be regarded as one of blood-poisoning, and the only treatment that appears successful confirms this conclusion. To quote the words of Mr. Graily Hewitt, I believe, "It it impossible to escape the conclusion that puerperal fever consists in nothing more or less than an injection into the general circulating fluid of a poisonous material of animal origin, that it is a form of pyæmia, for the production of which the minutest portion of the morbific agent may prove sufficient." But I am also led to think that there are two forms of this so-called fever, which Dr. Barnes aptly terms "heterogenetic" and "autogenetic," and that one may be more contagious than the other. "The former arises from causes outside the patient's body; the poison *has been carried to her and has been put in her.* The latter autogenetic, in which all the conditions of the fever exist or arise in the patient's system, with which infection or contagion has nothing to do."

Apologising for the length of my communication,

I am, Sir, yours truly,

Fredk. H. Alderson.

Southerton House, Hammersmith,
July 26th, 1875.

THE HEALTH OF THE TROOPS AT THE AUTUMN MANŒUVRES.

(From our Special Correspondent.)

With the face of the heavens the type of prevailing disease must change. Accordingly, while during the manœuvres of 1874 so much care was needed to protect the men from undue exposure to, or exertion in, the heat of the day, and the wildest rumours were circulated of the ravages of sunstroke, on this occasion not a single man was incapacitated from the effects of the sun, but in its stead the various kinds of rheumatism took precedence. Catarrhs and affections of the chest, such unfailing visitants of the inhabitants of houses in wet weather, are comparative strangers in the equable temperature enjoyed by the dwellers in tents. The proportion of diarrhœa amounted to about one-sixth of the total cases sent from the field.

Another condition also which has always existed on the manœuvres, and which, though productive of no very marked consequences in so short a time, still, on a campaign, would most seriously multiply the non-effectives, is want of sufficient means of personal cleanliness. No very great ingenuity would be required to devise a little india-rubber basin which, when not in use, would serve as a waterproof cover to some of the soldier's equipment, and which would well repay the few ounces' additional weight imposed, and the small expenditure incurred. Probably nothing would do more towards lessening the gaps in the ranks from foot-soreness than this.

The battles were somewhat prolific in accidents, but that may only testify to the brilliancy of the movements. On the whole, the physical condition of the men was improved by their rough field experiences.

BIRMINGHAM.

(*From our own Correspondent.*)

THE Town Council have rarely done so much important business at any one sitting as they did yesterday. They received from the Mayor, to whom great credit is due for the energy and ability with which he has prosecuted these reforms, the announcement that the Gas and Water Bills had passed both Houses of Parliament, and they appointed committees to conduct and manage these undertakings. They resolved on the adoption of the Artisans' Dwellings Act, 1875, and appointed a committee to receive official representations of the unhealthiness of any area or areas in the borough, and to submit to the Council a draft scheme for the improvement of such areas, and generally to carry out the provisions of the Act; and, lastly, they raised the salary of Dr. Hill from £650 to £1000 on consideration of his giving up the whole of his time to the duties of medical officer of health and borough analyst. No higher functions could be exercised by any corporation than the acquisition of the water supply, the improvement of the dwellings of the working-classes, and the recognition of the value of the services of a health officer.

The last report of the Birmingham Medical Benevolent Society shows that the directors had been enabled to distribute during the past year £417 to fourteen recipients, and to invest £200, and that the total property of the Society amounts to £8387. Dr. Agar, of Henley, has been elected president for the ensuing year.

The post of surgeon to the Warneford Hospital, Leamington, is vacant by the resignation of Mr. Jones. The appointment of Mr. Joseph Morris, a former house-surgeon, who at the last election in 1871 was very nearly at the top of the poll, is almost a certainty.

The report of Dr. Robinson, the vaccination officer of the parish of Birmingham, shows that 95 per cent. of the children born in the parish are accounted for by the vaccination officer, recommends that the magistrates should exercise their full powers against those who try to evade the Vaccination Act, and says that the arrangements which the guardians have made for ensuring vaccination are all that can be desired.

The committee of the Women's Hospital have for the second time appointed a lady house-surgeon. Miss Edith Pechey has been educated at the University of Edinburgh, and brings with her exceptionally good credentials.

Birmingham, July 28th, 1875.

MANCHESTER.

(*From our own Correspondent.*)

AT the Royal Infirmary, the subject which perhaps principally occupies the attention of both the medical and lay bodies just now is the contemplated removal of that institution to a more suburban position. It is rumoured that twenty pounds per yard has already been offered for land in the immediate vicinity of the present hospital, for the purpose of erecting thereon a building which shall serve for an accident department. The neighbourhood of Oxford-street, near the new Owens College, is talked of as the probable situation of the new hospital. Amongst other interesting operations performed at the infirmary lately was one for strangulated umbilical hernia, performed by Mr. Bowring. The bowel had been strangulated for several days before operation, and as a consequence required most careful dissection. Stercoraceous vomiting occurred several times at intervals of a week. This finally ceased, and the woman made a perfect recovery. Mr. Whitehead has also had a case of strangulated hernia, where the operation was complicated with troublesome and dangerous hæmorrhage from a vessel within the fold of the peritoneum, covering the bowel at its junction with the mesentery. The vessel was ultimately secured by a catgut ligature, and the patient quickly made a good recovery. Mr. Bradley continues to obtain excellent results from his plan of injecting strumous glands with the tincture of iodine, which I hope he will soon publish in detail in the pages of THE LANCET.

A successful case of ovariotomy has recently occurred at St. Mary's Hospital. The patient was about twenty-one years of age. The abdomen was intensely and universally fluctuant, with general dulness and resonant flanks. The operation was performed by Dr. Lloyd Roberts. The cyst was exposed, tapped, and drawn through the wound. There was an adhesion of a piece of omentum about 3 in. or 4 in. broad to the cyst wall; this was secured by a silk ligature, and dropped with the divided pedicle into the abdominal cavity. The woman was convalescent on the ninth day, and was discharged from the hospital on the 17th inst.

Abdominal section has also been recently performed at this hospital by Mr. Cullingworth for extra-uterine gestation. The cyst was carefully exposed, opened, and a four months' fœtus extracted. The divided edges of the cyst were included in the ligatures which secured the abdominal wound. The patient appeared to go on favourably for a few days, but, unfortunately, symptoms of broncho-pneumonia came on, and she died about the eighth day after operation.

Manchester, July 26th, 1875.

Obituary.

SIR CHARLES LOCOCK, BART.

BY the death of Sir Charles Locock our profession loses one who was for long one of the most distinguished of its metropolitan members. He occupied, thirty years ago, the highest place as a practitioner of a branch of medicine which had not then perhaps received all the honour that was its meed; and that it now obtains due estimation is in part owing to his direct and indirect influence. He was the son of Mr. Henry Locock, of Northampton. A year older than the century, he graduated at Edinburgh in 1821, and soon afterwards commenced practice in London as an obstetrician. His success was rapid. Midwifery is a department of practice in which success often comes earlier than in most other branches. The demand which it makes on the physical powers throws its active work in the hands of comparatively young men. Still, the rapidity with which Sir Charles Locock made his way in fashionable practice was remarkable. At an age when most London physicians have hardly made good their first step, he had attained the highest position open to him, in being selected, by the advice of Sir James Clark, at the age of forty, as the Queen's physician-accoucheur—a post which he held up to the time of his death, and discharged its active duties as often as the occasion for his services arose. He was created a baronet on his retirement from practice nearly twenty years ago, a retirement which has also extended to all parts of public professional life. He was elected Fellow of the Royal Society in 1864, and in 1865 was an unsuccessful candidate for the representation in Parliament of the Isle of Wight.

During his career in town his practice was a very large one, perhaps the largest ever made by an obstetric physician. He owed it in part to his personal qualities, but chiefly to his remarkable practical knowledge and skill, which made his contemporary reputation as high with the profession as with the public. He wrote but little; his only published work was his inaugural thesis, "De Palpitatione Cordis," on obtaining his degree in 1821. He contributed articles on menstrual disorders, diseases of lactation, and infantile and puerperal convulsions, to the "Cyclopædia of Practical Medicine."

The late Sir Charles Locock possessed many attractive social qualities. He was fond of society, and made warm friends among all with whom he was brought into contact, foremost among whom must be mentioned Her Majesty, whose high regard for his personal character and professional ability is well known. To most of the younger generation of the profession he has been known only by name, but to a large number of its older members pleasant recollections of former professional intercourse will cause the news of his death to come with regret.

Sir Charles Locock has left several children, some of whom occupy honourable positions at the bar, in the church, and in diplomacy. His wife died in the year 1867.

ALEXANDER M. OFFICER, M.D.

DR. OFFICER was born at Stonehaven, Kincardineshire, on April 21st, 1820, and, prior to entering College at Aberdeen, was a private pupil of the late Dr. Pratt, of the Episcopal Church, Cruden, author of "Buchan" and other works. He was articled to Dr. David Kerr, Aberdeen, and took his degree of M.D. in 1843. He afterwards became a partner with, and latterly succeeded to, the late Dr. James, of Brechin, where he remained nine years. He then removed to Montrose, where, in addition to a select general practice, he held the offices of assistant-surgeon to the Forfar and Kincardine Militia Artillery, Admiralty surgeon and agent, medical attendant to Dorward's House of Refuge, and medical officer to the Royal Infirmary. In all these capacities he enjoyed the confidence and respect of those with whom he came in contact. He was one of the most unselfish of men, and counted neither trouble nor cost in going out of his way to visit the sick or to do a kind act, whether pecuniary or otherwise.

It was in the course of his professional avocations at Montrose that he came by two accidents which brought on his last sad illness. The first was being thrown from his horse near a railway, at which the animal took fright, and the other was a puncture in one of his fingers while operating upon a patient in the Montrose Infirmary. The latter was very serious, though not immediately; but the severe treatment to which he subjected himself weakened his physical and mental powers to such a degree that he retired to his native place, where he died, after a lapse of two years, of softening of the brain and general paralysis on the 24th of April.

BECKIT TRUMAN, M.R.C.S. ENG.

MR. TRUMAN was born in June, 1802, at Bulwellwood Hall, Notts, the residence of his forefathers for 250 years. He studied at Guy's and St. Thomas's whilst they were united, and was a favourite pupil of Sir Astley Cooper, who spoke in high terms of his industry and knowledge. Having obtained the L.S.A. Lond. in 1825, and the M.R.C.S. Eng. in 1826, he settled in Nottingham and acquired an extensive practice, until in 1860 the demands on his time and strength were incessant. It was at this juncture, when the powers of life were becoming feebler, and no rest was possible, that his finger was inoculated with syphilitic virus from an obstetric case. The consequences were very sad, and were never recovered from, leading ultimately to his death fifteen years after.

Mr. Truman was a man universally respected, and his deep and unfeigned belief and trust in the truths of revealed religion were the causes of unfailing patience and goodness. A proverb says, "Ubi tres medici, duo athei"; but Mr. Truman could, whilst hearing and seeing the facts that are alleged by materialists to prove their theories, fearlessly and simply receive as true the lessons taught him from his mother's bible: he received them as a little child, never doubting.

Mr. Truman married early in life Susanna Mary, daughter of Mr. Joseph Smith, of Trent Bridges, Nottingham, who predeceased him by six months. Eleven sons and daughters, all grown up, remain to mourn his loss.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on the 22nd, 23rd, 26th, 27th, and 28th inst.:—

Baker, Alfred De Winter, Dawlish.
Barker, Walter Herbert, Brighton.
Bartlett, Henry, L.S.A., Great Dover-street.
Bowen, Alfred L., Ludlow.
Brenchley, Algernon D., L.S.A., Denmark-hill.
Briggs, Harry B., L.S.A., Horncastle.
Brooks, Walter John, Westminster-bridge-road.
Brown, Thomas Lloyd, Camberwell.
Bruce, Peter, L.S.A., Valparaiso.
Burton, Edward Campbell, Lee.
Burton, James K., Doughty-street.
Burtonshaw, Thomas, L.S.A., Hackney-road.
Carter, Frederick H., Pewsey.
Cock, William, Redruth.
Colborn, Henry, Wimbledon.
Collins, Henry A., L.S.A., Bayswater.
Collyns, Robert T. P., Gower-street.
Continho, Joaquim V., Goa, Bombay.
Cooke, William Conway, Brompton, Kent.
Coom, Richard, Bodmin.
Couldrey, James, L.S.A., Abingdon.
Cory, Frederick W., L.S.A., Buckhurst-hill.
Crocker, Henry Lawrence, Plymouth.
Curwen, Cecil, Worlington.
Cundell, George R., L.S.A., Lock Hospital.
Davies, Thomas, Barmouth.
Dickinson, William Gilbert, Hampstead.
Druitt, Lionel, Strathmore-gardens.
Farfan, Joseph V., Claverton-street, Pimlico.
Fisk, George H. B., Camden-square.
Godfrey, Robert F., M.D., Montreal.
Grasett, Frederick Le Maitre, M.B. Edin., Toronto.
Greenish, Robert William, New-street.
Ground, Edward, Whittlesea.
Hancock, Charles J., Bath.
Hancock, John Gatchell, Halse, near Taunton.
Harvey, Frederick G., Spalding.
Harrison, Edwin, Wrexham, Denbigh.
Hattie, Alexander G., M.D., Antigua, West Indies.
Hay, William A. E., L.S.A., Bridport.
Henley, Edward W., Derby.
Hind, Henry Joseph, L.S.A., Twickenham.
Hopkins, John, Northwich.
Hovell, Thomas M., Clapton.
Humphry, Reginald, Kensington.
Jameson, George H., M.B. Edin., Heywood, near Bury.
Johnston, Chadd M., Lancaster.
Jones, Benjamin, Chorley.
Karop, George C., L.S.A., Camden-town.
Lacy, Alexander G., L.S.A., Guernsey.
Lancaster, Henry Francis, Amersham-park-villas.
Langley, John G., Mildmay-grove.
Leeson, John Rudd, Teddington.
Le Quesne, Edwin J., Jersey.
Lucas, Arthur, L.S.A., Barwell, Cambridgeshire.
Makins, George H., L.S.A., Walton-on-Thames.
Mason, John W. B., Osnaburgh-terrace.
Morgan, David Craven, Llanddewi Brefi, South Wales.
Mugliston, Thomas Crichton, Plymouth.
Needham, Joseph, Victoria-park.
Newland, Charles Francis, Bradleigh, Down.
Noot, Henry Curtis, Dudley.
Phillips, James Alfred, Guildford.
Pettigrew, Augustus J. W., Hounslow.
Rees, Charles, L.S.A., Cape Town.
Richardson, Joseph B., L.S.A., Castle Bytham.
Roughton, Walter, Hammersmith.
Routh, Alfred Curtis, Meyrick-square.
Sangster, Alfred, M.B. Cantab., Streatham-hill.
Scott, Alexander Thomas, L.S.A., Cantlows-road.
Shadwell, St. Clair B., Walthamstow.
Sibbering, George, Merthyr Tydfil.
Stevenson, Robert A., M.D. M'Gill Coll., London, Ontario.
Sworder, Horace, Luton, Bedfordshire.
Symonds, Edmond, Thaxted, Essex.
Tamplin, Charles H., Old Burlington-street.
Taylor, Henry Cumberland, L.S.A., Trinity-square.
Todd, John, Tufnell-park.
Traill, Mark Windeyer, Kinross.
Turnour, Charles C., Millman-street.
Vernon, Mark H. H., Battle, Sussex.
Wakefield, Thomas, Nottingham-place.
Ward, Austin George, Carlton-hill.
Willis, Charles Fancourt, Penton Hook.
Wilding, Leonard James, Worcester.
Williams, Neville, Ruthin, Denbigh.
Woollett, Charles Jerome, Monmouth.

Of the 175 candidates examined during the last and present weeks, 113 satisfied the Court of Examiners and obtained their diplomas; 15 candidates passed the examination in Surgery, and, when qualified in Medicine, will be admitted Members, and 47 were referred to their professional studies for six months.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on July 22nd :—

Branson, John, Rotherham, Yorkshire.
Clarke, Arthur, Brill, Bucks.
Davies, John, Queen-street, Worship-street.
Eames, James Crompton, Kearsley, near Manchester.
Laverick, John Valentine, Hinderwell, Yorkshire.
Morgan, William, Ynysmudw, Swansea Valley.
Richardson, Joseph Berridge, Castle Bytham, near Stamford.

The following gentlemen passed the Primary Professional Examination on the same day :—

Robert Huntley Campbell, St. Thomas's Hospital ; Thos. Baxter Carlyon, St. Bartholomew's Hospital ; Ernest James Pritchard, Guy's Hospital ; Charles James Rayley Owen, St. Mary's Hospital.

Dr. Welsh, of Kinghorn, N.B., was recently presented by his friends and patients with a purse of money and a very handsome marble timepiece.

At the Bath Town Council meeting a short time back, it was resolved to purchase, for £8100, a site on Claverton Down for an asylum for pauper lunatics.

The Quarterly Court of the directors of the Society for Relief of Widows and Orphans of Medical Men was held in the rooms of the Royal Medical and Chirurgical Society, 53, Berners-street, on the evening of July 14th, Mr. Charles Hawkins, vice-president, in the chair. The sum of £1116 10s. was voted to be distributed among fifty-seven widows now receiving grants, a sum of £75 10s. to be divided between seventeen children, and a further sum of £19 10s. was granted to three children from the Copeland Fund. The expenses of the quarter amounted to £66 10s.

Bequests, &c., to Medical Charities.— Mr. Selwood Riddle has this week presented to the Bristol Royal Infirmary the munificent donation of £3000. Mr. Joseph F. Duckett, of Kingstown, bequeathed £500 each to the Adelaide Hospital, Mercer's Hospital, Steeven's Hospital, Meath Hospital and County Dublin Infirmary, and Sir Patrick Dun's Hospital, all at Dublin. The Worcester Infirmary has become entitled to £300, 4 per cent. Debenture Stock London and North Western Railway Company, under the will of Miss Harriet Watkins, of Ombersley.

Medical Appointments.

Allchin, W. H., M.B., M.R.C.P., has been appointed an Assistant-Physician to the Victoria Hospital for Children.

Baly, J. S., M.R.C.S.E., has been reappointed Medical Officer of Health for the Leamington Urban Sanitary District, at the increased salary of £80 per annum.

Bredin, J. N., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Sutton District of the Hollingbourn Union, Kent, vice Sankey, resigned.

Browne, T. H., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Frankford, King's County, vice Ridley, resigned.

Clark, W. W., M.D., M.R.C.S.E., has been appointed Medical Officer for the Wellingborough District and the Workhouse of the Wellingborough Union, vice T. Clark, F.R.C.S.E., resigned.

Cosgrave, A., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Infirmary and Dispensary, Manchester, vice Byrne, whose appointment has expired.

Deane, J., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Warboys District of the St. Ives Union, Hunts, vice Serjeant, resigned.

Dobie, W. M., M.D., M.R.C.S.E., has been appointed a Physician to the Chester General Infirmary, vice Waters, resigned.

Griffiths, D., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Llandilo-Talybont District of the Swansea Union, vice Jones, resigned.

Harvey, R. J., M.D., has been appointed Assistant-Physician to the Richmond, Whitworth, and Hardwicke (House of Industry) Government Hospitals, Dublin, vice Yeo, appointed Professor of Physiology at King's College, London.

Hill, T., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Chipping-Warden District of the Banbury Union, Oxfordshire, vice Fowke.

Hope, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 3, or Chobham District of the Chertsey Union, Surrey, vice Ward, resigned.

Hutchinson, V., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the No. 3 Sub-district of the Auckland Rural Sanitary District.

Iles, D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the first Division of No. 3 District of the Northleach Union, and Medical Officer of Health for the first Division of No. 3 Sub-district of the Northleach Rural Sanitary District.

Irvine, J. P., M.D., M.R.C.P.L., has been appointed Assistant-Physician to the Victoria Hospital for Sick Children, Queen's-road, Chelsea.

Kenyon, G. S., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the No. 4, or Tarleton District of the Ormskirk Union, vice Hilton, whose appointment has expired.

Kidd, G. H., M.D., F.R.C.S.I., has been appointed Consulting Obstetric Surgeon to the Richmond, Whitworth, and Hardwicke (House of Industry) Government Hospitals, Dublin.

Kilburn, W. B., M.R.C.S.E., L.M., has been reappointed Medical Officer of Health for the No. 2 Sub-district of the Auckland Rural Sanitary District.

M'Kane, G. O., L.R.C.P.Ed., L.M., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the No. 1 Sub-district of the Auckland Rural Sanitary District, vice Manson, whose appointment has expired.

Manser, R., M.R.C.S.E., has been appointed House-Physician to the Hospital for Women, Soho-square, vice Skelly, appointed Resident Surgeon to the Western General Dispensary.

Palmer, F. S., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Mortlake District of the Richmond Union, Surrey, vice Alex. Crichton, L.R.C.P.Ed., L.R.C.S.Ed., deceased.

Phillips, S. R., M.D., C.M., has been appointed Non-resident Medical Officer to the Branch Dispensary of the Cheltenham General Hospital and Dispensary.

Robertson, J., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator, and Medical Officer of Health, for the Parish of Fordoun, Kincardineshire, vice Henderson, deceased.

Sellers, W., M.R.C.S.E., has been appointed Medical Officer for the Radcliffe District of the Bury Union, vice Bott, resigned.

Seward, W. J., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Bristol General Hospital, vice Thornley, appointed Assistant Medical Officer to the Leicestershire and Rutlandshire Lunatic Asylum.

Smith, C. E., M.R.C.S.E., L.R.C.P.L., has been appointed Senior House-Surgeon to the Royal Infirmary, Manchester, vice Birch, resigned.

Waters, E., M.D., F.R.C.P.Ed., F.K.Q.C.P.I., has been appointed Consulting Physician to the Chester General Infirmary, upon resigning as Physician.

Woods, G. A., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2, or North Meols District of the Ormskirk Union, vice G. Woods, F.R.C.S.E., resigned.

Woods, O. T., M.D., L.R.C.S.I., Senior Assistant at the Warwick County Asylum, has been appointed Medical Superintendent of the Killarney District Asylum, vice Murphy, deceased.

Wreford, S., M.R.C.S.E., has been appointed House-Surgeon to the York County Hospital, vice Kebbell, appointed Medical Officer to No. 4 District, York Union.

Wright, J. B., M.D., M.R.C.S.E., has been appointed Medical Officer for the Finedon District of the Wellingborough Union, vice Clark, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Child.—On the 26th inst., at New Malden, Surrey, the wife of Edwin Child M.R.C.S.E., of a son.

Dudgeon.—On the 23rd inst., at Montagu-square, the wife of R. E. Dudgeon, M.D., of a daughter.

Fraser.—On the 20th inst., at Knutsford, Cheshire, the wife of Thos. R. Fraser, M.D., of a son.

Jeffery.—On the 20th inst., at Trinity House, Eastbourne, the wife of G. A. Jeffery, M.D., of a son.

Morris.—On the 15th inst. (St. Swithin's), at Euston-place, Leamington, the wife of J. Morris, Surgeon, of a son.

Theobalds.—On the 13th ult., at Jubbulpore, the wife of Surgeon-Major J. R. Theobalds, 16th Madras Native Infantry, of a daughter.

MARRIAGES.

Atkinson—Timins.—On the 28th inst., at the Parish Church, Kingston-on-Thames, Frederick P. Atkinson, M.D., of Surbiton-road (eldest son of J. C. Atkinson, M.D., of Kew-green, Surrey), to Eliza Henrietta, only daughter of A. Kier, M.D., of Tunbridge Wells, late H.E.I.C.S., and widow of the late Douglas C. Timins, M.A., of Hilfield, Aldenham, Herts.

Field—Browne.—On the 11th ult., at St. Paul's Church, Kingsey, P. of Quebec, Canada, Albert Field, M.B., C.M., of Bridge-town, Barbadoes, W.I., to Dora Caroline, eldest daughter of G. S. H. Browne, Esq., late of the Bengal Army.

Holman—Partridge.—On the 22nd inst., at St. Philip's, Kensington, Robt. Colgate Holman, M.R.C.S.E., L.S.A.L., of Keighley, Yorkshire (youngest son of Henry Holman, Esq., of East Hothly, Sussex), to Edith Sybilla, daughter of the late Samuel John Partridge, Barrister-at-law, of Kensington, and Stroud, Gloucestershire.

Norbury—Fitzgerald.—On the 21st inst., at the Parish Church, Prestbury, Cheshire, Thos. Wm. Norbury, of Crediton, North Devon (second son of the late Thos. Norbury, Esq., of Upton Hall), to Eliza Theresa, daughter of Captain T. C. Fitzgerald, of Upton Grange, Macclesfield, Cheshire.

DEATHS.

Betts.—On the 20th inst., at Bonchurch, Isle of Wight, Geo. Harvey Betts, M.D., aged 66.

Burt.—On the 18th inst., at Edinburgh, Benj. Burt, M.D., aged 78.

Clarke.—On the 25th inst., at Cambridge, Wm. J. Clarke, M.R.C.S.E., of Huddersfield, aged 61.

Davidson.—On the 26th inst., at Heathcote-street, Mecklenburgh-square, C. J. Davidson, late Surgeon 47th Bengal Native Infantry, aged 64.

Lovell.—On the 19th inst., at Sandymount, John Lovell, M.R.C.S.E., Inspector-General of Hospitals, formerly of the Madras Medical Service, aged 71.

Moffatt.—On the 31st of May, at Naini Tal, India, Elizabeth Abbott, the beloved wife of Surgeon-Major J. E. Moffatt, 1–14th Regiment.

Robertson.—On the 20th ult., at sea, on the passage to Jamaica, Schoedde Robertson, M.D., Staff Surgeon Army.

Thomas.—On the 19th inst., Richard Thomas, L.R.C.P.Ed., of Mold.

Todd.—On the 6th inst., at Honley, Yorkshire, J. Todd, L.F.P. & S. Glas., aged 29.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

ESERINE IN CHOREA.

M. BOUCHUT has been experimenting with this alkaloid on children, and states (in the *Bull de Thérap.*, April 15th, 1875), among other things, that it may be ingested in the stomach or used hypodermically. The sulphate may be injected in doses of the tenth or the eighth of a grain; the dose should be larger when taken into the stomach. The effect of injections is very energetic, and in both cases the alkaloid should be administered fasting. The action lasts from one to three hours, and then entirely disappears, so that from three- to four-tenths of a grain may be used in three doses in the course of the day. This action with children is observed in a few minutes. The little patients may turn rather pale; but with the doses mentioned nothing serious has occurred. By injecting the tenth of a grain, the diaphragm is found to be partially paralysed. When eserine is used in chorea, it arrests the convulsive movements whilst its action lasts, and, by its continuous use, gradually moderates them. A cure may be obtained in about ten days. For this purpose we should inject a twelfth of a grain under the skin, or give a sixth by the mouth. It is, however, important to repeat the doses as soon as the usual eseric effects have disappeared, and it should be observed that the cessation of the choreic movements persists only whilst the alkaloid is being eliminated. M. Delamarre has tried hypodermic injections of eserine in two cases of traumatic tetanus. The patients died; but great improvement was obtained after each injection, so that new trials may be expected to lead to more favourable results.

Enquirer should address a note to Mr. Frank Buckland, of *Land and Water*.

THE EXAMINATION FOR THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—It has been generally believed for some months that a new Warrant most favourable to the army medical service is about to appear, and no doubt the expectation of it will induce many young medical men to present themselves at the approaching examination in August. To these I would tender *Punch's* well-known advice, "Don't." Be it remembered, the same tactics were tried in 1864, when it was generally believed that a new and favourable Warrant was actually in print; but as soon as the requisite number of candidates was obtained the document was thrown into the waste-paper basket. Mr. Hardy's reply to Dr. Lush's motion is certainly far from satisfactory. I would refer intending candidates to last week's *Broad Arrow;* and if, after perusing the excellent article therein, they still venture to come up for the examination, they have only hereafter to blame themselves.

By the way, the last insult offered to the medical profession is the insertion of an authority into the commissions of captains and lieutenants of orderlies to *command* medical officers who may be junior to themselves, thus raising up an *imperium in imperio*, which must prove utterly destructive to all good feeling between medical officers and their *quasi* medico-purveyor-combatant anomalies, yclept captains of orderlies; and, to make matters worse, the heads of the medical department, under whose orders these hospital stewards (as they ought to be called) are really placed, have no power of command over their own subordinates.

At the present moment the position of affairs is this: A surgeon-general in charge of a hospital—say the Herbert at Woolwich—has no power to give a private orderly a pass, but can direct the captain of orderlies to do so, who has perfect power to refuse it or not as he pleases, subject, of course, to his conduct being investigated afterwards.

With the abundant warning before them, if young medical men persist in taking service before matters are put to rights, they have hereafter their own folly only to blame, and they cannot say the medical officers of the army have not given them ample warning.

Yours obediently,

July 26th, 1875. AN ARMY SURGEON.

To the Editor of THE LANCET.

SIR,—Mr. Gathorne Hardy's reply to Dr. Lush's motion in the House of Commons on Friday last being vague and unsatisfactory to a degree, holding out no hope that one single grievance under which army surgeons are now suffering will be ameliorated—viz., stagnation of promotion, loss of forage, dismissal from their regiments without compensation, compulsory payment of entrance fees and subscriptions to mess and band funds of regiments to which they are only *attached*, difficulty of getting leave, refusal of exchanges, with many others which have been fully discussed in your columns,—I therefore write to entreat my young medical brethren who are thinking of entering the army to pause ere they do so, and to assure them that their position and prospects in the Royal navy or Indian medical services are infinitely superior to the Royal army, in which for years we have been suffering from injustice and broken faith. I write these words with deep regret. Twelve years ago I was full of *esprit de corps*, proud of my commission, proud of being an army surgeon. Now all that is changed, and, in common with a large majority of my brother officers, I look forward eagerly to the day in which I may resign a commission the acceptance of which was a mistake.

Yours obediently,

AN ARMY SURGEON OF FOURTEEN YEARS' SERVICE.

July, 1875.

POOR-LAW RELIEF.

Fair Play.—A parish medical officer argues the propriety of relieving officers granting relief only on the certificate of the parish surgeon. This, we presume, is the legal course, and, on the whole, is the reasonable one. In his union he complains that relief is granted on the certificate of another irresponsible practitioner as readily as on his own.

WE have received a communication from *Mr. Clarke*, of Lincoln, in reference to his blood mixture, which we hope to insert next week.

SUSCEPTIBILITY TO PAIN IN THE LOWER ANIMALS.

MR. GEORGE PORRITT, curator of the Huddersfield Naturalists' Society Museum, in a lecture lately delivered before the Society, narrated a circumstance recorded by Coleman, which is calculated to soothe one's sensibilities in view of the enormous aggregate amount of inevitable pain suffered by the lower animals in their often brief life history. "I have seen," says Coleman, "a wasp, that has been snipped in two, afterwards regale himself with avidity upon some red syrup, which, as he imbibed, gathered into a large ruby head just behind the wings, where the stomach should have been; but really the creature's pleasures seemed only to be augmented by the change of his anatomy, for he could take ten times his ordinary fill of sweets, without, of course, getting any the fuller."

Angina Pectoris.—The subject will be found treated in most works on Medicine: Watson, Aitken, or Roberts.

Nemo, (Glasgow.)—Has our correspondent tried belladonna for checking night-sweats?

ERYSIPELAS DURING PARTURITION.

To the Editor of THE LANCET.

SIR,—I was called in to see Mrs. G——, aged twenty-two, pluripara, a strong, healthy young woman, who hourly expected to be confined. I found her suffering from a severe attack of erysipelas, affecting chiefly the face, throat, and fauces, accompanied with great constitutional disturbance. Ordered castor oil, six drachms, immediately, to be followed after the bowels were relieved by tincture of perchloride of iron, twenty minims; solution of acetate of ammonia, two drachms; water to one ounce; the face to be dredged with flour; steam inhalations for the throat. Diet: milk, eggs, and beef-tea. No stimulants.

Seen next morning. The oil had acted freely; the tongue was cleaner; she had frequent rigors from the commencement of her illness. I was sent for at 4 P.M. on the same day, as she was in labour. On making a vaginal examination, I found the os dilated to the size of half-a-crown, the vertex presenting; the soft parts were very hot and swollen; the secretions scalding, acrid, pungent, and offensive. She was delivered at 6.45 P.M. of a small, weakly child, asphyxiated, but surviving on the employment of resuscitating measures. It died on the ninth day of icterus neonatorum. Having removed the placenta by Crede's method, and applied a compress and binder, I gave her liquid extract of ergot, thirty minims, to ensure if possible permanent contraction of the uterus. At 9 P.M. she had not passed urine; the after-pains were not severe; had passed a few clots, but the lochia were rather scanty, bad-coloured, and offensive; pulse 120; skin very hot and dry. Left her three pills, containing one grain of opium each, one to be taken every four hours. To continue steel mixture.

The next morning I found on inquiry that she had passed urine; she had several rigors during the night; the uterus was larger than normal, and tender on pressure; the lochia scanty and offensive; pulse 126; skin hot and pungent to the touch; erysipelas of face lessened. Ordered quinine, five grains; dilute sulphuric acid, five minims; tincture of opium, ten minims; water to one ounce: to be taken every four hours; and an antiseptic uterine injection of carbolic acid to be used warm night and morning.

The symptoms gradually improved until, on the fifth day from her delivery, I was pleased to find the erysipelas rapidly defervescing, the lochia natural, no subinvolution of the uterus, nor abdominal tenderness. She had no rigor on the previous day, and the bowels had been relieved without any aperient medicine having been exhibited. Lactation was established. The quinine and injection were discontinued, and she was ordered tincture of perchloride of iron, fifteen minims, chlorate of potass, five grains; water to one ounce: every four hours.

On the ninth day the patient was sufficiently well for me to discontinue my visits. The breasts, which had been drawn with a breast-pump, had given her no trouble. She was advised to remain in bed for another week, and to recline the greater part of the day until the end of her puerperal month; to take her medicine three times a day after meals, which were to consist of ordinary diet—tea, coffee, milk, bread, meat, and bitter ale.

She was seen again at the end of the month, when I learned that her recovery had been uninterrupted and complete.

On inquiry I ascertained that the drainage of the house was defective, and that two people living in it had suffered from sore-throat and a third from diarrhœa at about the same time as Mrs. G——'s illness. I may add that I continued my midwifery practice during my attendance on Mrs. G——, whilst using every precaution, such as change of clothes and frequently washing my hands with disinfectants, without any bad results to my patients.

I would also ask, is it possible that the speedy exhibition of quinine to chinchonism and the use of an antiseptic injection were the means of warding off in this case an impending attack of puerperal fever?

I remain, Sir, yours truly,

High-street, Deptford, July, 1875. W. R. SMITH, M.R.C.S.

A PHOTOGRAPHIC WONDER.

DR. ULTZMANN, teacher at the University of Vienna, lately read a paper before the Medical Society of Lower Austria on the "Use of Photography in Medical Studies." *Inter alia*, he mentioned, on the authority of Dr. Vogel, that an eruption of small-pox had been made evident by photography twenty-four hours *before* it actually came out. Although no one could as yet observe anything on the skin of the patient, the negative plate showed stains on the face which perfectly resembled the variolous exanthem, and twenty-four hours afterwards the eruption became clearly evident.

A. B.—We must decline to notice the matter. It is disgraceful to all parties.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—Can any of your readers answer me this question:—If a medical officer serves 20 years in the Poor-law service, and retires when 50 years of age, can he when he becomes 60 years of age claim a pension?

Yours &c.,

July, 1875. ENQUIRER.

Small-pox in France.

At a late meeting of the Paris Medical Society of Hospitals, M. Moissenet stated that hospital authorities had at length decided that small-pox patients should be received in special wards. Why such a measure was not taken years ago is hardly conceivable. It has also been resolved that variola wards should be set apart at Vincennes and Vésinet, which are institutions where the convalescent from the Paris hospitals are sent. Indeed *all* convalescents used to be sent to these institutions, which are situated in the immediate vicinity of Paris. Among these patients were many just recovering from small-pox; they were conveyed by rail, and the seats they had occupied were *immediately afterwards* used by the general public. Whether the authorities are wise in setting apart wards for small-pox patients in an asylum intended for convalescent patients is extremely doubtful. At all events, it is to be hoped that when variolous patients are sent thither, they will not be conveyed by rail.

Dissector.—Gray's or Quain's Anatomy; Kirkes's, Marshall's, or Carpenter's Physiology.

Mr. Wynter Blyth.—The paper shall receive attention.

A Case of Post-partum Hæmorrhage unsuccessfully treated by Injection of Tincture of Iron.

To the Editor of The Lancet.

Sir,—As we have heard so much of late about the injection of perchloride of iron in post-partum hæmorrhage, I venture to suggest that the following case is worthy of attention.

A short time back, while taking temporary duty in the absence of a medical friend, I was called to Mrs. D——, aged forty, who was taken in her twelfth confinement at 9 A.M. On reaching the house I found her attending to her duties, and, in reply to my questions, she told me that her pains were very trifling, and only occurred at long intervals. Accordingly I left her, being engaged with a more urgent case. Two hours subsequently I was summoned in haste, and informed that the child was born, and that the mother was flooding profusely. On my arrival I found I had been correctly informed; the patient was lying on the bed completely surrounded with blood. I introduced my hand into the uterus, and cleared it of its contents, which consisted of several large clots and a small piece of placenta, which was adherent to the fundus. The hæmorrhage still continuing, and the uterus refusing to contract, I sent for the perchloride, but could only obtain the tincture of perchloride of iron of the Pharmacopœia (the strength of which is one part of strong solution of perchloride of iron to three parts of spirit). I mixed six ounces of this with an equal quantity of water, and injected the whole of the mixture. In about three or four minutes the hæmorrhage returned as freely as ever, the uterus contracting only momentarily. I now injected about six ounces of the tincture of iron alone, and watched the result. The uterus contracted, but only to relax again. By this time a small quantity of the strong solution of perchloride of iron had been procured, and I mixed about three ounces of this with the same quantity of water, and injected it as before; but once more the hæmorrhage returned, and the patient sank.

Not one of the least interesting features of the case is the fact of the patient surviving so long the immense loss of blood, aided, no doubt, by the administration of brandy and milk at frequent intervals. I have used the perchloride on several occasions; but only in rare instances have I had to inject it more than once, and never before have I seen it fail to arrest hæmorrhage.

In conclusion, I may add that the result of the case in question was not due to neglect of any of the precautions necessary to the success of the operation.

I am, Sir, yours obediently,

July 10th, 1875. T. P. Morgan.

How Sanitary Questions are decided in Cambridgeshire.

The following extract is taken from a local paper. We will merely premise that the medical officer of health of the district found occasion to point out the defective condition of the water-supply:—

> "Effects of Impure Water.—In consequence of recent unfavourable reports respecting the Chatteris water, we have been supplied with the following facts:—Five widows and two widowers are living down the New-road, who met together last week at a tea party, all being members of the Zion Chapel, whose united ages amount to 496 years; eight old people living in Slade-end, whose average age is 80 years, and one old lady, who had her portrait taken the other day, prides herself on having lived 92 years. In the face of Mr. Apjohn's report, they all believe in the purity of Chatteris water."

Surely no more conclusive testimony could be given of the wholesomeness of the water. The results of analysis are as nought beside such evidence.

Mr. John Russell, (Neath.)—Such cases will occasionally occur, and unfortunately there is no appeal. We do not think any good would result from the publication of our correspondent's letter.

Medical Officers of Health and Parish Medical Officers.

Dr. Woodward, of Worcester, has written a letter to the Board of Guardians, explaining his unwillingness to supply returns of infectious cases to the medical officer of health unless specially remunerated for doing so.

A Dualist, (Manchester.)—A capital article on Syphilis by Bäumler appears in the third volume of Ziemssen's Encyclopædia of Medicine, just published.

The Profession in the United States.

To the Editor of The Lancet.

Sir,—Allow us respectfully to refer your readers to the "Medical Register and Directory" of the United States," recently published by us. In it will be found full information on the point raised by a correspondent in your last. The systems and institutions for qualification and the number of medical men in each State are fully given, as well as much valuable information not obtainable of any other published source.

Your obedient servants,

Baillière, Tindall, and Cox.

King William-street, Strand, July, 1875.

Anatomical Peculiarity of the Japanese.

Dr. Hilgendorf, of the German Society at Yeddo for the study of natural history, is credited with the observation that the malar bone of the Japanese is double in many cases. The additional bone, when present, is united to the other by a suture, and is believed by Dr. Hilgendorf to be peculiar to the natives of Japan.

The New Fever Department of the Sussex County Hospital.

To the Editor of The Lancet.

Sir,—In reply to Dr. Kebbell's letter in the last number of your journal, I beg leave to agree with him that there has been a great deal of misrepresentation, although not on my part, on the subject on which he has written as, for instance, an assertion that the article which appeared in The Lance some weeks since was inspired by your humble servant, which, as you can testify, was totally unfounded. Dr. Kebbell has written many letters to the local press on the subject in dispute; while up to the present time I have not written to any journal, local or otherwise, and should not do so now had not Dr. Kebbell indirectly accused me of misrepresentation.

In the very laconic letter which I received from the secretary to the hospital, the new fever department, as Dr. Kebbell now chooses to call it, was designated "a building for the reception of fever and other infectious diseases." In a subsequent letter to the Town Clerk it was called "a sanatorium for erysipelas and other allied diseases, so injurious to patients after accidents and operations." Here we have a complete change of front, and, as I consider, a scarcely honest one, and a false issue is raised. Is it not a preposterous euphemism to call a county fever hospital an erisipelas adjunct? An endeavour is made to make the removal of erysipelas cases the primary reason for erecting the new fever hospital and that of the allied diseases (scarlet fever, diphtheria, typhoid fever, &c.) a mere secondary one. All this at first sight seems plausible; but has it not struck Dr. Kebbell that even after the erysipelas and allied diseases have been removed to the new fever department, the patients after operations and accidents will still be liable to erysipelas if kept in the main building, where they will still be exposed to all those conditions which may be the cause of that disease, such as the emanations given off wherever a number of sick persons are collected or congregated, faulty ventilation, and other insanitary arrangements. If Dr. Kebbell wants a remedy for this state of things, let him remove the patients after operations and accidents into the new building, and so remove them out of the atmosphere of the general hospital. I have never for a moment disputed the desirability of removing the fever and erysipelatous cases out of the main building; but what I suggested was, that as they were to be so removed, why not carry the improvement to its fullest extent, and take them to a safe distance from the population. The matter does not admit of any argument; for if it is right to remove them so short a distance, it must be still better to take them further.

There is no analogy between the cases of London and Brighton. The former is a vast city of nearly four million inhabitants, where there manifestly must be some difficulty in getting a proper site for a fever hospital sufficiently isolated, and yet at a convenient distance from the parts from whence the patients are drawn. Dr. Sibson, in his evidence before the Select Committee of the House of Commons, lays down that distance as three miles. The Sussex County Hospital is nearly three miles from the western extremity of Brighton, and I am sure an eligible site for a fever hospital could be obtained in a situation nearer the central and western parts of the town than the County Hospital. Dr. Kebbell has himself indicated one spot much more isolated—namely, the Parish Infirmary, which the guardians have always kindly allowed to be used in cases of epidemics. What is the practice at present at the County Hospital? It is this. Whenever a case of small-pox is sent there, it is forwarded on at once to the Parish Infirmary. Does not this point to some extent to a solution of the difficulty? If a joint action of the hospital authorities, the guardians, and the sanitary authority were to take place, the difficulty, if any existed, would soon be removed. Dr. Kebbell would only prepare for epidemics. I would do this, but also would, in addition, try to prevent their occurrence. Dr. Kebbell is medical officer of health for Hove, and advocates the transplanting of fever cases from that part to Kemp Town, the extremity of the borough of Brighton, for which I am medical officer of health. I advocate an isolated hospital, which shall be beneficial equally to all parts; that would provide not only for epidemics, but also for the ordinary wants of the town, in order to prevent epidemics, and into which the sending fever patients from the country districts (Dr. Kebbell's hospital being a *county* one) would not be likely to become the means of importing infectious diseases into Brighton. It seems to me astounding that Dr. Kebbell or anyone else can advocate the collection and treatment of cases of infectious disease, no matter how few in number, in a situation close to two asylums for children, the one having at the present time 29 inmates, the other 70, and in last March 116. There is another institution (St. Mary's Hall) not very far off, with 100 pupils, 20 teachers, and 20 servants; total 140. There is also the Brighton College, the Deaf and Dumb Asylum, and a large number of first-class schools in Kemp Town. Dr. Kebbell cannot see any objections to his contemplated fever hospital. I think I have shown him many. Dr. Letheby, in his evidence before the Select Committee (now sitting) of the House of Commons, said: "As a professional man, from the attention he had given to the matter, he believed that it was of the first importance that a hospital for contagious and infectious diseases should not be in a residential district, or in a place where many persons were continually passing by it, for there was no doubt that infection would be spread in this way. He also gave it as his opinion that such hospitals should stand on elevated ground, instead of in a hollow, and away from public thoroughfares." I am of opinion that it is not only wrong to perpetuate a dangerous practice, which has hitherto prevailed, of sending cases of contagious disease for treatment into a thickly populated town like Brighton, but that it inflicts an additional wrong by increasing the zymotic death-rate of the borough, whilst it in the same proportion lessens that of other districts.

I am fully persuaded that so benevolent a lady as Miss Poore has shown herself to be would not have made the least difficulty if the case had been properly represented to her. For what would it matter to her whether the proposed fever hospital or department was close to the main building or a mile or two away from it? The specific object for which she gave the donation would still have been carried out.

I remain, Sir, yours &c.,

R. P. B. Taaffe, M.D. Lond.,

July 19th, 1875. Medical Officer of Health for Brighton.

Diarrhœa in Children.

Dr. Langmore is thanked for the copy of the "Plain Rules for the Prevention and Treatment of Diarrhœa in Children" distributed among the poor of the dispensary and neighbourhood. They seem to us very good for the purpose, and it would be well if such papers could be extensively distributed. Infantile diarrhœa is a disease so common, and yet so grave, and withal dependent to so large an extent on causes of a preventable character in regard to which the people are ignorant, that such tracts as that under notice are likely to be very useful.

Mr. E. George, (Horncastle.)—The preliminary examination at either the College of Surgeons or Apothecaries' Hall.

Scilla.—Ten days is not a long time. It is not wise to formulate iron rules of conduct in all the different circumstances specified in the three cases put to us. In all events it is better to act magnanimously, and upon a generous construction of the conduct of professional neighbours.

Mr. C. J. Ottley.—We never recommend a particular physician or surgeon.

Case of Displacement of the Seventh Cervical from the First Dorsal Vertebra, without Fracture.

To the Editor of The Lancet.

Sir,—J. C——, aged forty-two, a strong muscular man, on May 22nd, whilst under the influence of drink, was engaged in a wrestling encounter. When down on his hands and knees, his opponent placed one hand between his thighs, the other at the back of his neck, and turned him over, so that his head was doubled under his chest. He held him in that position about half a minute, and after releasing him it was found he could not stand. Two hours afterwards I saw him, and diagnosed displacement of the seventh cervical from the first dorsal vertebra, causing pressure on, and tension of, the cord. He was quite conscious, and remained so until a few hours before his death. There was considerable tenderness over the seat of injury, complete loss of motor power and sensibility in the lower extremities, and of sensibility in the trunk below the seat of injury; motion and sensibility somewhat impaired in the upper extremities; priapism and spermatorrhœa. I drew off his urine, applied leeches and hot fomentations, prescribed bromide of potassium, and administered a turpentine enema. He got gradually worse until the third day, when total loss of motion and sensibility in the upper extremities came on, and he died comatose.

In my absence, Mr. Couldrey made a necropsy twenty-nine hours after death. There was considerable ecchymosis over the seat of injury; marked separation between the spinous processes of the seventh cervical and first dorsal vertebra on exposing the spine; the supra- and inter-spinous ligaments ruptured; the ligamenta subflava stretched and partially torn; the dura mater congested, and the spinal cord softened from seat of injury to the brain; the posterior common ligament torn through, the anterior one unruptured. There was no fracture. Brain congested; cerebellum very much softened. An examination of the thorax and abdomen was not deemed necessary.

Yours &c.,
Littleborough, July, 1875. G. K. Pitcairn.

Lectures on Insanity.

Dr. Yellowlees, Physician-Superintendent of the Royal Asylum at Gartnavel, has during the last three months given a course of lectures on Mental Diseases at the University of Glasgow, accompanied by clinical demonstrations at the asylum. At the conclusion of the lectures on the 17th inst., an address was presented to Dr. Yellowlees in acknowledgment of his services.

Medical Appointments in the Dutch Navy.

Gat, Surgeon (Dewsbury), would be glad to be informed where he could get the Dutch Navy Medical Regulations.

Statist.—Yes, in Dr. Lagneau's paper recently read before the Parisian Academy of Moral and Political Sciences on the "Influence of Illegitimacy on Mortality." Out of every 1000 children born of unmarried parents, only 238 reach 21 years of age; whereas of children born in wedlock, 640 out of every 1000 attain their majority.

Zero.—We have no information on the subject. It could not be registered in England.

Coroners' Inquests.

At this juncture the following paragraph, taken from the *Local Government Chronicle*, may prove interesting:—

> "The Middlesex justices, at their next meeting, will have laid before them the opinion of counsel on questions submitted to them respecting the holding of unnecessary inquests by coroners. The opinion of Mr. Manisty and Mr. F. W. E. Everitt is as follows:—'If an inquest has been in fact held, and the expenses have been really and *bonâ fide* paid, the justices have no right to disallow the payment of such expenses. If it could be shown that they had not been incurred and paid *bonâ fide*, we think the justices might properly refuse to pay them, leaving the coroner to apply for a mandamus; in which case, if any *mala fides* on his part were proved, the Court would probably refuse to assist him. If, at the expiration of the current five years, the justices should be of opinion that unnecessary inquests have been held, it will be competent to them to take that circumstance into consideration in fixing the amount of the coroner's salary for the next five years. If, in the opinion of the justices, the coroner misconducts himself by holding inquests unnecessarily and vexatiously, the only course open to them during the current five years seems to be to bring the matter under the consideration of the Lord Chancellor.'"

W. C. M., (St. Andrews.)—The "Handbuch der gesammten Augenheilkunde," by Proff. Arlt, Arnold, and others. This important work, in which Proff. Alfred Graefe and Saemisch have a considerable share, is exceptionally good on that little cultivated branch of ophthalmic science, the "Organology of the Eye." Chapter VIII., on the Circulation and Nutrition of the Eye, is particularly well done. It is from the pen of Prof. Leber.

Mr. H. W. Kiallmark.—We will endeavour to do so.

Turkish Baths in France.

M. Leudet lately read a paper before the Hydrological Society of Paris, in which he described the Turkish baths of Hamburg and Scandinavia. In 1872 the same author had offered a sketch of similar establishments in England, Ireland, and Scotland. He laments greatly that France should be so sadly behindhand in this respect. No doubt the French are more accustomed to public baths than we are in this country, as complete domestic ablutions are with us more common than with them; but it is to be regretted that the French should ignore the great advantages which, in appropriate cases, attend the use of Turkish baths.

The Indian Medical Service.

To the Editor of The Lancet.

Sir,—Knowing that you are at all times ready to open the columns of your valuable journal for the purpose of bringing before the medical profession and those about to enter it any injustice and hardships inflicted upon men who have been induced by the promise of high pay and emoluments to enter a public service, allow me to trespass upon your kindness in order to inform those who are about entering the Indian medical service to think seriously before doing so. I will, then, briefly notice a few facts which intending candidates for the service may have to encounter should they embark upon an Indian career.

1st. With reference to pay. On arrival in India, a surgeon draws 286 r. 10 a. per mensem, about £300 per annum. This is just sufficient to enable him to exist, for since the great increase in the price of necessaries within the last few years, to save money out of this sum is impossible. To this amount he is restricted until he has passed the examination in the Hindustani language. So say the Regulations. This then is done as soon as possible, in order to qualify for higher pay.

2nd. After passing the examination in the language comes the first blow to his hopes of higher pay and improved position. Instead of being located permanently with a regiment, he is ordered about, first in one direction, then in another, remaining two months in one place, three in another, and so on, these journeys often extending over three and four hundred miles, and the expenses of which frequently have to be borne by the unfortunate officer. This continuous change of station may continue for two or three years, according to the amount of interest he may have at head-quarters. The fortunate may by this time obtain an appointment; the unfortunate, or those who have no interest, may continue to be sent about the country until, wearying of such a life, they obtain a sick certificate to England, disgusted with everything connected with the service, having lost three or four of the best years of their lives, which might have been spent more profitably at home.

3rd. For five or six years a medical officer often is, although entitled after five years' service to 600 r. per mensem, restricted to 300 r. per mensem, with an additional 100 r. with a regiment, because he is only acting—but performing exactly the same amount of work—for an officer who may be in England or elsewhere. When this state of things continues over a period of two or more years, it becomes hard and unjust.

4th. With reference to the future. After twenty-five years of Indian service, an officer may retire upon £365 per annum. Often he may be worn out from long service, and unfit for any further exertion as far as earning money is concerned. I ask you, Sir, do you consider £365 per annum, looking to the present rate of prices in England, a sufficient reward for an officer who has toiled for a period of twenty-five years in an unhealthy climate? Prior to 1864, officers who entered the service had the advantage of subscribing to a Fund, under the regulations of which, on retirement, they were granted an annuity of £200 or £400 in addition to the pension. No such Fund exists now. The reason why is only known to the authorities at the India Office. He has nothing, therefore, to look to but an inadequate pension as a means of subsistence in his old age.

I remain, Sir, your obedient servant,
Madras, June 2nd, 1875. Surgeon of Five Years' Standing.

To the Editor of The Lancet.

Sir,—In my Lancet received by the last mail I see a letter on the Indian medical service, signed by "Medicus," in which he certainly states the feelings of all the younger members of that service whom I have come across. The memorandum which he quotes states in paragraphs 8 and 9 the various rates of pay to be drawn by medical officers of the different ranks, both unemployed and in charge of regiments; but in no single place is there the slightest mention of *officiating allowances*, the way of calculating which not only bothers the new-comer, but also many high up in the list. I enclose a table showing the way in which this is done, and feel sure you will fully agree with us in considering it a great anomaly, not to say a decided grievance, that for doing exactly the same duty one officer should draw 148 r. 0 a. 11 p. in addition to his unemployed pay, while another receives but 55 r. 10 a. To explain this more fully, let us take two surgeons of eighteen months' standing (this is about the time when they may expect to commence *officiating*). A. is sent to one regiment, the permanent incumbent of which is a surgeon-major of twenty-five years' service. His monthly salary will be, unemployed pay of rank, 286 r. 10 a., plus 55 r. 10 a., which is half the difference between the consolidated and unemployed pay of the permanent incumbent, the two sums amounting to 342 r. 4 a. B., who is perhaps lower down in the list, is, however, more fortunate, and is sent to officiate for a surgeon of over five years' service. He will get 286 r. 10 a. and 148 r. 0 a. 11 p., or a total of 434 r. 10 a. 11 p. It is true these are the extremes; but the above has often occurred, and is likely to do so over and over again. Why should not the medical allowances for a regiment be a fixed sum, as in the case of adjutants, quartermasters, and, in fact, every other officer in a regiment? A certain amount of work and responsibility is attached to the appointment, and a certain sum ought to be paid in return for it. The reason the India Office does not make it clear to intending applicants for appointments what they are really to expect is, of course, unknown to most of us; but the sooner the matter is put upon a better footing the less discontent there will be, and all know that to commence one's career with this destroys zeal to a very great extent.

Your obedient servant,
June 8th, 1875. Surgeon, Indian Medical Department.

P.S.—I may state there are not many of us who have not been retrenched at one time or another (in one case to the amount of about 2000 r.) through not being aware of the rules relating to officiating allowances. This is the painful way we first became acquainted with them.

A Third Dentition at Ninety Years of Age.

A case of this kind is published in the *Allg. Med. Central Zeit.*, June 21st, 1875. The subject of it was a woman in the Hospital for Incurables at Paris, who found, in her ninetieth year, all her teeth grow again. At the age of forty-seven and again at sixty-three, she had had a new set. The head surgeon of the hospital, who has occupied his post these fifty years, had occasion to witness this extraordinary dentition. In bringing this case before the Academy of Sciences, he referred to Hunter, Jobert de Lamballe, and Petrequin, who had observed similar cases, but not at so late an age.

Mr. G. Skene (Castle Douglas) sends us an account of a method for preventing a "host of diseases depending on deranged alimentary canal," and so doing away with "the practice of physicing children." "An enema given once a day will thoroly prevent any viscious secretion from loding and causing after trouble." The extracts, which we have given *literatim*, are at the service of our readers.

Dr. Woodhouse.—We sympathise acutely with Dr. Woodhouse. We cannot doubt that the letter of Mr. Tasker Evans, jun., was written under a misapprehension of the facts of the case.

F. W., (St. Albans.)—Medical men do not generally dispense in that city. We cannot speak as to the probability of one being able to follow the two occupations mentioned.

Mr. W. Adams.—Another instance, which we happen to remember, is that of Dr. Ede, of Barnsbury, London, who, doubtless, would give particulars to our correspondent.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Mr. Henry Lee, London; Dr. G. Johnson, London; Dr. Hughlings Jackson, London; Mr. James Lane, London; Mr. M. Tupper, London; Dr. Quinton, Deal; Messrs. Baillière, Tindal, and Cox, London; Dr. More Madden, Dublin; Dr. Payne, London; Mr. Ayling, London; Mr. Orchard; Dr. Gillespie, London; Mr. Hemming, Bristol; Surgeon-Major Hunter; Mr. S. Snell, Sheffield; Mr. M'Gann, Mysore; Mr. Alcock; Dr. M. Brown, Edinburgh; Dr. F. Alsop, Edinburgh; Mr. Macdonald, Manchester; Dr. Lomas, London; Mr. Blackett, London; Mr. Shackles, Hull; Mr. Newstead, London; Mr. Willing, Great Wakering; Mr. Palmer, Mortlake; Dr. Taaffe, Brighton; Mr. Chitty, Shaftesbury; Mr. Plimsoll, London; Mr. Watts, Hartfield; Rev. J. Cranswick, Staley; Dr. Ray Lankester; Dr. Woodhouse, Hertford; Mrs. Dalrymple, Norwich; Miss Thornton, Dover; Dr. Daly, Dalston; Mr. Jeaffreson, London; Dr. Cuthbertson, Zanesville, Ohio; Messrs. Richardson and Co., Leicester; Mr. Tomkins, Manchester; Mr. Hughes, Waenfawr; Mr. Douglas, Bangor; Mr. Hanbury, Hunstanton; Mr. Sprakeling, Bootle; Dr. Harford, Hillingdon; Mr. Magill, Embleton; Mr. Holland, Camberwell; Rev. A. J. D'Orsey; Dr. Goolden, London; Dr. Haughton, Norwood; Mr. Draper, Boxmoor; Mr. Rayner, Stockport; Mr. George, Horncastle; Dr. Longmore, London; Mr. Lewis, Maidenhead; Mr. Blyth, Barnstaple; Mr. Alderson, London; Mr. Kerr, Woodford; Mr. Solomon, Birmingham; Mr. Horne, London; Dr. Wylie, Clapham; Mr. Haward, London; Mr. Pelham, Croydon; Mr. Evans, Bath; Mr. Rossiter, Diss; Mr. Mason, Hull; Mr. Fortescue, London; Mr. Hawke, Canterbury; Mr. R. Clark, Carlisle; Dr. Woods, Warwick; Dr. Allchin, London; Mr. Manning, Catford Bridge; Dr. Constable, London; Dr. Phillips, Reading; Mr. Price, Wexford; Mr. Dale, Yarmouth; Mr. J. Russell, Neath; Dr. Hutchinson, Chipping Norton; Mr. De Grave, Bromley; Mr. W. Pearson; Mr. Owen, Birmingham; Mr. Anderson, Lower Norwood; Mr. Reed, Worcester; Mr. Kiallmark, London; Dr. Laycock, Edinburgh; Mr. Love, Wolverhampton; Local; M.D.; Paterfamilias; Register; Gat; Zero; Enquirer; R. M.; Medicus, London; Gray's Inn; The Secretary of the Bristol Royal Infirmary; T. B.; Angina Pectoris; Tyro; Every Man to his Own Trade; S. N., Bedford; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Mr. Hamilton, Liverpool; Mr. Fairles, Montgomery; Mr. Allott, Hoyland Nether; Mr. Stephenson, Tramore; Dr. Gray, Wragby; Dr. Bayfield, Swindon; Mr. Lloyd, Newport; Mr. Fox, Topsham; Mr. Ernst, London; Mr. Hind, Ampthill; Mr. Macmillan, Hull; Mr. Cooper, Macclesfield; Dr. Masken, Lyndhurst; Mrs. Crichton, Mortlake; Dr. Burder, Bristol; Dr. Morris, Barnsley; Mr. Thomas, Llanelly; Mr. Sparr, Sheffield; Mr. Williams, Canterbury; Mr. Wellmore, Stockbridge; Mr. Love, London; Dr. Field, Montreal; Mr. Wright, Merton; Mr. Martin, London; Mr. A. G. Fox, St. Peters; Mr. Morris, Gosberton; Mr. Teevan, London; Mr. Evans, London; Mr. Hughes, Pen-y-Mais; Mr. Fox, London; Mr. Fawcett, Taunton; Dr. Davies, Bridgend; Mr. Wright, London; Mr. Roberts, Shrewsbury; The Secretary, Dover Hospital; L.R.C.P., Deal; Lexicon; B. H.; ——, New York; J. L. G., Ross; M.D., Grantham; M.R.C.S., London; C. O., Edinburgh; M.D., Hanley; Surgeon, Romsey; Medicus; W. H., Blackwood; E. M., Edinburgh; A. T.; M. M., Lancaster; J. P.; W. C.

Manchester Guardian, Welshman, Broad Arrow, Women and Work, Spectator, Examiner, Pharmaceutical Journal, Evening Express, Academy, Sunday Times, European Review, Worcestershire Chronicle, Fifeshire Advertiser, Land and Water, Daily Chronicle, Kidderminster Advertiser, Cork Constitution, East London Observer, Surrey Advertiser, Worcestershire Advertiser, Huddersfield Daily Chronicle, Metropolitan, Liverpool Daily Post, Leeds Mercury, Evening Post (New York), *Brisbane Courier, Record, Stockport and Cheshire County News, Colonies, Brighton Examiner*, and *Isle of Man Times* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, July 29th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall.	Remarks at 8 A.M.
July 23	29·72	W.	55	57	99	70	55	0·10	Raining
„ 24	29·69	W.	58	60	107	70	56	...	Cloudy
„ 25	29·93	W.	54	60	105	71	51	0·03	Cloudy
„ 26	30·32	W.	51	55	110	74	49	...	Fine
„ 27	30·38	S.E.	54	60	102	72	53	...	Fine
„ 28	30·28	E.	58	61	107	77	54	...	Fine
„ 29	30·29	E.	58	62	...	...	55	...	Fine

Medical Diary for the ensuing Week.

Monday, Aug. 2.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ A.M. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ P.M. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 A.M. and 2 P.M.

Metropolitan Free Hospital.—Operations, 2 P.M.

Tuesday, Aug. 3.

Guy's Hospital.—Operations, 1½ P.M., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 P.M.

National Orthopædic Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 3 P.M.

Wednesday, Aug. 4.

Middlesex Hospital.—Operations, 1 P.M.

St. Mary's Hospital.—Operations, 1¼ P.M.

St. Bartholomew's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 P.M., and on Saturday at 1½ P.M.

Great Northern Hospital.—Operations, 2 P.M.

University College Hospital.—Operations, 2 P.M., and on Saturday at the same hour.

London Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2½ P.M.

Thursday, Aug. 5.

St. George's Hospital.—Operations, 1 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Aug. 6.

St. George's Hospital.—Ophthalmic Operations, 1½ P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

Saturday, Aug. 7.

Royal Free Hospital.—Operations, 2 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

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THE
ADDRESS IN MEDICINE,

Delivered before the Annual Meeting of the British Medical Association, at Edinburgh, August, 1875.

By J. WARBURTON BEGBIE, M.D., F.R.S.E.

ANCIENT AND MODERN PRACTICE OF MEDICINE.

When the late distinguished Professor of Logic and Metaphysics in the University of Edinburgh inquired, "Has the *practice* of medicine made a single step since Hippocrates?" and, in vindication of his own belief in the negative conclusion, referred to the recorded opinions of several eminent authorities of modern times in the profession, he put a question which no thoughtful mind within the pale of medicine will be inclined to evade, and the consideration of which, after some sort, may suitably engage our attention in such a meeting as the present.

Sir William Hamilton, in penning the question referred to, had under review "An Account of the Life, Lectures, and Writings of William Cullen, M.D., the famous Professor of the Practice of Medicine in the University of Edinburgh from 1769 to 1790," by Dr. John Thomson; and having noticed, in terms of well-deserved commendation, the masterly execution of his task by the eminent author of the "Lectures on Inflammation," and accompanied him in a brief survey of the doctrines promulgated by the renowned triumvirate of the early part of the eighteenth century—to wit, Hoffmann, Stahl, and Boerhaave,—he was tempted by a mild reflection of Cullen on the practice of Stahl, which censure, indeed, was judged too indiscriminating by Dr. Thomson, to indulge in a philippic against the modern practitioners of the healing art, quoting what for his purpose appeared to be the apposite phrase of Hoffmann, "Fuge medicos et medicamenta si vis esse salvus," and that of Celsus, "Optima medicina est non uti medicinâ." The vehemence of Sir William Hamilton's denunciation is more fully explained by a note, published in 1853, to the original article, which had appeared in the *Edinburgh Review* for July, 1832, where it is shown that the dangers which are to be apprehended in the practice of medicine arise, in Sir William Hamilton's opinion, from the illiterate rashness of its practitioners, for he transfers to his pages, with very evident satisfaction, the statement of Dr. Gregory: "I think it more than possible that in fifty or a hundred years the business of physician will not be regarded, even in England, as either a learned or a liberal profession." If the medical faculty of the University of Edinburgh had in any measure justly laid itself open to the charge of hastening the decadence of learning in the profession, it will be admitted by every dispassionate inquirer that the statutes and regulations of that University relative to degrees in medicine entitle it, at the present time, to be regarded as in the van of those bodies which are striving for the honour and advance of the medical profession. It is, indeed, impossible to read the animadversions of Sir William Hamilton without coming to the conclusion that learning in the practitioners of medicine, by which he evidently understood general culture and, in particular, classical attainments, was, in his opinion, the great desideratum. Between learning of the nature referred to, and usefulness in medicine, as dependent upon ample professional qualifications, there is really nothing antagonistic. Not a few of the most distinguished men in the profession in quite recent times have been accomplished scholars. But, while this holds true, let it be distinctly understood that learning of the kind in question is not supreme: it is secondary in importance to ability in the healing art. I make bold to say that not a few physicians, with no pretension whatever to learning, have served their generation well, and have done much to recommend the profession they zealously cultivated, if they cannot be said to have adorned it. If, therefore, it were necessary to decide between the claims of medicine as a learned or so-called liberal profession and as a useful art, the preference must be awarded to the latter. Let us be thankful, however, that no such issue is before us. Medicine *is* a liberal profession, and will doubtless continue to be so, although the diffusion throughout its ranks of polite learning may have become diminished, a result which is to be in no small measure attributed to the very great enlargement which has taken place in all that is proper to medicine itself. Think of the rapid advances which have been made during the last thirty years in such departments of medicine as animal chemistry, physiology, pathology, and psychology, and then consider how limited is the time at the disposal of him who is expected to acquire at least a competent knowledge of these sciences for the cultivation of other subjects, however elevating and attractive. That there exists nothing hostile in the study of medicine, as now pursued, to distinction in other walks, is evident from the circumstance that members of our profession in no way favourably placed for the study have achieved distinction in scholarship. Look at the career of the late Francis Adams, toiling as a country surgeon in Aberdeenshire, and yet distinguished as the translator of Hippocrates, Aretæus, and Paulus Ægineta. Who can fail to sympathise with the feelings of that accomplished man when, in drawing his *magnum opus* to a close, he thus expressed himself: "I shall conclude this argument and my present task by quoting the memorable words in which Cicero apologises for his having spent a certain portion of his time in the cultivation of elegant literature and of philosophy, leaving the reader to apply the same in the case of Hippocrates, and, I may be permitted to add, in that of the humble editor of the present volume, who trusts he shall not be set down as an idle and unprofitable practitioner of the art because he has found leisure, amidst the turmoil and distraction of a professional life, to communicate to his countrymen the important opinions contained in the genuine remains of the Coan sage."

It has been my happy lot to meet with others who, although less distinguished, some indeed wholly unknown to fame, have cultivated, in circumstances quite as trying, their natural taste for classical and other learning; in remote districts of the country, undergoing a daily round of fatigue and anxiety, which must needs try the strength both of body and mind to the very utmost. Mine, moreover, has been the privilege to meet and have friendly intercourse with men who were ably discharging the duties of their calling, and were at the same time being leant upon by the whole community in which their lot was cast, not only as the advisers in sickness, but as persons on whose counsel and judgment all reliance was to be placed.

> "Along the cool sequester'd vale of life,
> They kept the noiseless tenor of their way."

Having formed the acquaintance of such men, I have with pride reflected on the circumstance that the individuals who were the recipients of so much confidence, and whose friendship was so highly prized, were members of the profession to which we have the happiness to belong. It is not the least of the advantages possessed by membership of this great Association, that in our annual meeting the bands of fellowship among us are apt to be greatly strengthened.

The question of Sir William Hamilton, to which reference has been made, leads us, in the first place, to a brief consideration of the practice of medicine at the period of Hippocrates.

Intimately acquainted as Sir William Hamilton was with the whole history of philosophy, he knew the close alliance which existed between philosophy and medicine in ancient times. The most renowned philosophers antecedent to, and contemporaneous with, Hippocrates, applied themselves to the study of medicine. Numerous are the references to medicine in the writings of these philosophers. Take, for example, the following passage from the "Phædrus" of Plato, in which not only is the relation referred to, but the name of Hippocrates is introduced.

"Socrates remarks: Rhetoric is like medicine.—Phædrus: How is that?—Socrates: Why, because medicine has to define the nature of the body, and rhetoric of the soul, if you would proceed not empirically but scientifically; in the one case, to impart health and strength by giving medicine and food; in the other, to implant the conviction which you require by the right use of words and principles.—Phædrus: You are probably right in that.—Socrates: And do you think that you can know the nature of the soul intelligently without knowing the nature of the whole?—Phædrus: Hippocrates, the Asclepiad, says that this is the only method of procedure by which the nature of the body can be understood.—Socrates: Yes, friend, and he says truly. Still, we ought not to be content with the name of Hippocrates, but to examine and see whether he has reason on his side.—Phædrus: True.—Socrates: Then consider what this is which Hippocrates says, and which right reason says about this or any other nature."*

But, while occupied with the study of medicine and engaged in speculations as to the phenomena of disease, it is in the highest degree improbable that these philosophers ever practisėd the healing art. It is, indeed, worthy of remark that in subsequent, although still ancient, times, the intimate connexion which had subsisted between philosophy and medicine was not regarded as favourable to the growth of the latter, and the share he had in effecting their divorcement is held by Celsus as a reason for eulogising Hippocrates. "Hujus autem, ut quidam crediderunt, discipulus Hippocrates Cous, primus quidem ex omnibus memoriâ dignis, ab studio sapientiæ disciplinam hanc separavit, vir et arte et facundiâ insignis" (*De Medicinâ*, liber primus). Medicine, however, had been cultivated after a fashion long antecedent to the birthtime of philosophy. The doctor-priests of the Grecian temples, or Asclepiadæ, had acknowledged Æsculapius as its origin. The Asclepia, or temples, were erected in many parts of Greece, were ruled by the Asclepiadæ, and used in a manner not very unlike that in which hospitals are employed in modern times. To them the sick resorted for advice and cure. In one of the most distinguished of these temples—namely, that of Cos, built on the island of the same name, one of the Sporades, a group of scattered islands, as their appellation denotes, in the Ægean Sea, off the island of Crete and west coast of Asia Minor, Hippocrates, inheriting a recognised position, acted as an Æsculapian priest. He had been born, in all probability, in the four hundred and sixtieth year before the birth of Christ. But Hippocrates had not only the advantage of the most favourable study in the Asclepion of Cos; we know, on excellent authority, that, under the direction of Herodicus of Selymbria in Thrace, he became intimately acquainted with the practice then pursued in the gymnasia, while, through the instructions of Gorgias and Democritus, the former of Leontini in Sicily, the latter of Abdera in Thrace, and himself illustrious as the originator of the doctrine of atoms, he became thoroughly versed in the literature and philosophy of the age.

The foundation of the practice of Hippocrates, with which we are now more immediately concerned, was experience; but this experience of Hippocrates was rational in character, not a mere blind or misguided empiricism. No one could be more convinced of the fallaciousness of a blind empiricism than he was, and his condemnation of it may be recognised in the earliest, the best known, and perhaps the grandest of all the Hippocratic aphorisms, "*ἡ πεῖρα σφαλερή, ἡ κρίσις χαλεπή*," "experimentum periculosum, judicium difficile." Hippocrates believed in the existence of a principle, a spiritual essence, the preserver of all things in nature, the restorer of whatever had become disordered. The regulation and superintendence of all the actions of the system were due to this principle, to which he gave the name of *Φύσις*, Nature. Thus, he was led to consider that the chief duty of the physician consisted in watching the operations of Nature, endeavouring, as might be the case, to promote or restrain these, possibly in some, but these very rare instances, to counteract them. "Our natures," he remarks, or, if not he, one of his immediate descendants, who may reasonably be supposed to be expressing the views of his master, "our natures are the physicians of our diseases." *Νοῦσων φύσεις ἰητρόι.* It is in reference to this exposition of the function at once of nature and the physician in relation to disease that Sydenham, "the chief of English practical physicians," who in many particulars resembled the Father of Medicine, observes: "He it is whom we can never duly praise. He it is who then laid the solid and immovable foundation for the whole superstructure of medicine when he taught that 'our natures are the physicians of our diseases.'" And, again, "The great sagacity of this man had discovered that nature by herself determines diseases and is of herself sufficient in all things against all of them." The belief which Hippocrates had in this "vis conservatrix," "vis naturæ medicatrix," would, in the first place, make him, as we know from his writings he really was, a very close observer of the operations of nature. It would further render him cautious in regard to interference with these, and resolute in his determination "to have two special objects in view with regard to diseases—namely, to do good, and to do no harm." There is, however, no ground for concluding that Hippocrates was an inert or purely expectant practitioner. On the contrary, there is abundant proof in the works which bear his name that, in limiting, as Sydenham has expressed it, "the province of medical art to the support of Nature when she was enfeebled, and to the coercion of her when she was outrageous," Hippocrates found occasion to be bold and decided in his method of treatment. His employment of powerful remedies is best exhibited in the instances of diseases which, according to the humoral doctrine promulgated by him, were to be relieved by the discharge of some peccant humour. Evacuants of various kinds were used with this intention, purgatives more especially, but likewise emetics, diuretics, and sudorifics. He drew blood by means of the lancet, the scarificator, and the cupping instrument, but with what careful consideration and thoughtfulness is well shown in the treatise *Περὶ Διαιτης Ὀξέων* ("On the Regimen in Acute Diseases"), in which he remarks concerning the treatment of pleuritis: "But if the pain be not removed by the fomentations, we ought not to foment for a long time, for this dries the lungs, and promotes suppuration; but if the pain point to the clavicle, or if there be heaviness in the arm, or about the breast, or above the diaphragm, one should open the inner vein at the elbow, and not hesitate to abstract a large quantity of blood, until it becomes much redder, or, instead of being pure red, it becomes livid; for both these states occur." What forcibly strikes the reader of the passage now quoted, and of those passages which immediately precede and follow it, is, as indeed Galen among the ancient, and many of the modern, commentators of Hippocrates have carefully noted, the manner in which the Father of Medicine commences with the milder means of affording relief from the pain of pleuritis, such as the employment of fomentations, the rules for the preparation and application of which, as laid down by him, are simply admirable; and only in the event of these failing to accomplish the object in view, he counsels that recourse should be had to bloodletting and the use of other powerful remedies, including cathartics. In another part of the same treatise, the following rule is laid down for the employment of bloodletting: "Bleed in the acute affections, if the disease appear strong, and the patients be in the vigour of life, and if they have strength." Surely this is a most cautious limitation of the circumstances in which the remedy is to be, in the mind of the writer, advantageously employed. In one passage, however, if not in more than one of the Hippocratic writings, there is reference made to the production of "deliquium animi," "leipothymia," or "leipopsychia," as the Greeks termed it, by bloodletting in the treatment of acute diseases. This rule, which was opposed by the ancient authorities generally, cannot be said to have been invariably acted upon by Hippocrates.

A study of the method of treatment pursued by the Father of Medicine and his immediate descendants exhibits the fact that their rules of procedure were all based on experience. He had the merit of discovering the great truth that accurate observation in medicine is the real foundation of all knowledge, and he proceeded in the true spirit of the inductive philosophy to generalise solely from the phenomena thus observed. It can never cease to afford material for wonder that through the genius of one man so much was accomplished, when we reflect on the circumstance that in the time of Hippocrates human anatomy had scarcely, if at all, been practised, that physiology was virtually unknown, and the use of remedial agents was almost entirely limited to articles of the vegetable kingdom, and these the indigenous plants of Greece and the neighbouring countries. To the subject of diet and regimen, however, Hippocrates paid the greatest attention. In the Hippocratic writings there occur terms which exactly correspond with those we so frequently employ; full, ordinary, and low diet. In the treatise *Περὶ Ἀγμῶν*, the following passage occurs:—"A diet slightly restricted will be sufficient in those cases in which there was no external wound at first, or when the bone does not protrude; but one should live rather sparingly until the tenth day, as being now deprived of exercise; and tender articles of food should be used, such as moderately loosen the bowels; but one should abstain altogether from flesh and wine, and then by degrees resume a more nourishing diet." And so, not to multiply quotations, in the treatise already referred to, and in Ἀφορισμοί, there are many interesting and instructive suggestions to be found regarding the administration of food and wine. It is sufficient, in passing, to make a brief reference to the paramount importance Hippocrates attached to the doctrine of crisis, and to the bearing which this had on the treatment of diseases. The doctrine of crisis, indeed, was an essential part of his system of humoralism, and had in consequence an intimate connexion with the method of treatment he pursued. Critical events were evacuations of different kinds, occurring chiefly by the skin, bowels, and kidneys.

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* The Dialogues of Plato. By B. Jowett, M.A., vol. i., p. 605.

With the views he entertained as to crisis, there is further intimately blended the so-called Hippocratic doctrine of critical days. Galen expressly affirms that Hippocrates was the first author who treated of these, but whether this be true or not, we know that he attached very considerable importance to the doctrine. "Fevers," he remarks, "come to a crisis on the same days as to number on which men recover and die." It was the particular attention given by Hippocrates to the tendencies manifested by diseases to recovery, or, on the other hand, to an unfavourable termination, also to the occurrence of evacuations or of crises in their course, that led to the remarkable care with which he studied the whole subject of prognosis. There is no more interesting or valuable work in the whole Hippocratic collection than the one entitled Προγνωστικόν, Prænotiones, Prognostics; and happily, concerning its authenticity, as the undoubtedly genuine work of the Father of Medicine himself, there has never been any question.

Again, we should be doing serious injustice to the Father of Medicine were we not to notice, and that in terms of the very highest commendation, the profound sagacity exhibited by him in the observation of the influence of external agents on men in health and on disease. This is fully exhibited in the treatise Περὶ Ἀερῶν, Ὑδατῶν, Τοπῶν, in which the operation of the atmosphere, of particular seasons, situation, and dwellings of the people, in the production of health and diseases of different kinds is discussed. Dr. Adams says of it that "it relates to a subject of commanding interest, and deserves to be carefully studied, as containing the oldest exposition which we possess of the opinions entertained by an original and enlightened mind on many important questions connected with public hygiene and political economy, two sciences which of late years have commanded a large amount of professional attention." Since this passage was written by Dr. Adams, greatly increased interest has been awakened in these subjects. I venture to affirm that the most enlightened inquirer concerning public health, be he legislator or physician, will find much to instruct him in the pages of Hippocrates.

The narration of individual cases of disease commenced with Hippocrates; he may, indeed, be said to have been the originator of the clinical study of medicine. By way of comparison between ancient and modern medicine, some clinical observations of Hippocrates may be quoted in the first place, and thereafter certain passages cited from a modern clinical lecture not unworthy of being placed alongside of the former. In the first book of the *Epidemics*, Ἐπιδημιῶν, α, it is thus written: "Philiscus, who dwelt near the wall, was laid up. On the first day, fever acute; he perspired; night very disturbed. Second day, aggravation of symptoms; in the evening, an injection procured a good stool; night quiet. On the morning of the third day, and up to noon, appeared free from pain; but in the evening, acute fever, with perspiration; thirst, tongue dry; passed black urine; night disturbed; he did not sleep at all; his mind wandered on all subjects. On the fourth day, general paroxysms; urine black; night more endurable; urine of improved colour. On the fifth day, about noon, a little blood escaped from the nostrils; urine varied in appearance with thready clouds resembling semen irregularly suspended in it. The urine did not deposit. A suppository caused passage of some feculent matter with wind. Night distressing; little sleep; talkativeness; delirium; extremities very cold, and could not be warmed; the patient voided black urine; he rested a little towards daybreak; lost speech; had a cold sweat; extremities livid. About the middle of the sixth day he died. The respiration was throughout large and rare, like that of a person who required to be reminded to breathe. The spleen was swollen, and formed a roundish tumour. The perspiration continued to be cold till the end; the paroxysms were on even days." It is to the description here given of the patient's breathing that I wish particularly to call attention. The words employed by Hippocrates are "*Τούτῳ πνεῦμα διὰ τέλεος ἀραιὸν μέγα.*" Galen's commentary on the passage justifies the rendering which has been adopted. Further, we know that the word *ἀραιός*, when used by Hippocrates, whether in reference to the respiration or the pulse, invariably signifies "infrequent," "few in number," "with intervals." Before offering a few observations on this clinical history, I shall give an extract, or rather extracts, from a case recently recorded by Dr. Laycock (*Dublin Journal of Medical Science*, 1873). "J. O'H——, aged fifty-six, labourer, admitted to hospital November 18th, 1863. No family history obtainable. Previously to admission, was employed in sinking a well, which kept him constantly wet; he has not been a temperate man, but enjoyed good health up to four days before his admission. On that day he complained of pain in the chest and some shortness of breath. He attributed this to overwork, but it was so severe as to oblige him to leave off work, and he consequently went to bed. Next day felt better, but the day after he felt very giddy, and was forced to return to bed. On the 17th, about 7 A.M., his wife found him lying half out of bed, and passing urine on the floor; when spoken to, said his left arm felt very heavy, and he could not move it, and that the left leg was the same; he also complained of headache, frontal and temporal, but not severe." Then follows a detailed and interesting statement regarding the patient's condition on admission to the Royal Infirmary. I quote the account of his breathing: "Breathing appears calm for the most part, with frequent intervals of accelerated and laborious breathing. When the act of respiration is suspended, the fact of coughing once or twice does not seem to bring it back; but, if the patient is roused and made to speak, respiration is resumed. The cessation appears to be quite regular in point of time, occupying generally about thirty seconds, and respiration then continues for about twenty-five respirations. The heart's action at such times was accelerated and tumultuous." The progress of the case is recorded as follows. "On December 1st complained of pain in the right side; friction sounds detected; coughs slightly; no expectoration; delirium occurred during the succeeding night; the following morning said he was better, and the ascending and descending respiration was not observed; friction heard in the right infra-axillary region; the right side moved but slightly in respiration, which was chiefly diaphragmatic; dulness was perceived over the right base posteriorly, where also friction and fine crepitation were heard. On the 3rd December the respiratory phenomena were less marked; but on the 4th weeping was observed in the afternoon, although the patient was cheerful about himself, and the peculiar breathing was again manifested. On the 5th heart's action was calmer; œdema of the left hand commenced. On the 9th œdema of the lower part of the left thigh; foot and lower part of leg very cold. On the 12th a fresh pulmonary attack commenced, the left pleura being now the seat. During the three following days there was considerable delirium; he was very troublesome at night, crying out and groaning. On the evening of the 16th he had more frequent paroxysms of apnœa; the cardiac action was hurried, about 130 per minute, but regular. On the 18th the symptoms were found to have subsided somewhat, but on the evening of that day dyspnœa came on, with greatly increased feebleness; pulse about 60, and irregular; respirations hurried and forcible, from 45 to 50 per minute. The pulmonary symptoms had become greatly aggravated, and the patient died about one o'clock on the morning of the 20th. Post-mortem examination was not permitted."

The case of Philiscus, as recorded by Hippocrates, is one of great interest. The occurrence of accession of fever towards the evening of the third day, freedom from fever having been noted in the morning, with supervention of several unfavourable symptoms—in particular, great thirst, dry condition of the tongue, black urine, delirium, and coldness of the extremities,—led Galen, in his Commentary, to remark that the fatal issue of the disease might have been anticipated. It is, however, in respect to the peculiar character of the breathing that the case of Philiscus acquires its chief interest, and it is in this particular that a resemblance is to be found between the ancient and the modern clinical examples now quoted. The attention of Hippocrates had been arrested by the peculiar character of the breathing which existed throughout the fatal illness of Philiscus. Surely it is matter of interest and for reflection that the respiration described by Hippocrates as ἀραιὸν μέγα, "rare and large," and to which Galen has attached the meaning "like a person who forgot for a time the need of breathing, and then suddenly remembered," or "the respiration throughout, like that of a person recollecting himself, was rare and large," has attracted great attention in quite recent times. The expression used by French writers, "besoin de respirer," corresponds in some measure to the meaning which is sought to be conveyed by the Greek words. In Latin, the rendering is "Spiratio huic perpetuo rara et magna fuit." Daremberg, the learned French editor of Hippocrates, thus translates the passage: "La respiration fût constamment grande, rare comme chez quelqu'un qui ne respire que par souvenir." The relation of this peculiar character of the breathing, with which, under the name of "ascending and descending inspiration" of the eminent Dublin physician, Dr. Stokes, the profession is now familiar, to lesion of the nervous system, was of course unknown to Hippocrates, and for many subsequent ages could not be known to those who were ignorant alike of anatomy and physiology. In recent times it has been described by the late Dr. Cheyne, of Dublin. "For several days," wrote Dr. Cheyne, in 1816, in his account of a patient, aged sixty, who had fatty degeneration of the heart, with irregular and intermittent pulse, and whose death was due to apoplexy, "his breathing was irregular; it would cease for a quarter of a minute, then it would become perceptible, though very low, then by degrees it became heaving and quick, and then it would gradually cease again. This revolution in the state of his breathing occupied about a minute, during which there were about thirty acts of respiration." Subsequently Dr. Stokes connected the peculiar respiration with a weakened state of the heart, "a phenomenon to be looked for in many cases of fatty degeneration." I have never seen it, remarks the same authority, except in examples of that disease. In his description of it, Dr. Stokes observes: "It consists in the occurrence of a series of inspirations, increasing to a maximum, and then declining in force and length, until a state of apparent apnœa is established. In this condition the patient may remain for such a length of time as to make his attendants believe that he is dead, when a low inspiration, followed by one more decided, marks the commencement of a new ascending and then descending series of inspirations. This symptom, as occurring in its highest degree, I have only seen during a few weeks previous to the death of a patient. I do not know any more remarkable or characteristic phenomena than those presented in this condition, whether we view the long-continued cessation of the breathing, yet without any suffering on the part of the patient, or the maximum point of the series of inspirations, when the head is thrown back, the shoulders raised, and every muscle of inspiration thrown into the most violent action; yet all this without any râle or sign of mechanical obstruction." Dr. Stokes refers to the fact of the sighing respiration, which is closely allied to the more formidable ascending and descending respiration, being observed in persons who are labouring under certain forms of gastric and hepatic derangement, and in connexion with undeveloped gout, and likewise to the significant fact of Laennec having described a form of asthma with puerile respiration, while the illustrious French physician attributed the malady to some special modification of nervous influence.*

Dr. Little, of Dublin, in an able paper published in 1868, while allying the peculiar breathing, as Dr. Stokes had done, with organic disease of the heart, does not admit its special connexion with fatty degeneration, but believes it to accompany atheroma of the aorta, valvular lesions, and hypertrophy, as well as dilatation of the left ventricle. Dr. Little has suggested as a theory of its causation, that, in consequence of the existence of one or other of the lesions mentioned, there is an unequal action of the two ventricles. Consequently the left ventricle is unable to propel the aerated blood, and stops now and then. This blood, therefore, remains in the lungs, pulmonary veins, and left auricle, and as it has already been fully oxygenated, it no longer stimulates the respiratory centre through the vagus. Thus the venous blood which is requisite to excite the vagus branches is not supplied, consequently respiration ceases, and the breathing takes on this irregular action. By degrees the contractions of the ventricle partially free the auricle and pulmonary veins, venous blood is again sent to the lungs, which stimulates the filaments of the pneumogastric and causes respiration to begin. Dr. Laycock, in his valuable contribution to the pathology of the ascending and descending respiration, or, as he terms it, "recurrent brief apnœa," from which I have already quoted, while offering objections to the completeness of the explanation according to Dr. Little's ingenious theory, does not hesitate to concur in the opinion that the vagus system is involved.

It is worthy of remark that, in the case of Philiscus detailed by Hippocrates, sleeplessness was a notable feature, and although the febrile condition under which the patient laboured may be the explanation of this symptom, it is at least as reasonable to suppose that the neurosis of the vagus on which the peculiarity of his breathing depended was its cause.

Laennec, the illustrious French physician, the modern discoverer of auscultation, he to whom we are indebted for the introduction of auscultation and for the great light which his discovery shed on the diagnosis and treatment of diseases of the chest, has rendered due credit to Hippocrates. To the Father of Medicine, indeed, and to Aretæus, among the ancients, Laennec confesses that he was alone indebted for any information on the subject which he has so signally made his own. He expressly states that Hippocrates practised immediate auscultation. "Hippocrate avait tenté l'auscultation immédiate"; and in proof of his having made trial of this means of diagnosis, he refers to the well-known passage in the treatise Περὶ Νουσῶν, τὸ Δευτέρον, "De Morbis," Liber Secundus, a work which there is good reason for believing, although not composed by Hippocrates himself, was written either by one or more of his contemporaries or by some of his immediate descendants in the school of Cos, in which it is made clear that Hippocrates fell into error in supposing his ability to distinguish between the presence of water and of pus in the chest by the peculiar sound heard on applying the ear. It is in the same chapter, and in close relation to the same subject, that Laennec makes the remarkable statement—a statement which cannot be read without feelings of admiration for the candour and modesty of that distinguished man—that he had read the passage in Hippocrates many years before the commencement of certain experiments in physics, which suggested to him the idea of mediate auscultation, but he never entertained the idea of repeating the experiment of Hippocrates; it passed entirely into forgetfulness; he simply regarded it as one of the errors into which that great man had fallen. But the passage reverted to his mind when he commenced his researches, and he felt surprised that its consideration had not proved suggestive to some readers. The error made by Hippocrates, Laennec further remarks, might have led him to the discovery of many valuable truths. He concludes a remarkable passage in the following words:—"But Hippocrates stopped with an incorrect observation, and his successors overlooked its import. This, at first sight, may appear surprising; nevertheless, nothing is more common. No man is permitted to embrace all the relations and consequences of the most simple fact; and the secrets of nature are more frequently disclosed by accidental circumstances than they are wrested by scientific efforts" ("De l'Auscultation Médiate," Première Partie, Chapitre iii). Under the designation of Hippocratic succussion, we possess, as is well known, a means of physical exploration of the chest which was practised by the Father of Medicine. In the same treatise as that already referred to, the method of procedure in the use of this means is laid down. It is directed that after the patient has been carefully washed with warm water, he is to be placed in a firm seat, and his hands held by an assistant; the physician, meantime, taking him by the shoulders, shakes him, and attentively listens in order to determine on which side of the chest a sound is occasioned. Further, the rules for the treatment of empyema by operation are given with precision: it is directed that recourse is not to be had to paracentesis before the fifteenth day from the commencement of the effusion; where pain is chiefly felt and swelling is most conspicuous, the opening is to be made, while a preliminary incision through the integuments precedes the penetration of the pleura effected by a sharper and more pointed instrument, protected by a piece of cloth. In some instances, it is mentioned, the perforation of the thoracic parietes was made, not through an intercostal space but through a rib, a plan revived in recent times by M. Reybard. When a sufficient quantity of pus has been permitted to flow, the wound is to be closed by means of a portion of linen cloth attached to a thread. Daily a similar quantity of pus is to be evacuated. On the tenth day, when the whole of the collection has been allowed to escape, a mixture of tepid oil and wine is to be injected through the opening, for the purpose of cleansing the lung. This part of the operation is to be practised twice daily, the injection of the morning being withdrawn and replaced by a fresh quantity in the evening, and so on. At length, when the purulent fluid has become clear and thin, a metallic sound is to be introduced, the size of which is to be gradually lessened as the fluid itself diminishes; thus, the wound is permitted to cicatrise.

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* Cependant le malade étouffe; et, comme nous venons de le dire, il aurait besoin d'une respiration plus étendue que celle que permit son organisation: ou, en d'autres termes, la expiration est très parfaite, le besoin seul de respirer est augmenté. Ce n'est pas dans le poumon qu'il faut chercher la cause de la maladie; et lors même qu'adoptant en entier la théorie chimique de la respiration, on voudrait supposer qu'un besoin extraordinaire d'oxygenation du sang est la cause de la dyspnée, il faudrait encore remonter plus haut et reconnaître que le mal est dans l'innervation même.

The interest attached to the description now quoted is heightened by a consideration of certain shrewd observations bearing on the same subject, and which occur, not in the same treatise alone, but in other of the Hippocratic works, notably in the book of "Aphorisms." An empyema on the left side, the author remarks, is less dangerous than on the right. When the pus was clear, and studded more or less with sanguinolent threads, that appearance indicated the probability of a satisfactory recovery; but, on the other hand, if, on the first day of its removal, the fluid possessed a colour like the yelk of egg, while on the succeeding day it was thick, having a pale-green hue, and emiting a fetid odour, it was likely that the sufferer would not recover, but shortly die. Again, the sufferers from empyema and dropsies treated by incision or by the cautery, certainly perish if the pus or water be suddenly evacuated. Everyone acquainted with the history of paracentesis thoracis knows that it dates from the period of the Father of Medicine. The dogmatic statements which are to be found in the Hippocratic writings may not all be accepted without question in the present day, but it is remarkable how much truth there is in several of these. One of the highest living authorities on diseases of the chest, Dr. Walshe, commends the precept of Hippocrates, that paracentesis should not be performed before the fifteenth day of effusion, unless the accumulation of fluid be so great as *per se* to threaten life; while he questions the accuracy of the observation made in the ancient time, and adhered to pretty closely in subsequent ages, that success is less likely to follow operations where the fluid has been from the first purulent in character than where sero-albuminous ("Diseases of the Lungs," 4th edition, page 218).

The modern history of thoracentesis is very interesting. Since the writings of Trousseau in its recommendation, and the still more powerful example of our transatlantic brethren, chiefly Dr. Bowditch, the remedy has become one commonly resorted to. In the article Pleurisy, contributed to the third volume of Dr. Reynolds's System of Medicine by a physician whose premature death the profession had recently occasion to deplore, will be found an interesting account of what Dr. Anstie called a new era in the treatment of pleurisy. The new era is, however, signalised rather by the discovery and introduction of such new instruments as the suction-instrument of Dr. Wyman, so efficient in the hands of Dr. Bowditch, and the aspirator of M. Dieulafoy, than by any novel suggestion regarding the treatment of the disease. If, as is not unlikely, we have recently attained to something like perfection in the diagnosis and treatment of pleurisy, a dispassionate review of the history of the disease in ancient and modern times will justify the application of the dictum of Seneca, "Multum egerunt qui ante nos fuerunt sed non peregerunt."

It would be very easy to multiply references to important and suggestive passages in the Hippocratic writings tending to establish yet more fully the truth of the statement that the Father of Medicine was enabled, by the exercise chiefly of his most remarkable powers of observation, to acquire a really wonderful amount of accurate information regarding the causes and progress of diseases, as well as the influence exerted by various remedies over them. Enough has, however, been stated to justify Sir William Hamilton in exalting the reputation and praise of Hippocrates. Was Sir William entitled to depreciate the medical practitioners of his own time, which he surely did when exclaiming, "Has the practice of medicine made a single step since Hippocrates?" For centuries after the Hippocratic epoch, it may truly be said that little or no advance in medicine was effected. Many learned and ingenious men no doubt did appear in the ranks of the profession, and by them the position which had been achieved for medicine by Hippocrates was, at all events, maintained. In ancient times, by far the most renowned of these was Galen, who, embracing warmly the views of Hippocrates, was the first formally to expound and then systematically to formulate the doctrine of humoralism or humorism. It might be a sufficient answer to the query of Sir William Hamilton to signalise the discovery in modern days of vaccination and the introduction of sulphuric ether and chloroform as anæsthetics—the last mentioned, as the author of "Rab and his Friends" says, "one of God's best gifts to his suffering children." These were unknown to Hippocrates, and surely our possession of them indicates at least one step in advance. But we are able to point to the abandonment of many remedies altogether worthless which were used in ancient times, and to the introduction, as well as much more satisfactory employment, of others; while, owing to the remarkable and altogether indisputable progress which has been made in the prosecution, first of all, of the study of anatomy, then of physiology, and subsequently of pathology, we are justly entitled to conclude that the more advanced our knowledge of the minute structure of the body becomes, the more extensive our acquaintance with the function and uses of its several parts, and the more refined our understanding of the various morbid processes by which these are altered and destroyed, so much the more thorough and reliable will be our application and adaptation of the means of cure to the treatment of diseases. Any scientific practice of medicine before the physician had been able to acquaint himself with human anatomy was not to be expected; and it is truly marvellous that Hippocrates, Aretæus, Galen, and the Arabian physicians, notably Rhazes, were able to achieve so much, and to hand down to posterity a body of well-observed facts and careful deductions from these facts, wearing so much the aspect of science.

Medicine can, however, be said to have started on a scientific basis when Mundinus, early in the fourteenth century, applied himself with diligence to the dissection of the human body, and published a treatise on anatomy, "Anatomi Omnium Humani Corporis Interiorum Membrorum," which till the middle of the sixteenth century was the recognised textbook of the schools. The statutes of the University of Padua prescribed that all anatomical lecturers were to adhere to the literal text of the Bologna professor. Mundinus died in 1326,* universally respected; and no advances in anatomical knowledge were made after his time till Berenger of Carpi published, in 1521, a commentary upon Mundinus. There succeeded Berenger, Vido Vidius, Jacob Sylvius, and the renowned Flemish anatomist Andreas Vesalius. Of the last named, Hallam remarks that "if he was not quite to anatomy what Copernicus was to astronomy, he has yet been said, a little hyperbolically, to have discovered a new world" (Literary History, vol. i., p. 467). He was the first anatomist who ventured to emancipate himself, and that thoroughly, from the trammels of Galen, who, up to that time, had been regarded with an altogether blind veneration. Fallopius and Eustachius—two well-known names, names not to be forgotten by anyone at all acquainted with anatomy—were the contemporaries, although younger, of Vesalius; and of the same period, or shortly subsequent, were Realdus Columbus, Arantius, and Fabricius ab Aquapendente, the discoverer of the valves in the veins and the instructor of our own immortal Harvey. The splendid discovery of the circulation of the blood was followed by that of the absorbent system, in which Asellius (a professor at Pavia), Rudbeck (a professor at Upsala), and Bartholini (a Dane) were chiefly concerned; while to Pecquet, a professor at Montpellier, belongs the credit of describing the thoracic duct and its uses. Other important anatomical discoveries, and discoveries also in physiology, were being made simultaneously, or shortly thereafter, in connexion with which the names of Malpighi, Glisson, Wharton, Highmore, Richard Lower, Leuwenhœck, Ruysch, Valsalva, and many others start up. The most eminent of the pupils of Valsalva was the distinguished Morgagni, who, following the plan pursued by Bonnet in his "Sepulchretum Anatomicum," first published at Geneva, the place of his birth, in 1679, described by Haller as "immortale opus," became himself professor in the University of Padua, and was the founder of pathological anatomy ("Der Begrunder der Neurer Pathologischen Anatomie," Haeser, seite 654). His works "Adversaria Anatomica," and still more his celebrated treatise "De Sedibus et Causis Morborum per Anatomiam Indagatis," immensely advanced his favourite science.

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* Mundinus, sagt John Adelphus in der von ihm besorgten Strassburger Ausgabe vom Jahre 1513, "quem omnis studentium universitas colit ac venerat ut deum."—Haeser, Lehrbuch der Geschichte der Medicin.

While chemistry, about the same time, was advancing towards the dignity of a science, chiefly through the genius of our distinguished countryman, the Honourable Robert Boyle, there arose the sect of the so-called chemical physicians. Of this sect, the earliest was François Deleboe Sylvius ("Der berühm teste Vertreter der Iatrochemischen Schule." Haeser, seite 571), who was born at Hanau in Flanders, in 1614, and, after a time, became professor of the practice of medicine at Leyden. The chemical theory of medicine had, however, passed from Paracelsus, who was born towards the close of the fifteenth century, through Van Helmont, by more than eighty years his junior, to Sylvius. The leading principles of the chemiatric physicians was that diseases owed their origin to derangement in a process of fermentation, which was constantly at work in the human body. While most of the maladies which were produced in this way arose from excess of acid, some were regarded as of alkaline origin. One eminent English physician embraced the doctrine of Sylvius. Thomas Willis was born in 1621, and in 1659 published his celebrated treatise entitled "Diatribæ duæ Medico-Philosophicæ; quarum prior agit de Fermentatione, altera de Febribus." The object of this work was to prove that in every organ of the body there existed its own special fermentation, and that diseases of every kind resulted from the disturbance of these fermentative processes. Willis was one of the earliest members of the Royal Society, and left behind him the character of an orthodox, pious, and charitable physician.* It is recorded of Dr. Willis that, being consulted regarding the delicate condition of the children of the Duke of York, afterwards James II., he spoke his mind freely, and thereby gave great offence. Bishop Burnet has related that "Willis, the great physician, being called to consult for one of his (the Duke of York's) sons, gave his opinion in the words, '*mala stamina vitæ*,' which gave such offence that he was never called for afterwards." The reputation of Willis, unquestionably a very able man, has been obscured by that of another English physician, his junior by only three years. The physician in question was Thomas Sydenham, "whose character," as Dr. John Brown felicitously remarks in that delightful essay, "Locke and Sydenham," "is as beautiful and as genuinely English as his name." He was born in Winford Eagle, in Dorsetshire, in 1624. A parallel has been drawn between Hippocrates and Sydenham by more than one modern writer. "Wiederherstellung des Hippokratismus durch Thomas Sydenham," is the title of a chapter by Haeser, the erudite German historian of medicine, and a very instructive one it is, on the life and writings of the English physician. He has frequently been called the English Hippocrates, and, in truth, the appellation is deserved; for, like the illustrious Greek physician, the great aim he set before him was the cure of disease, and although possessing a mind which delighted in speculative inquiry, he never permitted the theories he formed and ably defended to interfere with his treatment. That was based on a rational empiricism, such as we have seen in the instance of Hippocrates; he carefully watched the operation of the remedies he employed, and from these he drew the indications for further guidance. Sydenham was humoral in his pathology, and he further agreed with Hippocrates in the doctrine of crisis, and the subsidiary view as to action and crasis. We find him frequently referring to the Father of Medicine—as, for example, when he inquires what is gout? It is a provision of Nature to purify the blood of old men, and to purge the deep parts of the body; such at least is the language of Hippocrates. The same may be said of all other diseases, fully formed; and "that practice and that alone will do good which elicits the indications of cure out of the phenomena of the disease itself. This made Hippocrates divine." It was from Sydenham that the school of empirical physicians in England sprang—a term to be used, as Hallam has expressed it, "in a good sense," as denoting the regard its disciples had to observation and experience, or to the Baconian principles of philosophy.

Another school of medicine had arisen in Italy through the instrumentality of Giovanni Alfonso Borelli, a profound mathematician, who endeavoured to explain the operation of the various functions of the body on mechanical principles. His views and principles were, through the excessive zeal of his pupils, carried beyond their legitimate length. Of these, Lorenzo Bellini, of Florence and Pisa, was the chief. There were other eminent adherents of the iatro-mathematical school in Italy; while Pitcairne, Friend, and Mead, in their time, were in this country attached to it, and it secured the sympathies of the illustrious nosologist, François Boissier de Sauvages in France, in the eighteenth century.

To the chemiatric and iatro-mathematical school there succeeded a third, of which Van Helmont was the founder. Embracing the views of the former to a certain extent, he made this important addition, that all the changes occurring in the body, whether arising spontaneously or produced by remedies, are determined by a specific agent inherent in the living system, to which he gave the name of Archeus. This archeus explained, in Van Helmont's opinion, all physiological actions, and accounted for the maintenance of health as well as the occurrence of disease. Founding on the views promulgated by Van Helmont, although widely differing from him, came the earliest of the three distinguished men to whom a brief reference was made at the commencement of this address. Rejecting the doctrines of the chemical and mathematical physicians, Stahl concentrated attention on what he denominated vital actions. He, too, referred these actions to a dominating principle; and the Anima of Stahl—so he named it—resembles, in some measure at least, the Archeus of Van Helmont. To Stahl belongs the great merit of having pointed out that, contrary to the prevalent opinions of the schools, the operations of the animal economy cannot be explained by either chemical or mechanical laws, that there exists something over and above these, and that something is of the nature of vital action. The anima of Stahl, however, was a hypothetical principle, and he signally failed to gain for his theory any general support. Hoffmann, his distinguished colleague in the University of Halle, and his rival, conferred a lasting benefit on science by pointing out that the actions which were ascribed by Stahl to the government of his "anima" were in reality determined by nervous influence. "It was reserved for Hoffmann," says Dr. John Thomson, "to take a comprehensive view of the nervous system, not only as the organ of sense and motion, but also as the common centre by which all the different parts of the animal economy are connected together, and through which they mutually influence each other." Facts, and many of these most important in their nature, regarding the nervous system, had been recorded before the time of Hoffmann. The renowned professors in the early Alexandrian school, Herophilus, and Erasistratus, and Galen, with others among the ancients, Willis, Vieussens, Mayow, Baglivi, and Pacchioni, much nearer his own day, had laid the foundation for the reasoning of Hoffmann, but, as Cullen has observed, "he was the first who gave any tolerably simple and clear system on the subject, or pointed out any extensive application of it to the explanation of diseases." There is little need for reminding you of the triumphant discoveries in the nervous system which have been made since the time of Hoffmann—such discoveries as have rendered the names of Charles Bell and

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* The Roll of the Royal College of Physicians of London. By William Munk, M.D., vol. i., p. 524.

Marshall Hall in particular, but many others in lesser degree, famous. In no department of pathological inquiry is there at the present time exhibited a greater amount of zeal, or are important facts being more frequently brought to light, than in that pertaining to the nervous system. How signal our advance in treatment also, as determined by that which can alone with any certainty determine treatment: a sound diagnosis! We can distinguish between functional and organic diseases of the brain, spinal cord, and nerves, and use our remedies in a way of which not only the ancient physicians, but many among the moderns, could not have dreamt.

The names of Stahl and Hoffmann, the German professors in Halle, of whom a few words have been said, are inseparably linked with that of the illustrious Dutch professor in the University of Leyden, Hermann Boerhaave. The aim of Boerhaave was essentially eclectic; he culled from the writings of his predecessors all that was valuable, and with these and the results of his own extended observation endeavoured to erect a system of medicine. His system was faulty in ascribing too little importance to the influence exerted by the brain and nervous system generally over the animal functions. The pathology of Boerhaave was as defective as his physiology; his explanations of morbid phenomena were more applicable to the body considered as an inert hydraulic machine, than as an organised living and sentient system. Intellectually and morally distinguished, few greater men than Boerhaave have adorned our profession in any age or country. After his decease, his reputation, which as a living teacher had been of the most exalted description, rather increased than declined. This result was due in great measure to the publication of commentaries on his works by two of his most distinguished pupils, Haller and Van Swieten. The former of these is justly considered as the father of modern physiology. The magnificent researches of Haller regarding development, growth of bone, and the circulation, deserve the praise and gratitude of posterity not more than the impulse of his ardent spirit and example in laborious inquiry, by which the zeal of his associates and successors was kindled. Of Haller's powerful opponent in the controversy regarding irritability and sensibility—Dr. Whytt—I can only make mention. Contemporaneously with Haller, and conferring benefits on the practice of medicine resembling those which Haller rendered to physiology, was William Cullen. A very erroneous impression of this great Scotch teacher has been entertained by many, more particularly, however, by foreigners. By such, Cullen has been called a purely speculative physician. The condemnation of this opinion is readily supplied by his own words. "There is nothing," he observes, "I desire so much as that every disease we treat here should be a matter of experience to you; so that you must not be surprised that I use only one remedy when I might employ two or three; for in using a multiplicity of remedies, when a cure does succeed, it is not easy to perceive which is the most effectual. But I wish that you may always have some opportunity of judging with regard to their proper effects." Again, he says: "Every wise physician is a dogmatist; but a dogmatical physician is one of the most absurd animals that lives. We say he is a dogmatist in physic who employs his reason, and, from some acquaintance with the nature of the human body, thinks he can throw some light upon diseases, and ascertain the proper methods of cure; and I have known none who were not dogmatists, except those who seemed to be incapable of reasoning, or who were too lazy for it. On the other hand, I call him a dogmatical physician who is very ready to assume opinions, to be prejudiced in favour of them, and to retain and assert very tenaciously, and with too much confidence, the opinions or prejudices which he has already taken up in common life, as in the study of the sciences. Now, I profess to be a dogmatist, but I should be sorry if any person thought me dogmatical, for there are but few theoretical opinions which I have received or offered to communicate with regard to disease, concerning which I am not ready to doubt, and to admit grounds for doubting, as soon as they are offered to me. I know there are no universal rules in the practice of physic, but there are general rules, which all admit of, with more or fewer exceptions, in theory and practice." The foundation of the practice of physic was expressly stated by Cullen to lie in fact and experience. "All our knowledge of Nature consists," he says, "in experience."

To Cullen we are largely indebted for the introduction into general use by medical men in this country of such remedies as the acid tartrate of potash, tartar emetic, hyoscyamus, and James's powder, or the pulvis antimonialis. Tartar emetic Cullen largely employed as an antiphlogistic, sometimes after bloodletting, and sometimes in place of that remedy. He had noticed something of the contra-stimulant action of antimony in the form of tartar emetic, described by Dr. Marryatt, of Bristol, in 1790, and afterwards so strongly insisted upon by Rasori, a professor in Pavia, and by others. A successor of Cullen, one of the most distinguished physicians in recent times, as he certainly was also one of the most benevolent of men—the revered Dr. Alison,—who occupied the chair which you, Sir, now so worthily fill, when this Association held its former meeting in Edinburgh—he, whom Dr. Stokes has recently described as "the best man I ever knew," and in so alluding to Dr. Alison, may be said to have turned many hearts towards himself; for what student knew Dr. Alison did not venerate him?—and who can ever cease to cherish his memory?—when indicating the way by which, in his opinion, the further improvement in the art of medicine was likely to be effected, signalised the two following lines of inquiry: first, in the discovery of specifics which may counteract the different diseased actions of which the body is susceptible, as effectually as the chinchona counteracts the intermittent fever, citric acid the scurvy, or vaccination the small-pox; and, second, in the investigation of causes of disease, whether external or internal—i. e., of the conditions under which either the vital action of the solids or the vital properties of the fluids of the body may become liable to deviation from their natural state. It will be readily admitted by all candid inquirers that, under the latter head, very signal advances have been made during the last half-century. Look, for example, at the etiological investigations regarding continued fevers, and the bearing of these upon treatment, with which the names of Jenner, Stewart, Bartlett, Murchison, and Buchanan are so intimately connected. Again, consider the great advances in knowledge of parasitic diseases—the entozoa more particularly,—and their appropriate treatment, for which we are largely indebted to Küchenmeister, von Siebold, Davaine, and Cobbold. Nothing more interesting or more remarkable in the line of therapeutics has recently appeared than the wonderfully successful treatment of hydatids of the lung by the internal administration of turpentine in the hands of Dr. Bird, of Melbourne, Australia.* This is a medicine in estimation of which, were time at my disposal, I could say much, having had occasion to watch its influence very closely when administered in cases of pulmonary gangrene and bronchial affections attended by copious expectoration of fetid pus. In these diseases I regard turpentine as an invaluable remedy.

Of specifics we still possess but few; while the desire to increase their number is not only legitimate, but is likely sooner or later to be gratified. Of the class of specifics no remedy better deserves the name than quinine. The potent action of quinine in intermittent fevers thoroughly justifies the application to it of the term specific; and it is to be noted that the curative action in question is to be seen not only in febrile disorders of the intermittent type, but in neuralgias which manifest a similar character. Many ingenious theories regarding the *modus operandi* of chinchona or quinine in these diseases have been advanced; but, up to the present time, we are compelled to admit that we are entirely ignorant respecting the method of action of a medicine in whose power we justly place the very highest confidence. The remarkable effects of quinine in reducing the temperature in pyrexia, and the still more remarkable influence of cold in the same way in hyperpyrexia, of which Dr. Wilson Fox has given some happy illustrations, are noteworthy facts in the recent history of therapeutics.

A remedy of marvellous power and usefulness, the virtues of which we are still only learning, is the iodide of potassium. This medicine was prepared soon after the discovery of iodine by Courtois in 1812, and has been chiefly employed as a deobstruent, alterative, and diuretic. I am satisfied that the diuretic properties of iodide of potassium deserve to be more widely recognised than is generally the case. Its specific action is seen in syphilitic periostitis, for truly the rapidity and completeness with which pain and swelling decline and disappear in instances of enlargements over the tibiæ and other bones in cases of secondary syphilis are not less remarkable than the readiness with which an attack of intermittent fever or neuralgia yields to quinine. The late Dr. Todd, of London, remarked: "If there is anything in addition to quinine which deserves the name of a specific, it is the iodide of potassium in syphilitic periostitis." Another remarkable action of this medicine is in aortic aneurism. Iodide of potassium, administered for the most part in tolerably large doses, in this terrible disease exerts a wonderful influence, not only in relieving the neuralgic pains, which are frequently so harassing, but in subduing the local pressure occasioned by encroachments of the aneurism, and in leading, apparently, to firm coagulation within the sac.

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* Dr. Bird had formerly used bromide of potassium, twenty grains, with one fluid drachm of tincture of kamela in infusion of serpentary, three times a day regularly. (On Hydatids of the Lung. Melbourne, 1874.) I am, however, assured by a recovered patient that, in the treatment of pulmonary hydatids, Dr. Bird now places great reliance on turpentine administered internally.

It is in the treatment of thoracic aneurism by iodide of potassium that physicians have learned the very remarkable tolerance of the drug manifested by sufferers from that disease. No reasonable suggestion has hitherto been offered regarding the *modus operandi* of iodide of potassium in aneurism. The influence it exerts on the progress of aneurism appears to have been discovered not only empirically, but by the merest hazard, writes Dr. Walshe; "in this point of view, the story of all our really valuable medicines is simply repeated" ("Diseases of the Heart," fourth edition, page 512). The names of Bouillaud, Nélaton, and Chuckerbutty are specially connected with the early employment of the iodide of potassium in the treatment of aneurism; while the profession is largely indebted to Dr. G. W. Balfour, of Edinburgh, for his patient investigation into the subject. (*Edinburgh Medical Journal*, 1868.)

Twenty years ago little was known regarding the virtues of bromide of potassium. If any standard work on the materia medica of that date be consulted, it will merely be found recorded of this salt that it is diuretic and cathartic, and, like the preparations of iodine, a powerful deobstruent and alterative. Its dose, moreover, is stated, in such works, at from three to twelve grains thrice daily. Since then, and more particularly within the last few years, bromide of potassium has rapidly advanced in professional estimation; and, at the present time, it may with confidence be affirmed that there are very few medicines which are more largely employed, and the use of which is attended by more signal benefits. As a calmative and hypnotic, bromide of potassium is largely confided in; but its specific operation in epilepsy is of the most striking description. "It is to be demonstrated, in my opinion," writes Dr. Russell Reynolds, "that there is something specific in the action of bromide of potassium in epilepsy." And the same author observes: "Bromide of potassium is the one medicine which has, so far as I know, proved of real service in the treatment of epilepsy." My own experience of the use of bromide of potassium in epilepsy has been of the most encouraging description. I have repeatedly witnessed cures, in the strictest sense, result from its employment. Let me briefly refer to one such.

S. A——, a bookbinder, aged fifty, had for twenty years been subject to severe fits, occurring irregularly by night and by day, often attended by biting of the tongue. The usual interval between the fits had been a fortnight, and on no occasion had a longer period than six weeks elapsed. In January, 1870, this patient, whose mental capacity had at that time become considerably enfeebled, so much so as to make it necessary for him to give up his business, began the bromide of potassium, and continued it for eighteen months without any pause. The dose never exceeded twenty grains thrice daily. The result of this treatment was an entire cessation of the epilepsy; and there has been no recurrence of the disease. His mental vigour has returned. He long ago resumed his occupation, and has since been busily engaged in it without any interruption.

I could multiply instances of this kind; and so, I believe, could many practitioners who, in the treatment of epilepsy with bromide of potassium, have been mindful to adhere to the rule upon which Dr. Reynolds insists, that the remedy "should not be discontinued in the treatment of a case of epilepsy because of its apparent failure, but that the dose should be gradually increased, and the exhibition of the drug most patiently carried on for a period of many months, or even years." Epilepsy is a disease which specially attracted the attention of the ancient physicians. It was termed *νόσος ἱερὰς*, the sacred disease, by the Greeks; and Aretæus expressly mentions why the appellation "sacred" was given to epilepsy: "for more reasons than one," he remarks—"from the greatness of the evil, for the word *ἱερὸς* also means great, or because the cure of it is not human but divine, or from the notion that the disease occurred from the entrance of a demon into the man." Plato, in the "Timæus," ascribes the use of the term "sacred" to the circumstance of the head or brain being the part of the body affected in epilepsy. "When the phlegm is mingled," he says, "with black bile, and dispersed about the courses of the head, which are the divinest parts of us, and disturbs them in sleep, the attack is not so severe; but when assailing those who are awake, it is hard to be got rid of; and, being an affection of a sacred part, is most justly called sacred." Hippocrates combated the notion entertained by his countrymen that epilepsy was peculiarly a sacred disease, one specially inflicted by the gods. In the treatise *Περὶ Ἱερῆς Νούσου*, he emphatically points out that the incomprehensible nature of the malady is no reason for concluding it to be divine, inasmuch as many other diseases, and notably the paroxysms of intermittent fevers, are just as much above the reach of the human understanding. He believes that epilepsy, like other diseases, results from natural causes. The reader of the remarks on epilepsy in the pages of Hippocrates and Aretæus cannot fail to have his opinion of these great men enhanced; but he also cannot fail to reach the conclusion that the moderns, understanding the nature of convulsive diseases, their connexion with altered conditions of the blood—with, for example, anæmia and uræmia,—and their dependence at one time on central, at another on peripheral irritation of the nervous system, are infinitely better prepared for their treatment than they were; and this unquestionably holds true of epilepsy.

The use of the remedies we have been briefly reviewing has, in the first instance, been adopted either by mere accident or empirically; nor have we, on this account, any cause for feeling regret. We do not know in what the preservative power of vaccination consists; and yet millions of lives have already been saved by this precaution (Œsterlen). A recent and very interesting example of the way in which therapeutical knowledge may be advanced is afforded by what has occurred in the Andaman islands. Dr. Dougall, a distinguished graduate of the University of Edinburgh, has apparently discovered that leprosy sores and other ailments attendant upon that disease can be cured by the aid of the Gurjon tree, which is very common in these islands. Take another disease known to the ancients, although its pathology, still to a considerable extent obscure, has been carefully investigated only in recent times—I mean diabetes; and regarding it, we may compare the treatment pursued by Aretæus, for example, and that which we now employ, with the result of feeling thoroughly assured that many steps have been taken in the right direction, and with signal advantage to suffering humanity, since the writings of the distinguished Cappadocian physician. I do not think the opinion unfounded that, owing to the recent advances in the knowledge of tubercular diseases, etiologically and pathologically, we may look forward with confidence to a decided gain in their efficient treatment; but even now may we not be said to possess in cod-liver oil a very potent means of modifying the progress of pulmonary tuberculosis? In the treatment of this disease and of other allied constitutional disorders, cod-liver oil was first employed in the Manchester Infirmary, chiefly by the elder Bardsley, after the commencement of the present century. Previously to that time, however, an oil obtained by ebullition with water from the fresh livers of several fishes, the ling and skate as well as the cod, had long been a domestic panacea in strumous affections and chronic rheumatism. Subsequently to its use in the Manchester Hospital, cod-liver oil was largely used in Germany; but, falling into disuse in this country, its restoration to professional and public favour has followed the publication of Dr. Hughes Bennett's recommendation of its virtues, in his excellent treatise on that subject. Sir Thomas Watson has very happily expressed the characteristic effect of the remedy in phthisis, when he says: "It is antagonistic to a much greater extent than any other drug of the consuming power of the disease." There are probably few medical men who have seen much of this sad malady who would hesitate to concur in the opinion of a very high authority—Dr. Williams—that cod-liver oil is more beneficial in the treatment of pulmonary consumption than any other agent, medicinal, dietetic, or regiminal, that has yet been employed. We may justly congratulate ourselves on the possession of cod-liver oil, but it becomes us to remember that the ancient physicians used oil inunction in phthisis. This is expressly stated by Aretæus, and he, as well as Hippocrates, lauds the use of milk in the same disease, preferring it to all other kinds of food. "For," says the former, "milk is pleasant to take, is easy to drink, gives solid nourishment, and is more familiar than any other food from childhood. In colour it is pleasant to see, as a medicine it seems to lubricate the windpipe, to clean as with a feather the bronchi, and to bring off phlegm, improve the breathing, and facilitate the discharge downwards. To ulcers it is a sweet medicine, and milder than anything else. If one will, then, only drink plenty of milk, he will not require anything else. For it is a great thing that in a disease milk should serve both for medicine and nourishment." In fevers Hippocrates did not allow milk, more particularly in such fevers as were attended by bilious discharges from the bowels. The modern practice is not in this very important particular in agreement with the ancient, the highest authorities, as, for example, Gairdner, Murchison, and Parkes—the last-mentioned on weighty theoretical grounds—considering milk the best food in fevers.

We have been alluding to the manner in which the practice of medicine has been advanced, and may doubtless be still further advanced, by the simple method of observation and experience. It is true that we cannot entirely depend upon empirical laws. We cannot, for example, feel assured that quinine will certainly cure an attack of intermittent fever, mercury syphilis, or, for that matter, that a dose or doses of any given medicine will exert their thoroughly ascertained physiological or therapeutic action; still such laws are of the highest value, and we cannot help employing them.

The recent progress of chemistry, physiology, and pathology, has naturally led to the establishment of an advanced school of therapeutics, from whose labours signal benefits may not only be anticipated for medicine, but have already been conferred upon it. To Dr. Lauder Brunton, for example, belongs the great merit of distinguishing accurately the therapeutic action of the nitrite of amyl from its physiological properties, and thereby of adding a useful remedy to our armamentarium. And so, also, to Dr. Fraser we are indebted for the elaborate investigations regarding the Calabar bean, which have resulted in a demonstration of its therapeutic value. Care must, however, be taken that the results of scientific inquiry and those of patient, oftentimes laborious, observation in the field of practical medicine running counter, do not interfere with the ultimate grand object of our profession—the healing of the sick.

We are not entitled to withhold remedies because we do not understand their exact nature, nor the minute changes they produce in the animal economy. Œsterlen has well expressed the attitude which, as practitioners of medicine, we are called upon to assume. "The patient requires our aid, and we must decide for or against the employment of a particular medicine, and upon the manner in which to employ it. If we possess sufficient experience, knowledge of the subject, and practical tact, we shall no doubt be able to do all for that patient which circumstances permit."

Let each one of us be fully persuaded in his own mind. While deeply interested in, and much instructed by, the experiments performed by a Committee of this Association, regarding the use of mercury for example, I remain as thoroughly convinced as ever that the much-abused drug in question exerts a powerful action on the function of the liver, and is to be trusted as a most efficient remedy in controlling not a few of its disorders.

I regard cold as a powerful antiphlogistic, and its external application, already briefly referred to, as a remedy of unquestionable value in the treatment of hyperpyrexia; but my own observation, and the fullest attention I have been able to give to the recorded observations of others, have convinced me that the real reason for the present abandonment of a remedy of superior power—to wit, bloodletting—does not lie alone in the advance of scientific pathology. "The thinking man," writes one of the most philosophical of living physicians, Dr. Stokes, "finds it hard to believe that the fathers of British Medicine were always in error, or that they were bad observers and mistaken practitioners. They, indeed, have rested from their labours, but their works remain; and he who reads the writings of Sydenham, of Haygarth, and of Fothergill, of Heberden and Fordyce, of Gregory, Cullen, Alison, Cheyne, or Graves, must have a very inapprehensive mind if he fail to discover that there were giants in those days, and that the advocacy of such ideas only indicates a state of mind not consonant with the modesty of science."

Clinical Lecture
ON
CONVULSIONS
DUE TO MORBID CONDITIONS OF THE UTERUS IN THE NON-PUERPERAL STATE.

Delivered in University College Hospital,

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GENTLEMEN,—In regard to the connexion between certain morbid conditions of the uterus in the non-puerperal state and the occurrence of convulsions, the subject to which I intend to direct your attention on this occasion, it may be said that comparatively little of a positive character is known. You are well aware that convulsions may be produced in two principal ways, and they have accordingly been divided into two classes—namely, centric and eccentric. The convulsions produced by the uterus come under the latter category; they are eccentric.

In considering this subject, let me remind you, in the first place, of the fact, very well known, that the sympathy existing between the nervous system of the uterus and the general nervous system is of the most intimate possible character. Of that we have abundant evidence. A remarkable instance of this is the fact that in the course of labour, if the patient be frightened, the labour may be altogether arrested for a time; and, conversely, a sudden fright may be the means of bringing on the process of labour. Again, sickness, a frequent attendant on pregnancy, is a sympathetic result of the condition then present. Sympathetic "uterine" sickness may occur also at other times, for it may be produced by certain morbid conditions of the uterus. It is, in short, one of the most common symptoms of uterine disease.

The occurrence of convulsions, as due to the uterus in the non-puerperal state, must be set down to the existence of some irritation in the uterus itself, this irritation acting in a reflex manner. The fact that the uterus itself can, in the non-gravid condition, give rise to convulsions is, it may be said, one which is not generally received and admitted. And, further, in quarters where so much as this is received and admitted, it has not yet been pointed out what is the nature of that irritation in the uterus which can and does give rise to these convulsions. This subject has for a long time occupied my attention, and having seen a considerable number of cases, I feel now in a position to express a very decided opinion upon it. I entertain the belief that there is a very well established connexion between the occurrence of convulsions and the existence of certain morbid conditions of the uterus.

The convulsions of which I am about to speak include those convulsive attacks which are ordinarily known and spoken of under the term of hysterical convulsions, and they include certain other cases of convulsions which lie in a sort of intermediate position between the hysterical and the true epileptic convulsions, and which may, for the want of a better term, be spoken of as epileptiform. But the great majority of these cases are such as have been distinguished as hysterical. I do not intend, on this occasion, to discuss the general question of hysteria, but simply to deal with the convulsive attacks observed. A case recently under my observation in this hospital will form the text of my remarks, which will be limited to the facts noted in this particular case.

CASE.—*Acute Anteflexion of the Uterus, probably of one year's duration; Convulsive Attacks occurring frequently during that time.*—The case more fully reported is as follows:—L. F——, thirty years of age, admitted Nov. 15th, 1874. Married six years; has had one child only, four years and a half ago; no miscarriages. Respecting the family history, it is stated that her mother is alive, and has had a paralytic seizure, from which she has recovered. The patient was always delicate, but enjoyed fairly good health until the present illness. The catamenial discharge was pretty regular until three months ago, since which time it has not appeared. Quantity generally above the average. It was not attended with pain. Her health was good until twelve months ago. About this time the patient was engaged for some six weeks in nursing and closely attending upon her sick child; she attended it both day and night. To the nursing of the child and this considerable bodily exertion the patient attributes her illness. The illness began very shortly after the recovery of the child. It commenced with an attack which was denominated a "fit." This came on in the morning. She lost her consciousness for a second, was convulsed, and, on recovery, ran in a state of alarm into an adjoining room. Since that time, except an interval during last summer, she has had fits occurring once, twice, or three times a day, lasting for a brief space, and not generally accompanied with loss of consciousness. For a moment or two after the attacks her eyes are affected, and she "sees things before her eyes" and has "dreadful things on her mind." Sometimes she is unable to see for a few minutes. She does not fall down during the fit, nor does she bite her tongue. The fits occur most frequently at night. Lately, since menstruation has ceased—that is to say, for the last three months,—the fits have become more intense. She has somewhat emaciated. A short time after the commencement of her illness she was under treatment at another hospital, where the attacks were pronounced to be epileptic. Since menstruation has ceased there has been more or less leucorrhœal discharge, sometimes puriform in character; and this was observed first when menstruation should have occurred, but did not. For the last few weeks she has felt shooting pains in the left groin. A walk across the room is attended with difficulty. Intercourse gives rise to pain. A few days after the admission of this patient into the hospital, on November 18th, the catamenia returned, after three months' cessation, and continued for two days.

Up to the time of my first examining the patient (Nov. 30th) there had been no alteration in regard to the occurrence of the convulsive attacks, which, as I before remarked, occurred one, two, or three times in the course of twenty-four hours. On Nov. 30th I first made the examination, and on that occasion it confirmed the result of an examination which had been previously made by Dr. Williams and by the obstetric assistant. The result was that the uterus was found anteflexed. The uterus was large, anteverted, and extremely anteflexed, the fundus being low down between the cervix and the pubic bones. By the aid of the sound, the introduction of which was extremely difficult, in consequence of the sharpness of the bend of the uterus, the uterus was restored to its natural position. It may here be mentioned that the patient herself had supposed that she was pregnant, but it was not so. The diagnosis was expressed in the following terms:—In consequence of severe and long-continued exertion in nursing her sick child, the patient became the subject of anteflexion of the uterus; the anteflexion had since progressively increased in intensity, and the attacks of convulsions, together with the arrest of the catamenia, are due to this condition of the uterus. Up to this time, as already remarked, since the patient entered the hospital the fits had continued as frequently as before admission. After replacement by the sound the uterus was treated by inserting a cradle pessary, so as to elevate the fundus uteri, and to maintain it in that elevated position. The satisfactory accomplishment of this object, the elevation of the fundus uteri, was more than usually difficult in consequence of the size which the fundus of the uterus had attained.

The subsequent history of the case is as follows:—Dec. 1st: No fits in the night; one this morning, but less severe.—2nd: Five slight fits during the night.—3rd: Two slight fits this morning; severe pain in left groin last night, and this morning catamenia reappeared.—4th: No fits or peculiar sensations; catamenia continues.—5th: A slight fit yesterday afternoon, also two slight ones in the night.—6th: No fits.—7th: No fits.—8th: One in the night.—9th: No fits. 10th: One fit and two "peculiar sensations" last night. 11th: No fits.—12th: No fits.—13th: One fit last night. 14th: No fits.—16th: "Peculiar sensations" last night. 17th: Ditto.—18th: One fit.—19th: No fits.—20th: Two "peculiar sensations."—21st: Ditto.—22nd: One rather severe fit with "sensations."—24th: No fits.—27th: No fits or sensations.—Jan. 5th, 1875 (twelve days since the last report): A bad fit last night.—9th: Catamenia returned.—13th: Catamenia continues, discharge very profuse, and coming in gushes.—15th: Period ceased, and the patient was allowed to get up, having been kept in the horizontal position until this time.—18th: Not quite so well; had a fit this morning; has been up each day for the last three days.—19th: Another fit this morning.—21st: No fit for two days.—22nd: Discharged.

During the whole of the patient's stay in the hospital the only treatment to which she was subjected was the use of the sound on one occasion, the wearing of the "cradle" pessary, and the maintenance of the body in the horizontal position. The legitimate deduction to be drawn from the foregoing statement is, that the treatment adopted had a very decided influence in alleviating the principal symptom—viz., the convulsions—from which the patient was suffering. There can be very little doubt of that. Before the time of the commencement of the treatment the fits occurred frequently every day, while under this treatment they were not altogether abolished, but very much lessened in degree and frequency. The treatment virtually consisted in straightening the uterus. The mechanical appliance used had the simple effect of preventing the descent of the fundus uteri anteriorly, the organ being thereby straightened.

In the next place, I will proceed to explain what I believe to be the connexion between the malady in question and the occurrence of the convulsive attacks. The case was one of very acute anteflexion of the uterus. When the uterus is actually bent on itself, as in this case, one physical result is inevitable—namely, that the tissues of the uterus are excessively compressed, especially on the concave side of the bend. The thickness of the uterine wall at the situation where the bend ordinarily occurs—viz., at the junction of the cervix and the body, corresponding to the internal os uteri—is not so great as above that point, but still it is considerable. The tissues of the uterus at this situation necessarily undergo compression, as the result of the acute flexion which is present under these circumstances. The result is that the blood is forced out of the tissues of the uterus at the situation in question by the action of this compressing agency. And inasmuch as the uterus is everywhere pervaded by nervous filaments, these delicate structures become also subject, like the other tissues of the organ, to forcible compression. In proportion as the flexion becomes increased in intensity so does the compression increase in degree. It is this compression of the nervous filaments of the uterus which constitutes, in my opinion, the irritation of the uterus which gives rise to the symptoms in question, and which, in fact, produced the convulsions in the particular case above described. It is one of the facts in this case that the fits were often worse at night. This is to be accounted for, I believe, by the change in the position of the uterus produced by the recumbent posture. Another explanation may be given of the connexion between the flexion and the occurrence of convulsions, and it is this: that inasmuch as the fundus of the uterus becomes acutely congested from time to time, as the result of this flexion, the convulsions are produced by and as the result of that acute congestion. It would be quite reasonable to suppose that acute congestion of the fundus of the uterus might cause such irritation of the organ as to give rise to convulsions. One of the most important effects of flexion of the uterus is the occurrence of congestion of the two extremities of the uterus, the fundus and cervix uteri. Doubtless, in this very case such congestion was present, and was intensified from time to time by the change of position of the patient. I, however, entertain the belief that the compression of the nerve-tissues, as well as compression of the tissues of the uterus generally, is really the starting point of the irritation which exists.

It has been a maxim with almost all writers and observers who have been really acquainted with diseases of the generative organs in the woman, that marked hysteria is connected in some way with disease of the uterus; but the precise nature of that uterine disorder, and the mechanism of the process by which the symptoms are produced, have never been satisfactorily described. My own observation has led me to the conclusion that marked flexion of the uterus exists in all cases of severe repeated hysterical attacks. This is the theory I advanced in the last edition of my work on Diseases of Women, published in 1872. At this moment I desire, however, to limit myself to the consideration of the nature of the convulsive seizures incidental to hysteria.

Respecting the truth of the theory now put forward confirmatory evidence is by no means wanting. Niemeyer, whose facts are generally considered as reliable, and who was certainly not disposed to attach an undue importance to these special uterine disorders, says that flexions, more than any other of the disorders of the uterus, give rise to hysteria. This is an exceedingly valuable statement, coming as it does from a distinguished modern pathologist. It is, in fact, a piece of evidence from the opposite camp, so to speak, and is important as bearing out my view of the case. The further arguments I submit are as follows:—In the first place, there is the *à priori* argument. It is reasonable to suppose that compression of the uterine tissues, involving as it must do compression of the nervous filaments, may produce such irritation as to give rise to convulsions. It does not, however, at all follow that such compression will always produce convulsions. It would be as reasonable to find fault with the theory that convulsions are sometimes due to the presence of worms in the intestinal canal, because these entozoa do not invariably give rise to convulsions. No one, however, doubts the connexion between these two events. It is therefore not a sufficient reply to this statement to say, that if this theory were true convulsions would always occur when compression of the uterine tissues is produced. The clinical arguments in favour of this view seem to me to be overwhelming. I have seen a considerable number of cases in the course of the past few years where convulsions of the kind described have actually ceased when the flexed uterus was so treated as to diminish or remove the compression existing at the seat of the flexion. And in all such cases I have observed that this kind of treatment produced a very marked effect even when it did not succeed in at once removing the attacks. This is an important argument. Another is, that the position of the body, or any exertion which has a tendency to aggravate the flexion, invariably aggravates and intensifies the convulsions. I could relate many instances where this interesting fact was observed. Thus, in one case of severe retroflexion, giving rise to convulsions, the attacks instantly ceased when the patient was made to lie on her face, this improvement being in that case effected without any other mechanical treatment of the uterus whatever. In another case, that of the wife of an Indian officer, in whom the convulsive attacks were produced by anteflexion of the uterus, they invariably occurred when the patient was sitting upright at the dinner table, that being the only time of the day when they did occur. The sitting position increased the anteflexion, and thus gave rise to the convulsions. These are typical instances, but I could mention several such cases. A further argument is the effect of measures having a more direct curative action upon the flexion, and which have been employed with the idea of restoring the uterus to its proper shape. I mean the employment of the sound and the use of pessaries in order to restore the uterus to its true natural shape. I now state that the effect of these measures has been, clinically, to give proofs, over and over again, of the validity of the position which has been taken up, inasmuch as the convulsions, or the tendency to convulsions, have always been influenced favourably in direct proportion to the degree in which the flexion has been favourably acted upon. Another argument which I have to submit to you is the result of very careful exploration of the uterus in many of these cases, an exploration made by the finger and the sound. It will be found in these cases that the introduction of the sound, if properly managed, gives no pain to the patient until it reaches the situation where the flexion exists. When the sound has been introduced a distance of one inch into the cervical canal its point comes in contact with that part of the uterine wall which is the seat of the compression; and invariably it is found, under these circumstances, that the patient experiences very great pain when that part is touched by the point of the sound. After the point has passed through this strait, and when passed beyond the site of the flexion, there is no more pain felt by the patient. But the mere touch of the point of the sound on the uterus in this situation always gives rise to extreme pain and evidence of extreme sensitiveness. It requires that the examination should be conducted with great care in order to give this result, because it generally happens in these cases that the uterus as a whole is also sensitive to the touch. But by carefully conducting the examination you will be able to define those parts which are so very sensitive to the touch.

This theory, which has now been brought under your notice, that the convulsive seizures in the case above detailed and in similar cases are traceable to the compression of the tissues of the uterus, is not, then, a fanciful one; it rests upon observations made carefully and repeatedly. And it is quite certain, to my mind, that its truth will be confirmed by all careful and unprejudiced observers. The uterus is in its normal and healthy condition very little sensitive to the touch, and little liable to give rise to reflex disturbances; but the clinical evidence is to the effect that its sensitiveness to the touch, and what may be termed its "reflex sensitiveness," are very much increased by compression arising from the alteration of the shape of the uterus, and especially that alteration which is now so generally known under the term of flexion of the uterus. These reflex disturbances are many in number, and the liability to convulsive attacks is simply one of them. The case which has been brought before you is one of anteflexion, but I have seen very severe convulsive attacks occur in cases of retroflexion, and it appears that they are liable to occur in a more *severe* form in cases of retroflexion. The degree of the flexion is liable to be greatest in cases of retroflexion, and hence the severity of convulsions due to it will be greater than in the case of anteflexion.

Time will not permit me to enter on the details of treatment applicable to such cases as the above, but I have endeavoured to give sufficient indications as to the principles which must constitute the basis of the treatment.

ON ANÆMIA.

BY JULIUS POLLOCK, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO CHARING-CROSS HOSPITAL.

THE disease which we call anæmia, more or less incorrectly, but for which perhaps it would be difficult to find a more appropriate name, may be the result of a number of different causes. I do not propose now, however, to consider more than one form of anæmia—that which we meet with so frequently amongst young unmarried women, and which generally occurs in connexion with some disordered state of the menstrual function. In such cases the catamenia are usually irregular in their appearance, frequently absent for months together, the discharge pale and scanty when it does occur, lasting sometimes but a few hours.

The relation of anæmia to amenorrhœa, pathologically, is of some interest. Is the latter due to the poverty of the blood? or is the formation of red corpuscles in some way discouraged by the irregular performance of the uterine functions? Doubtless anæmia, however produced, frequently gives rise to a scanty and infrequent catamenial discharge, as we see in advanced phthisis, and other wasting and blood-spoiling disorders. But is the converse true? Will functional irregularity of the monthly periods, when continued for any time, produce anæmia? I believe it will. There is some reason to suppose that the menstrual discharge is, to a certain extent, an excretion; and possibly its absence may lead to the retention in the blood of some material hostile to the formation of red-corpuscles. We certainly see cases of young girls who have enjoyed good health and looked well up to the period of puberty, in whom anæmia has gradually occurred in consequence of the non-appearance of the catamenia at their proper time; and the accidental stoppage of the courses in a healthy young woman, from exposure to wet and cold at an unfortunate time, or from some shock to the nervous system, will often, if the function remain suspended any time, lead to anæmia. But I do not think that the disorder is produced in these cases so much (if at all) by the retention of some morbid matter in the blood, as by the disturbing effect upon the nervous system of the absence or irregular performance of an important sexual function.

When this form of anæmia is allowed to go on without proper treatment, the patient ultimately presents an almost blanched appearance, the skin having a sickly green tint; hence the term "chlorosis." The lips and the cheeks are usually as pale as the forehead, but the face not unfrequently has an unnatural flush, which might deceive the inexperienced. The conjunctivæ are of a pearly white, sometimes of a slightly yellow hue, which must not be mistaken for jaundice. It is a wonder how such persons can get about or do anything, and, in truth, they are not fit for much. Upon the slightest exertion, and especially on going upstairs, they suffer from palpitation of the heart and breathlessness. They often feel faint, giddy, and sick; complain of pain in the left side, indigestion, loss of appetite; the bowels do not act well, the tongue is furred, and the breath foul; towards evening the ankles become puffy and swollen; a soft systolic bruit may frequently be heard over the base of the heart, and in the veins of the neck the stethoscope will detect the so-called "humming-top" murmur or *bruit de diable;* but it must be remembered that this latter sound may be sometimes produced in a healthy person by the mere pressure of the stethoscope. Anæmic women are generally more or less nervous, and sometimes hysterical, but I should not say there was any marked connexion between anæmia and hysteria.

How are these cases to be treated? Clearly by so nourishing the blood as to build up the red corpuscles and raise them to the proper standard in health. Steel is the medicine upon which we chiefly rely to effect a cure, but to be successful in the treatment requires some care and discrimination. If the tongue is coated and the digestion much impaired, the more astringent forms of iron, such as the sulphate or the perchloride, are often not tolerated at first; and the ammonio-citrate, the mistura ferri co., or the ferrum redactum, will be the best to begin with. In a large number of cases I have found nothing so successful as a combination of the ammonio-citrate of iron and rhubarb in suitable doses, with equal parts of some bitter infusion and peppermint-water. Sometimes the addition of two or three grains of the carbonate of ammonia seems to be useful. I make rather a point of the rhubarb, although it is so disagreeable to take, as I believe it much assists the action of the steel, especially when the stomach is out of order. If the patient is very nervous, ten grains of the bromide of potassium may be added with advantage to each dose of the mixture. If the rhubarb in the mixture does not act enough upon the bowels, it will be necessary to prescribe some aperient pill to be taken at bedtime. Preparations containing aloes are of service, and may be combined with steel. Pepsine is often useful with the meals. The diet should be light and simple; beer had better be avoided in most cases, and a glass or two of light claret may take its place with advantage. I believe claret is certainly better than port, although that wine is so often recommended. A moderate amount of exercise out of doors, when the weather permits, should be insisted upon, but anything like fatigue must be avoided. A tepid bath in the morning and a rub down afterwards with a rough towel is a good thing. By and by, in a few weeks, more or less, the steel and rhubarb mixture may be left off, and fifteen drops of the solution of perchloride of iron given after each meal in a wineglass of water.

Under the very best and most careful treatment, the improvement in anæmia is not unfrequently slow and tedious, and, to prevent disappointment, it is as well to caution patients and their friends that they are not to expect, as a rule, any very rapid change. Once get the patient on the road to health, however, and time and perseverance will do the rest.

Harley-street, Cavendish-square.

CASE OF ANEURISM OF THE ANTERIOR COMMUNICATING ARTERY.

By T. W. McDOWALL, M.D. Edin.,
MEDICAL SUPERINTENDENT OF THE NORTHUMBERLAND COUNTY ASYLUM.

This case appears worthy of record on account of the position of the tumour. Although I have now examined the brain in several hundred cases, chiefly among the insane, it never was my good fortune to meet with a specimen of aneurism of any of the cerebral vessels except the one to be now described. Any remarks which it may be considered necessary to make shall be reserved until the history and post-mortem appearances have been given.

A. B—— was admitted into the Northumberland County Asylum on October 16th last. She was at that time sixty-nine years of age, a widow, and said to be labouring under her first attack of insanity, which had existed for "some weeks." The cause of her illness was unknown. She was not epileptic, but was considered suicidal and dangerous. She was certified as being restless, always unhappy, and ever suspicious of those about her; memory greatly impaired; imagining that some one has robbed her, and disposed of her property; she has attempted several times to throw herself before passing trains.

Upon examination, on admission, she was described as slightly below the average height, fairly muscular, rather corpulent, complexion sallow, eyes grey, hair fair, temperament phlegmatic, expression vacant and demented. Circulatory system: Pulse 80; arteries at wrist atheromatous; no cardiac murmur. Respiratory system normal. Digestive system: Tongue clean; bowels regular; appetite pretty good; she states that everything she eats has a nasty, bitter taste. Genito-urinary system normal.

Mental condition.—This is evidently a case of dementia, though there are delusions of suspicion. She with difficulty understands the simplest questions, and is very incoherent in her answers. Her memory is very defective, especially concerning recent events. There is considerable depression of spirits and listlessness of manner. She states that she has been robbed of money by pitmen entering her house at night.

The following notes will show the progress of the case, which during life presented no special features of interest.

Oct. 17th.—In conversation she always reverts to the pitmen having plundered her house. So far she has conducted herself well, and attended to the calls of nature. Appetite good; bowels regular.

19th.—She is cheerful and apparently contented, but quite demented and childish in manner and conversation. Sleeps well.

22nd.—Still labours under the delusion that her house is being robbed. Takes her food well, and is otherwise unchanged.

Nov. 13th.—There is no change in her mental condition, but her bodily health and condition appears rather feeble.

Dec. 2nd.—She is decidedly more demented; her memory is much worse, and her conversation quite unintelligible.

Jan. 4th.—Deterioration progresses; she has become filthy in her habits. Water enemata were tried on three occasions, in the hope that her habits would be improved, but the result was not satisfactory. Her bodily condition is markedly worse.

Feb. 10th.—No decided change in mental or bodily condition since the date of last entry. The appetite continues fair, bowels regular.

March 9th.—She has a slight attack of bronchitis. To be kept in bed. Ordered milk, beef-tea, and four ounces of whisky daily. Pulse 90, very feeble.

16th.—Bronchitis has disappeared; a small bedsore is coming over sacrum. Patient to sit up in a carpet chair for a few hours daily. She is now in a very feeble and helpless state, dirty in her habits, and requires constant attention.

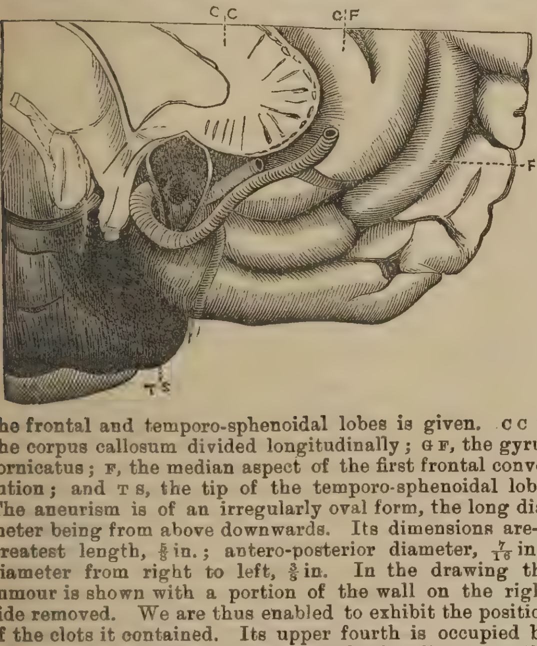
24th.—Bedsore over sacrum is enlarging and deepening, in spite of most careful nursing.

April 14th.—She is now confined to bed during the whole day, becomes more and more feeble, and the bedsore is in a sloughy condition. Liberal diet and stimulants continued.

19th.—Worse in every respect.

21st.—Died to-day.

Autopsy, thirty hours after death.—Weather warm. Body free from bruises and other marks of injury, but there is a large bedsore, and a small ulcer on each leg. The body is fairly nourished. No rigor mortis. — Head: Calvaria of average thickness; dura mater adherent in frontal region. During removal of brain, a large quantity of fluid—several ounces—escaped. There is no thickening or opacity of the arachnoid, but the amount of subarachnoid effusion is very great. The vessels at the base, and all the large arteries throughout the brain, are very atheromatous. All the convolutions in the frontal and parietal regions are atrophied, but the third parietal on each side is the one most affected. The membranes strip with great facility. On section, the grey matter is found pale and much atrophied, and the white is dirty in appearance. On a level with the corpus callosum, in each centrum ovale, there are numerous—about twelve—minute points of yellow softening. The lateral ventricles contain but a small quantity of fluid; their lining membrane is normal. Upon separating the hemispheres, and lying immediately in front and above the optic commissure, is an aneurism of the anterior communicating artery. The size, position, and relations of the tumour are represented, after a fashion, in the subjoined rough sketch. The internal surface of a portion of the frontal and temporo-sphenoidal lobes is given. C C is the corpus callosum divided longitudinally; G F, the gyrus fornicatus; F, the median aspect of the first frontal convolution; and T S, the tip of the temporo-sphenoidal lobe. The aneurism is of an irregularly oval form, the long diameter being from above downwards. Its dimensions are—greatest length, $\frac{5}{8}$ in.; antero-posterior diameter, $\frac{7}{16}$ in.; diameter from right to left, $\frac{3}{8}$ in. In the drawing the tumour is shown with a portion of the wall on the right side removed. We are thus enabled to exhibit the position of the clots it contained. Its upper fourth is occupied by a firm clot, of a dark-red colour, and firmly adherent to the wall of the sac. A small clot projects into the cavity on its left side, about the middle, marking the orifice of communication between the left anterior cerebral and the anterior communicating arteries. In the drawing, the continuation of the *right* anterior cerebral artery is seen to spring, as it were, from the posterior part of the aneurism. Once free from the tumour, both anterior cerebral arteries pursue their usual course, as may be seen in the drawing, where for convenience only a short portion of them is represented. The walls vary much in thickness, and are of a dense white appearance—indeed, exactly like what is usually seen in atheroma of any of the cerebral vessels. By pressure the tumour has made room for itself in the surrounding cerebral tissue, but has not caused softening or other morbid process. — Thorax: The pericardium contains about two drachms of yellow serum. Heart's valves competent. The cardiac cavities contain dark fluid blood and partially decolourised clots. There is considerable atheroma of the aorta and coronary arteries, these vessels being also markedly dilated. The mitral valves are thickened at their base. Right lung adherent posteriorly and to the diaphragm; its posterior part congested and very œdematous; weight 21¾ oz. Left lung adherent posteriorly; congested and œdematous like the right; weight 19½ oz. — Abdomen: Liver soft and somewhat fatty; weight 40 oz. Spleen pulpy; weight 4 oz. Capsule of right kidney firmly adherent in many places; cortical substance pale and atrophied, and contains several small cysts; weight 3¾ oz. Left kidney in a similar condition; weight 4¼ oz.



Remarks.—As already stated, the chief interest in this case lies in the unusual position of the tumour. In recording a single case it is not necessary to consult the whole literature of a subject; I shall therefore be content to refer to Mr. Erichsen's excellent summary on intracranial aneurism contained in his "Science and Art of Surgery," pp. 81–87. From Sir Wm. Gull's sixty-two cases, it would appear that the basilar artery was affected in twenty cases, and the middle cerebral in fifteen; in eight of the remaining, the internal carotid was affected as it lay by the sella turcica, and in six others the aneurism was situate on the anterior cerebral artery. Although the causes of cerebral aneurism are stated by Mr. Erichsen to be obscure, in the present case there can be no doubt that it was due to the atheroma of the vessel. In it, as in those already described, the walls of the aneurism consisted of both coats of the vessel. From its position and size, and consequent pressure on surrounding nerve-tissue, no results followed; and during life no symptom existed to indicate its existence. There may have been optic neuritis, but no ophthalmoscopic examination was made.

For some of the preceding notes I am indebted to my colleague Mr. Davies.

ON

THE PHYSICAL CAUSE OF PRESYSTOLIC MURMURS.

By ALFRED H. CARTER, M.D. LOND.,
RESIDENT MEDICAL OFFICER TO THE GENERAL HOSPITAL, BIRMINGHAM.

THE subject of this paper was suggested by an article from the pen of Dr. Alexander Harvey, of Aberdeen, appearing in the columns of THE LANCET (June 12th and 19th); from which I gather that he not only finds insuperable difficulties in the way of accepting the explanation of Dr. Gairdner as to the physical cause of the so-called presystolic murmur, but that he doubts altogether its existence as an established fact.

The question he has raised is, I think, an important one, and one that should by this time be practically settled. Nobody doubts that the mitral orifice may be so contracted or altered by disease as to become an obstacle to the flow of blood through it. The question is whether such obstruction can and does give rise to an audible murmur; and if so, as to what are the characteristics by which it may be clinically recognised. I own that I am one of those who have been accustomed to regard a presystolic murmur as a frequent if not invariable result of mitral stenosis, admitting of as accurate a diagnosis as any other form of cardiac valvular disease.

In the first place, what is the meaning to be attached to the word *presystolic* as applied to a murmur? I understand it to imply a murmur which runs up to and ends with the first sound, which is the clinical expression of the commencement of the ventricular systole; and hence a murmur whose essential characteristic is that of immediate precedence of that systole. A murmur of this sort is, of course, in one sense diastolic, in that it occurs during the diastolic period; but the above term is preferable, as conveying additional and more exact information as to the characters presented by it.

In the second place, has such a murmur as here described, considered for the present altogether apart from the mechanism of its production, any existence in fact to the ear of an observer? This question demands a categorical answer either in the affirmative or negative. If the latter, then there is an end of the matter, as it is an obvious waste of energy to attempt to prove that mitral stenosis may be recognised by what cannot be shown to exist. But, on the other hand, once admit that such a murmur is not only heard but heard frequently, it behoves us to inquire into the conditions which are necessary for its production; and, since it is a morbid sign, to endeavour to correctly interpret its anatomical signification.

To repeat, then, I have heard over and over again—and my observations have confirmed those of many of the most accurate clinical observers—a murmur occurring during the diastolic (ventricular) period running up with increasing intensity to, and ending with, the first sound when this is present; or when, as is often the case, the latter is masked by a murmur, passing without interruption into the systolic bruit. There is frequently also an appreciable interval between it and the preceding second sound, which, indicating as it does the commencement of the ventricular diastole, shows that the murmur in question, in such cases, does not occupy the *whole* of the diastolic period. When this interval can be made out, which is not always, it follows also that it cannot be due to incompetence of the aortic valves, the closure of which is directly or indirectly the cause of the second sound, for murmurs from this cause invariably commence simultaneously with the second sound, or so much of it as may remain audible. But more of this anon. This murmur, as I have heard it, is of maximum intensity at the left apex, as determined by the site of impulse, though sometimes a little to the upper and sternal side of this spot. And, lastly, a large proportion, larger probably than that of any other cardiac murmur, is accompanied with a distinct and obvious thrill.

Admitting, then, this statement as an established fact, as, personally, I feel bound to do, I will pass on to investigate its most probable cause in the light of modern clinical knowledge. It will facilitate matters, I think, if we first call to mind what is going on in the normal heart at the time when this murmur is asserted to occur. Without going into all the details of the mechanism of the production of the first and second sounds, no one, I take it, is prepared to deny that they are respectively the direct or indirect result of the closure of the auriculo-ventricular valves on the one hand, and of the aortic and pulmono-arterial valves on the other. The former marks the commencement of the ventricular systole, both ventricles contracting simultaneously, and continues for two-fifths of a second, when, without any appreciable interval, it is followed by the second sound, the first result of ventricular relaxation, or, in other words, the commencement of the diastole. Then a pause for two-fifths of a second, during which blood flows from the auricles into the ventricles, which are already beginning to dilate: whether actively or passively does not materially affect my present purpose; suffice it to say that, relatively to the other cardiac movements, it is progressive, even, and gradual. During the whole of this time blood is also flowing freely into the auricles from their corresponding veins. At the end of this "physiological pause" the auricles are full, and the ventricles also, *so far as they have hitherto expanded;* but though the latter are full in this sense, they are not yet sufficiently distended for the purposes of normal circulation. But now another period of activity sets in: the auricle contracts, and, in contracting, forces the blood into the ventricle to its maximum physiological distension, and, this once reached, the ventricular systole immediately follows.

This auricular contraction appears to be Dr. Harvey's chief difficulty, if I mistake not. He objects to any such term as "forcible opening" of the cavity, and attempts to depreciate its importance by regarding the auricle as "essentially extraneous to the heart,—as being a mere appendage to it." But, quibble as we may about the precision of these terms, it simply comes to this: "forcible" means nothing beyond the exertion of force, which, if the auricle contract at all, must be the case. And, further, it is a perfectly gratuitous assumption that, because the amount of force exerted is relatively inferior to that of the corresponding ventricle, "it is an insignificant affair"; it should be remembered that the obstruction to be overcome is relatively a slight one, and no great amount of force is necessary for this purpose; the force, however, is in exact proportion to the obstruction.

Then again as to the "emptying." It seems irrelevant to discuss whether the emptying is absolute and complete, or only partial. At any rate, judging from the auricular contraction as it may be witnessed during life, there is good reason for believing that a considerable portion of its contents are discharged in the process, if it is not so completely emptied as the neighbouring ventricle. The auricular contraction, insignificant though it may be in one sense, is none the less real on that account: it is an established fact; it can be watched in action; and its duration has been accurately timed, and found to occupy one-fifth of a second (Marey).

The effect of this contraction is to complete the distension of the ventricles, and is immediately followed by contraction of the latter, with closure of the auriculo-ventricular valves.

Now what may be termed the "clinical pause" includes the physiological pause and the auricular contraction, inasmuch as the latter gives rise to no perceptible sound; it commences immediately after the second sound, and ends with the succeeding first sound. This pause is generally referred to clinically as "the diastolic period," and is essentially characterised by the passage of blood from the auricles to the ventricles. It is during this period, and especially towards the end of it, that the presystolic murmur is stated to occur. It is now so well known that constriction of a cardiac orifice may give rise to an audible bruit that it is unnecessary for me to do more than allude to the fact here. If, then, a murmur is heard at all during the diastolic period, there is no room for any other supposition but that it results either from obstruction to the flow of blood into the ventricle, or from the regurgitation of blood into it through the aortic orifice. The sole difficulty that remains is the diagnosis between these two varieties of murmurs, and that it is but slight in the vast majority of cases I will endeavour to show further on.

Next, let us look at the matter for a moment from another point of view, by assuming that the presystolic murmur, as above defined, not only exists, but also that it is the outcome of mitral obstruction (tricuspid obstruction being so extremely rare), and then test our position by physiological and anatomical fact.

The physical conditions which are necessary to the production of obstructive cardiac murmurs in general, as I take it, are these: the more or less forcible propulsion of blood from one cavity to another through a contracted communicating orifice. Any of these factors being absent, no murmur will result. With regard to the first point, "forcible propulsion," there is always ample pathological proof in the autopsies of those who have suffered during life from well-marked mitral stenosis.

In order fully to understand what we see under these circumstances, it is necessary to keep in mind the following points:—Whilst alluding to the physiology of a normal cardiac revolution, I drew attention to the two modes, so to speak, in which the ventricle receives its supply of blood; during the first and most protracted of which the auricle is in a condition of relaxation, and the blood is flowing onwards merely with the *vis a tergo* of the pulmonary circulation. The secondary effects of the additional strain offered by the contracted mitral orifice during each part of this process are most interesting. In the first part it is to cause dilatation of the auricle and of the cardiac terminations of the pulmonary veins; and in the second—that of auricular contraction,—to cause hypertrophy of the walls of this chamber; and lastly, during the whole of the diastole, the general result is that of increased tension of the pulmonary circulation, which is compensated for by hypertrophy of the right ventricle—an invariable incident, at one time or another, in the life history of all cases of well-marked mitral stenosis.

And what is the conclusion to be drawn from all this? Why, that a large quantity of blood is propelled with unusual force, and with increased celerity (owing to the diminution in size of the aperture of exit), from the left auricle into the ventricle of the same side through a contracted mitral orifice—circumstances more favourable than which could not be conceived for the production of such a murmur as the one in question.

Then, with regard to the fact of increased intensity of the murmur towards its termination. A most plausible explanation of this feature of a presystolic bruit follows as a matter of course, when we take into consideration the increase of force exerted by the auricular contraction over and above that exerted in the early part of the diastolic period.

And, once more, with regard to the interval before alluded to as frequently occurring between the second sound and the beginning of the mitral bruit, I would suggest as an explanation that, in these cases, during the early part of the diastole neither is the quantity of blood nor the force with which it is propelled sufficient to cause an audible murmur.

And now a few words in conclusion with regard to the clinical aspects of presystolic bruits. Every practical physician will admit that instances occur in which the greatest care and deliberation are necessary to ensure a correct diagnosis; in some, perhaps, it may be that a decided opinion is impossible; but, on the other hand, there are many in which the morbid condition is obvious, and is easily recognised; and, again, there are many of which, judging merely from the murmur as heard by the stethoscope, we are unable to speak positively, but become clearly apparent when the collateral circumstances and conditions are closely investigated. In the first place, a typical presystolic murmur, presenting all the characters to which I have previously alluded, uncomplicated by any other valvular disturbance, requires nothing beyond an intimate acquaintance with these features, and a sharp ear, to make a correct diagnosis a certainty. The only murmur that could possibly be mistaken for it is an aortic regurgitant; and if additional aid in coming to a conclusion is necessary, I think it may be found by attention to the following:—Aortic disease never causes accentuation of the second sound at the pulmonic cartilage (second left), and in my experience murmurs of this class are almost invariably heard more distinctly at the right than at the left side of the sternum at the level of the third rib cartilage. In mitral stenosis the reverse holds good in both instances. Again, the secondary effects on the heart and circulation are widely different in the two cases. In the former there is always some, and frequently very great, excentric hypertrophy of left ventricle, and the jerking pulse and throbbing carotids are almost constant accompaniments, whereas in the latter they are absent, and the right ventricle is hypertrophied.

Of course difficulties do occasionally occur, and the most serious of these arise from the frequent association with presystolic murmurs of others which, by reason either of their number, intensity, or duration, require the greatest care and the closest attention for their proper discrimination, sometimes even rendering this impossible. For instance, I can well imagine that a loud aortic regurgitant existing together with a presystolic murmur might render a differential diagnosis an impossibility; or, again, an association with a loud mitral systolic murmur of a similar pitch might also cause a great difficulty. But, as a matter of fact, there is frequently such a marked difference in pitch and quality between them as to render a diagnosis comparatively easy. There is a case at present in the hospital, under the care of Dr. Foster, which well exemplifies this.

Although much more might be said with regard to this matter, space only allows me to add that, if something yet is wanting to convince those who, with Dr. Harvey, still doubt not only the possibility of recognising presystolic murmurs, but also their very existence, I think it may be found on a careful perusal of the chapters relating to this topic in the recently-published "Essays on Clinical Medicine," by Dr. B. Foster, of this hospital, containing some of the practical experience of one who has worked much with a view of clearing up our knowledge of cardiac disease in general, and to whom personally I owe no small debt of gratitude for much of what ability I may possess to recognise and deal with difficult cardiac cases.

Birmingham.

CASE OF LONG-STANDING FISTULA IN ANO TREATED BY THE ELASTIC LIGATURE.

BY J. C. OGILVIE WILL, M.D.,
ASSISTANT-SURGEON TO THE ABERDEEN ROYAL INFIRMARY.

AMONG other purposes for which an elastic ligature may be employed, Professor Dittell mentions that of division of the tissues for the cure of fistula in ano; and though I do not consider that, as a rule, its use should be preferred to the cutting operation, in certain exceptional cases I think it may prove of advantage, of which the following is a well-marked example. The history of this case is reduced from a written statement supplied by the patient, and it certainly appears a very extraordinary one.

W. P——, aged fifty-one, states that in the summer of 1854 he suffered from great weakness of his back and legs, and severe pain after being at stool. He was then treated for "spinal disease" by the actual cautery, blisters, and the application of leeches round the anus. After being subjected to this treatment for eight months he attempted to resume his duties; but the pain after defecation continued, and even at other times he suffered so much uneasiness that, frequently after returning home at night, he applied leeches and poultices to relieve it. He continued in much the same state till August, 1864, when matter was observed issuing from an opening by the side of the anus. This discharge went on for eighteen months, during which period he had no pain at stool, but a feeling of great weakness and pain in the small of his back. During the next four years "red swellings" appeared from time to time round the anus, but with the aid of leeches and poultices they were got rid of. From 1870 to 1874 there was an occasional discharge of pus from a sinus, the flow sometimes continuing for three months, then stopping, and then again commencing; at times he could neither sit nor lie, but was obliged to walk about, which he found afforded greater relief than anything. In September, 1874, the pain while sitting increased, especially at one point on the inner side of the left buttock, where he could feel "something about the size of a pea, from which a hard cord extended to the anus." This swelling gradually increased, as did the pain; and he had again recourse to leeches and poultices, but, finding them of no avail, he applied to a medical man, who soon after requested me to see him.

On examination, I found a small opening in the perineum on the left side of, and distant two inches from, the verge of the anus. On introducing a probe, it revealed an indurated, deeply seated sinus, ending some little distance above the sphincter; but no internal opening could be detected. The lower part of the gut was separated from its surrounding structures to such an extent that the point of the probe could be swept round fully half its diameter.

Some days afterwards I completed the fistula by making an internal opening in the gut above the sphincter, and passed in a probe armed with a solid elastic ligature (similar to that described by Sir Henry Thompson in THE LANCET of Jan. 3rd, 1874), which I then, after detaching it from the probe, put tightly on the stretch and knotted securely. The ligature was considerably larger than the eye of a probe would admit, so I fastened them together by means of a thread of iron wire. At the moment when the ligature was being tied, the patient complained of considerable pain; but this soon passed off, and by the use of morphia suppositories he was kept quiet and comfortable. A pad of lint coated with an ointment containing salicylic acid was applied, and retained by a T bandage.

The ligature came away on the eighth day of the operation, and left a broad but healthy granulating surface, which gradually healed. The bowels were moved some days before the separation of the ligature, but its presence did not occasion any inconvenience.

In this case, on account of the length and depth of the fistula, considerable hæmorrhage would, in all probability, have followed the use of the knife; moreover the patient was weak from long suffering, of extremely sensitive and nervous temperament, the subject of heart disease, and much averse to a cutting operation; therefore I think it was a peculiarly suitable case for the employment of the elastic ligature, as not one drop of blood was lost during the entire proceeding, and the shock of the operation was much less than it would have been had division by a cutting instrument been the mode adopted.

Aberdeen.

THE FOOT-AND-MOUTH DISEASE.—This disease has broken out in Herefordshire among cattle and sheep, and has spread most disastrously among the famous Hereford herds. The last weekly returns show a favourable decrease on those of the previous week. In the Hereford district, according to previous returns, there were 585 head of cattle ill, while the last return shows 479 only. Unhappily, however, to counterbalance this, there is a large increase of the disease among the sheep, which number 613, and pigs 43.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF DEPRESSED FRACTURE OF SKULL; TREPHINING; FUNGUS CEREBRI; DEATH.

(Under the care of Mr. John Marshall.)

For the notes of the following case we are indebted to Mr. A. Pearce Gould, late house-surgeon.

H. B——, a healthy young man, aged twenty-four, was admitted on Feb. 23rd, 1875, at 5 p.m., with the history that, while running fast, he had fallen and struck his head against a low spiked railing. He was on admission semiconscious, answering questions when spoken to loudly, but speaking petulantly. There was a wound in the scalp above and in front of the left parietal eminence; the finger introduced into this came upon a depressed fracture of the bone, and a small quantity of brain-matter was found protruding from the wound. The pupils were equal, of normal size, and acted readily to light; pulse regular, small, 96.

Mr. Marshall saw him at once, and ordered chloroform to be administered, under the influence of which the patient vomited. The wound in the scalp was lengthened at each end, and then another cut, four inches long, was made at right angles to it across its middle. The four triangular flaps of scalp were then reflected back, and the pericranium extensively raised from the fractured bone. The depression was formed by the driving in of three triangular plates of bone, having their apices firmly wedged together in the centre and their bases rounded. The depressed area was about one inch and a half in diameter. As the bone could not be elevated, a small trephine was applied at the anterior part of the exposed bone, and when the part-circle of bone was removed the depressed fragments were readily elevated and removed. A small spiculum of bone was then found to be sticking up vertically with its point in the dura mater, which had a rent in it at least an inch long. Loose pieces of the inner table of the skull were removed, and sharp corners taken off with bone-pliers. The brain was seen pulsating through the wound in the meninges, and arterial blood oozed up at each pulsation. The wound was syringed with very weak cold carbolic lotion, and lint soaked in this lotion was laid on it, and covered over with lint steeped in carbolised oil. The head was shaved, and the patient was put back to bed. When the bone was being removed the pulse increased in force and diminished in frequency.—6.30 p.m.: Is lying quietly in bed; answers questions quite rationally, but slowly. Pupils contracted, especially the right; pulse 100, full and bounding; respiration 20; temperature 100°. After about every ten respirations he makes a long pause, followed by a few very deep respirations. Ordered ice-bag to head and evaporating lotion to forehead. To take nothing but iced milk.

Feb. 24th.—Slept well through the night. Quite sensible this morning. Complains of frontal headache and pain round the wound, with severe paroxysms; forehead feels hot; skin hot and moist; pulse full, rather hard; tongue a little furred at edges, dry in centre; pupils equal, normal; has passed water voluntarily; bowels have not been open; urine pale, clear, acid, sp. gr. 1024, no sugar nor albumen. Dressings removed this morning; the wound syringed and dressed as at first. Temperature (axilla) 101°; pulse 104; respiration 20.—10 p.m.: Temperature 105·2°; pulse 105; respiration 21. Moaning, restless, half asleep; pain in the head almost the same as this morning; slight intolerance of light; pupils normal; pulse full, bounding, and rather hard; face pale. At 7 p.m. this evening he began to take one grain of calomel every four hours, and one drop of tincture of aconite every half hour.

25th.—Is in much the same state as yesterday. Mind clear; frontal headache; pupils equal, not contracted; no marked photophobia; no paralysis; no vomiting; skin dry, rather hot. Pulse 108, soft, jerky. Bowels have acted freely; wound dressed as before. The membranes are of a darker purple colour than before, and there is a slight protrusion of whitish brain-matter through the laceration in them; the edges of the wound are quite quiet; discharge slight and serous. Temperature 103·4°.—10 p.m.: Temperature 105°; pulse 130, rather irregular, soft; respiration sighing. Tongue dry; thirsty; bowels open again; no change in head symptoms.

26th.—2 a.m.: Pulse 108, very small, regular. To take the aconite every two hours.—11 a.m.: Had a short, slight rigor at 7.30, and another a few minutes since. Pain in the head has increased; felt sick this morning; pulse small, rapid; skin dry; tongue dry; bowels acted twice in the night; quite conscious. When the dressings were removed to-day there was a strong peculiar smell, resembling that of anatomical preparations. The hernia cerebri has more than doubled in size since yesterday; is now as large as a walnut, of white colour speckled with red, evidently consisting of brain-matter. The edges of the wound are granulating, and at one part adherent to the brain. Temperature 105·4°.—2 p.m.: Is less conscious. Has been twice sick. Pulse 128, regular and hard. To take aconite every half-hour. Respiration 40. The cerebral hernia is rapidly increasing in size, its surface now being as large as the external wound, pulsating in the middle, redder in colour, very soft and loose. A piece of lint dipped in carbolised oil is laid over it.—3.10 a.m.: Quite unconscious; eyes fixed; pupils equal, normal size; has been sick again twice. Pulse soft, small, irregular; respiration 56, very embarrassed; temperature 107·6° in rectum; 105·1° in axilla. The cerebral hernia is much larger, hanging over the lower edge of the wound as low as the left ear, very loose, with numerous dark-red spots, slight pulsation perceptible at one point, at the upper part; its surface is as large as the palm of the hand. The hernia increased in size until death, which took place at 4.50 p.m. Temperature in rectum at 5.10 p.m., 107·6°; at 5.30, 107·2°; at 5.50, 107·2°.

Autopsy, twenty-one hours after death.—Weather cold. Rigor mortis very great. The hernia cerebri has shrunk to about half the size it was during life, measuring two inches and a half by two inches, and appearing as a reddish-yellow mass. Dura mater very adherent to skull, presenting no abnormal appearance inside or out. A thin ridge of purulent lymph surrounded the part exposed in the wound, and effectually prevented the passage of fluid between the dura mater and the bone. The lateral ventricles contained rather less than their normal amount of fluid. There was purulent lymph in the arachnoid cavity over the upper and anterior part of the left hemisphere, but here only; no excess of fluid in arachnoid cavity. The vessels of the pia mater were injected all over the brain, and along the larger ones was an effusion of opaque fluid, and, at some points, of lymph; this condition was found over cerebellum and base of brain as well as on the hemispheres. There were patches of bright redness at some places, in which the vessels could be distinctly traced. The brain was notably paler than normal. On opening the chest, six ounces of dirty brownish-green fluid was found in the left pleura. On raising the left lung, the ligamentum latum pulmonis was found to have disappeared, and the lower lobe of the lung was extensively eaten away close to the spine; there was a rent in the œsophagus at the same place; the pleura was stripped off from the seventh and eighth ribs for some distance; no bruising around. These were supposed to be the effects of post-mortem digestion. Stomach healthy. Heart large, soft. Spleen large, dark. Kidneys congested. A little purulent lymph was found over the muscles covering the thyroid cartilage, for which there was no apparent cause. No other injury was detected.

MIDDLESEX HOSPITAL.

SPONTANEOUS CURE OF AN ANEURISM OF THE ABDOMINAL AORTA; DEATH BY URÆMIA.

(Under the care of Dr. Robert Liveing.)

The following case, for the notes of which we are indebted to Mr. Tomes, house-physician, presents many points of extreme interest. Although the aneurism, as shown by examination after death, was of considerable size, an important sign of aneurism—lateral expansion—was absent. At the post-mortem examination it was demonstrated that in this case, at least, the channel of circulation was behind the mass of the tumour. The supervention of albuminuria, and finally of uræmia, are facts of great clinical importance.

Elizabeth T——, aged fifty-two, was admitted into the Northumberland ward on April 27th. There was nothing of importance in her family history. She had borne ten children, three of whom were born dead; one miscarriage. She said she contracted syphilis from her husband sixteen or seventeen years ago; the miscarriage and two of the still-births were subsequent to this. The present illness commenced twelve months ago as an aching pain in the left side, worse at some times than at others. Subsequently it became continuous, and soon she perceived a small lump the size of a walnut midway between the navel and the breast-bone. The pain went on increasing, and the tumour grew, but very slowly. Of late she had lost her appetite, had retched frequently, and had also lost flesh.

On admission she was emaciated, and bore the marks of old syphilitic sores on the face, arms, and legs. Tongue furred and white. She complained of constant nausea; retched frequently. No appetite; and had a "burning" pain in the site of the tumour, not increased by food. There was great tenderness of the abdomen, especially about the right iliac region; percussion could not be borne. An irregular, roundish, hard lump, not particularly tender on manipulation, occupied the epigastric region, and extended into the left hypochondrium, about the size of a large fig; the upper border being half an inch below the xiphoid cartilage, its lower, which was less distinct, being about an inch and a half above the umbilicus; its right border extended a trifle beyond the median line of the abdomen, and was distinctly defined as a hard ridge, separated from the remainder of the mass by a sort of sulcus. Towards the left it gradually faded off under the costal cartilages. It was firm to the touch; dull on percussion; pulsated visibly and forcibly with the abdominal aorta in an antero-posterior direction, but had no lateral expansion. A bruit was audible on auscultation, synchronous with the pulse. The liver dulness was about normal. No ascites; no œdema of the lower extremities. The urine, when first examined, contained no albumen, sp. gr. 1015, pale. Some tortuous and dilated superficial veins could be felt under the skin of the abdomen. The nausea and retching continued in spite of bismuth and hydrocyanic acid. The urine was examined daily, and contained no albumen until the 8th of May, eleven days after admission, when she was suddenly seized with a marked epileptiform fit. After this had passed off the urine was drawn off, and found to contain a decided trace of albumen and granular casts. She was consequently wet-cupped over the loins, and given a large dose of compound jalap powder in a black draught; but the latter having no effect, croton oil was given. The fits recurred, however, with increasing rapidity, the patient being comatose in the intervals until death, which took place on May 12th. In all she had from twenty to thirty fits.

At the post-mortem examination, on removing the viscera was seen a large globular tumour the size of a common orange, springing from the abdominal aorta just above the origin of the renal arteries. The pancreas was wrapped over its surface; several large veins, of which the left renal was the most remarkable, being distended to the size of a forefinger, passed over its surface. On closer examination, it was found that the cœliac axis took origin from its upper part, that the superior mesenteric artery arose from its front, and the two renal arteries came from underneath its lower margin. The tumour felt highly elastic, and gave the impression of containing fluid. On slitting up the abdominal aorta from behind, it was seen that the tumour was a globular cavity communicating by a large open window with the aorta. It was completely filled with a fibrinous clot. On cutting open the clot it was found to be everywhere soft and elastic, and to present a greyish woolly appearance throughout, but no trace of concentric lamination. The arteries arising in connexion with the tumour were all of fair size and average calibre, but fluid injected with considerable force into the superior mesenteric failed to reach the aorta; there appeared to have been a free channel for the blood through the aorta itself, behind the tumour. The lower part of the thoracic and upper part of the abdominal aorta presented numerous white raised patches of atheroma. The kidneys were both intensely engorged with dark blood. The capsule was torn off with difficulty, leaving a rough granular surface. On section, no diminution of cortex. Consistence of kidneys tough. The left renal vein was bound down to the anterior surface of the tumour. A few patches of lobular pneumonia in the lungs. The other organs were healthy.

The cause of death in this case was evidently uræmia from renal disease, which must have arisen quite independently of any mechanical interference with the supply, or return of blood from the kidneys due to the aneurism; for, on the one hand, both renal arteries were of fair calibre and pervious, although arising almost from the sac itself. The left renal vein, it is true, took its course directly over the tumour, but, on the other hand, both organs were equally congested and granular. The case is especially interesting, since it shows that the absence of "lateral expansion" in an abdominal tumour may occur in connexion with an aneurismal sac filled with an organised clot.

HUNTINGDON COUNTY HOSPITAL.

EPITHELIOMA OF THE ARM, DEVELOPED ON THE CICATRIX OF A BURN; AMPUTATION; MISHAP WITH ESMARCH'S BANDAGE.

(Under the care of Mr. HOLDERNESS.)

FOR the notes of this case we are indebted to Mr. Greenway, the house-surgeon.

Abel B——, aged forty-nine, a brewer's man, was admitted on April 17th, 1875. When three years of age he was severely burnt on the right side and right arm by his clothes taking fire. The burn soon healed, except at a small spot over the elbow. This spot constantly kept healing up and breaking out again. Twelve months ago it broke out and rapidly spread all over the cicatrix until the arm presented a large ulcerated surface extending from about four inches below the shoulder to within two inches of the wrist-joint, encircling the entire limb. At the bend of the elbow was a large fungous mass, very tender to the touch, easily breaking down and bleeding, and discharging, together with the surface of the ulcer, very fetid pus. This fluid exhibited under the microscope, besides pus- and blood-corpuscles, a number of irregular-shaped, large, flat, thin scales, with nuclei and nucleoli, in some cases single and in others more than one. No history of cancer or syphilis could be obtained.

No disinfecting fluid had any effect in subduing the offensive fetor of the discharge until the whole surface of the ulcer was covered with a paste of chloride of zinc and opium. By this means all smell was quickly removed in a few hours. No improvement, however, occurred in the character of the ulcer, and, as it was evidently extending, amputation of the limb below the shoulder was proposed and performed by Mr. Holderness. At the operation, Esmarch's bandage was employed, and the elastic tubing was placed as high up the limb as was convenient, leaving space enough (as it was thought) for the circular incision to be made free of the margin of the cicatricial tissue. This, however, was not the case; for, immediately the incision through the biceps had been made, this muscle retracted beneath the tubing, and severe hæmorrhage from the unrestrained divided brachial and other arteries ensued. The removal of the limb was proceeded with, and the vessels secured with silk ligatures; not, however, before a good deal of blood had been lost. The stump has since progressed favourably, and is now almost healed. The point for consideration in connexion with this case is, What would have been the result of the early excision of the diseased spot at the elbow?—its character being recognised by microscopical examination of the discharge; and a lesson is taught that care is to be observed, in employing Esmarch's bandage, to leave sufficient space below the elastic tubing and the line of incision to prevent retraction of the divided muscles beneath it.

Reviews and Notices of Books.

Manual of Pathological Anatomy. By C. HANDFIELD JONES, M.B. Cantab., F.R.S., F.R.C.P., and E. H. SIEVEKING, M.D., F.R.C.P. Second Edition, revised, enlarged, and edited by JOSEPH FRANK PAYNE, M.B. Oxon., F.R.C.P. London: Churchill. 1875.

Lectures on Pathological Anatomy. By SAMUEL WILKS, M.D., F.R.S., and WALTER MOXON, M.D., F.R.C.P. Second Edition. London: Churchill. 1875.

STUDENTS of pathology—and who is there among practitioners of medicine that does not come within the designation?—may be congratulated on the simultaneous appearance of new editions of our two standard works on the science. Both have been for long out of print, and were indeed left far behind by the rapid progress of pathological work which the last fifteen years have witnessed. But their places remained unfilled in English medical literature, and we welcome their reappearance. The work of revision could not have fallen into better hands. The contributions to pathological knowledge which have been made by Dr. Moxon and Dr. Payne are many and various, and not least must be reckoned the excellent way in which each has performed his task in editing our handbooks of the science.

The general characteristics of the manual of Jones and Sieveking are well known. Its aim is to give an account, as full and comprehensive as is compatible with brevity, of what is known and conjectured regarding both general pathological processes and special organic changes. A useful description is given of each, and both facts and opinions are presented with clearness and impartiality, and the work is, on the whole, well brought down to the present day. The more important classical treatises have been freely used, the repertorium of pathological knowledge contained in the Transactions of the Pathological Society having been laid under free contribution.

The pathology of the general morbid processes, with an account of which the work commences, has furnished the editor with some of his most important work. The modern observations on the pathology of inflammation are incorporated with the old material. The great controversy on the part played respectively by tissue-cells and blood-corpuscles in the phenomena of inflammation and suppuration is only briefly alluded to for want of space, but the general conclusions are given. The editor avows himself convinced of the participation of the tissue-elements in the process, as well as the bloodvessels and cells. Septicæmia and pyæmia also occupy considerable space. The outline of the chief experimental evidence on the subject, which has of late been so abundantly furnished, is too brief to do anything like justice to recent investigation; but, so far as it goes, it is clear and fair.

In the revision of the section on Tumours, Virchow's work on Morbid Growths has formed the basis of the alterations and additions. The section has, indeed, been almost rewritten. The classification adopted is that of Virchow. Some forms of tumour are rather too briefly described, but the general questions incidental to the description of cancer and tubercle are very well discussed.

The special pathological anatomy of the various organs makes up the largest part of the volume, but into the details of this part it is impossible for us to go. The work of revision is here also on the whole well performed. The field is scanned with great completeness, no subject of importance being omitted. Here and there further additions might have been made with advantage. The account of the changes in the brain which are consequent on embolism needed fuller elucidation, and the pathological anatomy of the spinal cord is scanty. In the original edition it was very defective, and the trifling additions made fail altogether to bring it up to our present state of knowledge. Morbid conditions of the heart's walls are also too briefly given—a subject on which very much has been done since the first edition appeared. The account of the histology of both hypertrophy and fatty degeneration is very imperfect. With these and other similar exceptions, of no grave moment, incidental to the wide field to be surveyed, the work is well done. Every addition is clear and to the point, and those subjects which are still under discussion are impartially considered—arguments most relied upon on each side being given, and the most probable conclusion educed, without too great detail of the conflicting evidence. The book is in all parts pleasantly free from any attempt at dogmatic decision on doubtful questions. The illustrations of the first edition are supplemented by many fresh woodcuts, some from Rindfleisch and other continental works, others from original preparations by the editor, and many of the latter are of great excellence.

Dr. Wilks's "Lectures on Pathological Anatomy" were published originally in 1859, and the work was soon out of print. The task of the preparation of a new edition has been long, the preface informs us, in the hands of Dr. Moxon. The work itself bears evidence of much labour in its reconstruction. It could hardly have fallen into better hands. The great feature of Dr. Wilks's work was its original character, and this feature has been well maintained by Dr. Moxon in his additions, which, in some parts, amount to rewriting. In many portions, indeed, merely the skeleton of the old work remains, and has been reclothed with new material, and it may be questioned to whom the larger share of the work, in its present aspect, is to be ascribed. The chapter on Diseases of the Lungs alone has been revised by Dr. Wilks.

The pathological anatomy of the various tissues and organs of the body constitutes the subject of the work. General pathological processes are discussed only incidentally where they have special relation to the changes in certain organs, and at the end of the volume some of the morbid conditions which have been described under the head of certain organs are grouped together in their associated connexion, as they are seen in certain special diseases.

The work represents essentially the pathological experience of its two authors. The rare advantages which they have possessed of extensive, almost unrivalled, opportunities for observation, and the ability each has shown to make the best use of those opportunities, have enabled them to describe and discuss almost the whole range of the subjects which pathological anatomy embraces, in the light of their own observations and of their own careful and well-informed reflection. This confers a unity and consistence on the whole work. There are no uncemented facts, no disjointed quotations, no unmarshaled statistics. All parts are compactly grouped and welded together. In the preface to the original edition we were told that its pages contained no statement unverified by the author's own observation and experience. This, while it unquestionably added, perhaps incalculably, to the value of the work, was impressed upon its form very distinctly. The statement is true, though not to an equal extent, of the present edition, but the effect upon its style is even exaggerated, and the first person is predominant throughout to an extent which is not always quite fair to other workers, especially in a treatise which professes to, and does, present to a wide circle the pathological knowledge of the present day. The work is, however, one of great value, and the additions which have been made to it, in the completeness of range, and the thorough practical knowledge which each displays, leave nothing to be desired, and bring it in every respect thoroughly up to the present day. Its style is clear and exact.

Of the several sections we can only briefly speak. Almost every chapter has been extensively altered, none more so than the first one, on Diseases of Bone; the question of inflammation of bone being discussed with much ability. Diseases of the Heart receive very full discussion, as also do the Diseases of the Arteries, to which Dr. Moxon is known to have paid much attention. "Arterio-capillary fibrosis" meets, it is to be remarked, with little favour. An excellent description is given of the pathological anatomy of the brain and cord; which, although brief, is by far the best that exists in an English work, the results of the most recent observations being incorporated in the description. The chapter on Diseases of the Lungs has been revised, as we said, by Dr. Wilks, and it contains an excellent account of the morbid changes which underlie phthisis, the several views of their pathological character being stated with great clearness and impartiality.

The account of the Morbid Anatomy of the Stomach embraces an interesting discussion of the pathology of gastric ulcer. The view is rejected as unsatisfactory which ascribes its origin to the action of the gastric juice on an area in which an accidental arrest of circulation has taken place. Indeed, Pavy's explanation of the absence of self-digestion—that the circulating alkaline fluid neutralises the effect of the blood—is regarded as insufficient. The authors are inclined to attribute the occurrence of the ulcers to nervous influence, and to associate them with simple ulcers of the cornea.

In the description of Changes in the Liver, the mode of origin of hepatic abscess is considered at length. The theory of the mechanical action of embola in causing secondary abscess, on which stress has been laid, is doubted, and they are ascribed to the irritating quality of the clot from the inflamed region setting up a similar morbid action in the liver tissue.

A very good account is given of the Morbid Anatomy of the Kidneys. The identity of most forms of acute Bright's disease is strongly insisted upon; the various states of kidney representing the several stages of the affection. The authors have themselves met with no facts to suggest that a contracted kidney may be the ultimate stage of an acute inflammation.

The final section contains, besides the description of the association of diseased states, some excellent suggestions on the points to observe in making a post-mortem examination.

THE
OUTBREAK OF ENTERIC FEVER AT MÜLLER'S ORPHANAGE, ASHLEY DOWN, BRISTOL.

WE regret to state that the outbreak at Mr. Müller's Orphan Asylum near Bristol has assumed serious proportions; no less than 500 children being affected, of whom twelve have died, whilst others remain in a precarious condition, but no fresh cases have occurred during the last few days.

The asylum consists of five large separate buildings, and nearly 2000 children are maintained in them. The management of this huge establishment rests entirely with Mr. Müller, there being no committee, nor are any of the usual means of raising funds employed, Mr. Müller relying entirely on the efficacy of prayer to replenish his exchequer when it falls low. The buildings are well constructed, well ventilated, and are connected with the Bristol system of sewage. The water-supply of the establishment is taken from wells situated on the premises; the water is good, and the city analyst, Mr. Stoddart, reports it free from organic impurities. The water has been again analysed since the outbreak, with the same result. From a visit we paid to the asylum some few years ago, we can bear witness to the excellence of the domestic management, and the happy and contented appearance of the children.

For the details of the present outbreak we are indebted to Dr. Davies, the medical officer of health for the city of Bristol, who has most kindly furnished us with an account of the outbreak, so far as he has been officially connected with it.

The first notice received by Dr. Davies of the occurrence of the outbreak was on the 26th of July, when the local registrar returned five deaths from fever and one from hæmorrhage, which, on subsequent inquiry, proved to have been a case of typhoid, as having occurred at the asylum. Dr. Davies at once visited the orphanage, and obtained the following information. The disease commenced on the 24th of June. At first nearly 30 sickened, and these cases were severe. The disease was entirely confined to houses 2 and 5. Dr. Davies suspected the water-supply obtained from the wells on the premises, but failed to establish any proof of their having been contaminated. He then inquired about the milk-supply, but as the same milk was used in all the five houses, and only the inmates of 5 to 2 were attacked, that source of infection was eliminated. Dr. Davies, however, persevered in his inquiry, and presently learnt that the children were in the habit of playing in a picturesque dingle situated near the asylum, at the bottom of which runs a small stream of water fed by ditches containing the sewage of the several private houses on Ashley Down. Dr. Davies also learnt that fever has recently prevailed in these houses. The children, it appears, were in the habit of drinking the water when out for their afternoon rambles. Dr. Davies believes this to have been the original source of the mischief, and we quite agree with him, but we think that the subsequent extension of the disease in buildings Nos. 5 and 2, and the strict limitation of the fever to these houses points to some local defect in their sanitary arrangements; unless, of course, it can be shown that the inmates of these two houses alone had access to the contaminated water of the valley. What we think most likely to prove the case is that a certain number of children in house 2 and 5 received on a given day a dose of specifically contaminated water, and subsequently sickened with enteric fever. The disease thus introduced into the houses spread, owing to local sanitary defects in the buildings themselves, and as these defects were probably limited to these two buildings, the fever was not introduced into the other blocks.

The preventive measures that have been adopted by Dr. Davies are admirable, and will no doubt prove sufficient to check the extension of the disease in other quarters of the neighbourhood. With regard to the polluted streams that have caused the mischief, Dr. Davies, some months back, served notices on the owners of the houses on Ashley Down to abate the nuisance; but it was found that Ashley Down and its watershed lie above Bristol, in a separate sanitary district. The Bristol sewers are constructed only for the parliamentary borough of Bristol, and cannot take the sewage of outlying districts on a higher level, the result being that the sewage of the rapidly increasing suburban districts round Ashley Down is discharged into the open streams which pass through the town of Bristol to discharge itself into the harbour! To remedy this condition, Dr. Davies suggests that the sanitary authority of the district should be made coextensive with the watershed. It affords another instance of the absurdity of the present system of artificially dividing our sanitary authorities into urban and rural, when the interests of both are in so many cases identical.

In conclusion, we would comment on the extraordinary fact that, although enteric fever had been spreading rapidly in the orphanage for more than a month and 500 cases had sickened, no official intimation had been sent to the medical officer of health of the district, who did not learn of the outbreak till no less than five deaths had been reported by the registrar. This omission of a plain and obvious duty might have been followed by most disastrous consequences to the city of Bristol. We desire to express our sympathy with Mr. Müller during this trying time, and we sincerely hope that the public attention which has been drawn to this useful institution by the occurrence of the outbreak will secure for it increased support, and that Mr. Müller will be able to carry on his good work even more successfully than before.

THE LANCET.

LONDON: SATURDAY, AUGUST 7, 1875.

THE British Medical Association has this year held its meetings under exceptionally favourable circumstances. Although there was at first considerable objection raised by some of the Edinburgh authorities against holding the meeting in that city this year, and although there is still some resentment at the manner in which some of the leading members of the profession in Edinburgh have been treated by the Council of the Association, it must be confessed that at least the great majority of those who congregated in the Free Church Assembly Hall on Tuesday last were prepared to sink all personal considerations, and to contribute as far as possible to the success of the gathering. The traditions and the associations of the venerable city of Edinburgh and its illustrious University are calculated to inspire the most indifferent with a love of knowledge and a desire to increase his store, although the enthusiasm of most must have been damped when the President in his address pointed out the serious mistake they had made in not commencing and completing their educational career at the University with which he has so long and so honourably been identified.

The British Medical Association is certainly advancing in numbers, but, as one of the members suggested at the second general meeting, it may be doubted whether it is advancing in a corresponding ratio in influence and power. It was impossible to attend the general meetings and not to be struck with the want of control that the body of the members exercise over the management of the affairs of the Council. A great part of the business had been prepared in council, and offered cut and dried for acceptance at the general meetings of the Association, without any discussion, and even without any consideration. For instance, the report of the Council and the alterations in the bye-laws were accepted without being read by the few members who had not entirely subsided under the influence of the President's long address. It cannot surely be necessary to urge upon the members of the Association to insist on their right to supervise and superintend the working of the Council. The fullest confidence, it is true, must be reposed in the members of the Council; but if the great body of members are not allowed to discuss the official acts of their Council, or if they suffer themselves to accept and adopt whatever may be presented to them without previously ascertaining the nature of the proposition submitted to them, it is needless to say that they will soon lose their influence and independence, and that the Council alone will, in deed and in fact, become the political representatives of the British Medical Association, in which those members outside the Council have no voice or part, except the responsibility which attaches to them as members of the incorporated Association. The spirited protest offered by two or three of the more public-minded members of the Association will doubtless bear some fruit.

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SOME eight or nine years ago we took occasion to comment somewhat extensively and categorically on certain faulty items of administration at St. Bartholomew's Hospital, and to point out how, as it appeared to us, much of this arose from a sort of antagonism in little matters between the lay and the medical staff. *The Times* and other contemporaries followed our example in this important instance, and the evils then complained of are now remedied. It is nearly two years since the attention of our readers was called to the same kind of abuses as existing at the Seamen's Hospital, and it was shown indubitably that, in consequence of the undue predominance of the lay element in the administration, the institution was suffering both in usefulness and prestige. But in this case, also, certain reforms were organised and adopted, and the result has been eminently satisfactory, both as regards the patients and the officers. We thought, indeed, that this unwise and absurd antagonism between lay and medical authorities in our large hospitals had ceased to exist, and that the position of our own cloth was now duly and properly acknowledged. But it is not so as yet. The administration of the so-called Royal hospitals is still, for all practical purposes, entrusted entirely to one lay official, denominated the treasurer. He lives, or is supposed to live, in the building, and, though assisted theoretically by a number of so-called almoners, his reign is purely autocratic. A question has very lately arisen at St. Thomas's—one of these Royal hospitals—that shows the working of the system. The medical and surgical staff, with the exception of the two senior members, came to the unanimous conclusion that it was desirable to change the hours for visiting their respective wards. For some years it has been the custom with all to make an early morning round, which, for obvious reasons in connexion with consulting practice, is found to be very inconvenient. The treasurer and almoners were communicated with, and a desire was expressed by the staff that the recognised hours of visiting might be fixed in the afternoon. We do not care to record the minute particulars of the discussion, but it suffices to say that the treasurer, having remarked that the change would be inconvenient to the nursing staff and to others concerned, announced that no alteration could be made. In arriving at this decision, Sir FRANCIS HICKS was doubtless influenced by the want of unity in the medical camp, the two elders standing aloof and doing nothing. The nursing element, too, is very strong at St. Thomas's; for, besides the regular nursing staff, so ably commanded by Mrs. WARDROPER, there are the probationers of the Nightingale School, whose convenience had doubtless to be consulted. Be this as it may, we have here a glaring result of the antiquated system of hospital management. A large body of professional men, including in their ranks some of the most eminent physicians and surgeons in London, are compelled, or rather permit themselves to be compelled, to adopt a course of action injurious to themselves and (if we except the convenience of some few persons of very secondary importance) of no practical benefit to any concerned. If precedents are wanted for the afternoon visit, we have only to look at other hospitals. If we are told that eight o'clock in the morning is a specially convenient hour, we assert that at this hour neither patient, nurse, nor ward can be properly prepared for the doctor's visit. The washing, dressing, and breakfasts of the patients must be "scamped," particularly of course in the winter, to their great discomfort and detriment; and all who know anything about the necessary work to be done in a sick room or ward will agree that, before at all events half-past nine or ten o'clock, the physician or surgeon is an unwelcome visitor, emergencies excepted. And therefore, for these reasons alone, we believe that the staff, in the interests of their hospital clients, acted wisely in endeavouring to change the visiting hour. Without, however, canvassing their motives, it is enough just now to consider whether the highly skilled work continuously given by our profession in the wards of these large hospitals is to be wholly and entirely subordinated in fact to one lay official. There is work enough for that gentleman without such acts of supererogation and unnecessary annoyance. If we are rightly informed, the structural arrangements of the resident medical officers' quarters are neither palatial above nor by any means perfect below; and we may here in connexion therewith call attention to the fatal cases of typhoid recorded in THE LANCET of last week, no particulars as to which have yet appeared. The treasurer in these large institutions is appointed to look after the funds, to consult with the architect, surveyor, and engineer in order that the buildings and their surroundings may be properly kept up, to see that nothing is wanting to promote the comfort of the inmates, and to co-operate cordially with the medical staff. As we remarked some time ago in dealing with a kindred subject, no institution that depends for its very existence upon skilled professional work can be properly conducted unless the dignity and status of the professional workers are duly considered and supported. And so we recommend Sir FRANCIS HICKS to concentrate his great administrative powers upon finance, drains, bricks and mortar, and, following the worthy example of a fellow-treasurer in the City, to leave the doctors to do their own work in their own way.

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DISEASES like small-pox, typhus, and typhoid fevers are attended with such marked symptoms, and are so frequently followed by a fatal issue, that they could not fail to arrest the attention of the most inobservant and excite the fears of the most heedless; but the case is very different when we come to study the history of granular disease of the conjunctiva and contagious ophthalmia. And yet outbreaks of these affections in schools and pauper institutions are not by any means infrequent occurrences. Whether we regard its insidious nature or the great difficulty of eradicating ophthalmia when once fairly established in a community, or the disastrous results by which it is followed, as far as the integrity of the vision is concerned, this subject is much more important than is commonly imagined. And the study of it does not lack practical advantages, for ophthalmia is in a great measure a preventable disease, its causes being mainly such as are attributable to defective hygiene and bad management. It is only of late years, moreover, that the nature of the disease has been properly appreciated. Under the head of conjunctivitis very dissimilar affections had long been grouped together. The disease, which was the great scourge of our own and other armies, which gave rise in the aggregate to an enormous amount of ineffectiveness and invaliding from those services, and caused a large number of unfortunate soldiers to be cast like beggars upon society in a disabled condition, has now in a great degree been overcome by improvements in barrack hygiene at home and foreign stations, especially at the latter. Every ophthalmia does not end in granular lids, nor are all granular lids the results of one and the same disease. The affection to which we are alluding was observed and described by military surgeons long before its features were thoroughly recognised by civil practitioners. This was partly to be attributed to the greater frequency of the disease in the army in past years, and the consequently greater familiarity of military surgeons with it; partly to the fact that in its initial stages it was rarely seen at ophthalmic institutions to which the sufferers applied when its characteristic phenomena had been merged in, or overlaid by, inflammatory conditions or their results. Now, however, the ophthalmic affection known as granular disease of the conjunctiva has been investigated by numerous observers in this country and abroad; its varieties and stages have been recognised, and much light has been thrown upon the causes of its prevalence in schools and other large overcrowded institutions. It was found by Dr. FRANK and Dr. MARSTON that the pellucid-looking granules to which the expressive name of "sago-grain" or "spawnlike" granulations was given, were common among soldiers placed under abnormally depressed or insanitary conditions; and it has since been established that these bodies had their anatomical seat in certain physiological follicular structures developed out of the subepithelial adenoid tissue of the conjunctiva. The presence or absence of these hypertrophied follicular growths in the conjunctival tissue may be regarded, moreover, as affording a delicate test of the sanitary state of a community. Their presence in man or animals, speaking generally, is indicative of hygienic deficiencies, like phenomena being induced in both under like surroundings. The fostering conditions are vitiations of a hot and moist atmosphere, from impalpable excreta of breath, skin, and body, consequent on imperfect ventilation. Mr. BRUDENELL CARTER, and many other observers, have made us familiar with the affections grouped together as contagious ophthalmia; and Mr. EDWARD NETTLESHIP, in two admirable papers in the *British and Foreign Medico-Chirurgical Review* for October, 1874, and January, 1875, has very exhaustively and intelligently discussed their symptoms and causes. Mr. NETTLESHIP points out that precisely the same combinations of conjunctival diseases are common among the poorer classes of this and other countries as are found in schools for the children of such people and in the ranks of the army. He thinks that granular ophthalmia had existed for an indefinitely long time in many European countries before the date of the Egyptian campaign. The presence of "sago-grain," or indeed any other form of granulation, indicates a vulnerability of the conjunctiva on exposure to relatively slight exciting causes of ophthalmia, and where such a condition exists we may expect a chronic ailment, liable to frequent recurrences of superadded inflammation, but capable of being altogether overcome in time with care and vigilance. Authorities differ a good deal as to the influence of contagion as a cause of the spread of the disease. Mr. Nettleship, for example, appears to agree with Mr. Welch, the Assistant Professor of Pathology at Netley, who has written several excellent articles on the subject, in thinking that too much has been attributed by authors to contagion as a cause, and he dwells particularly on dampness of the atmosphere as a factor of the disease; but although it may be impossible to prevent a considerable number of the poorer classes from being affected with slight degrees of granular ophthalmia when occupying overcrowded dwellings in a damp climate, Mr. Nettleship considers that its extensive prevalence in a severe degree shows a culpable neglect of hygienic rules among the body of persons so affected. When ophthalmia exists in any institution we may fairly assume that deficient stamina and ill-health are associated conditions, requiring attention to proper dieting, and that a "thinning out" of the occupants, with more air, more out-door exercise, and a greater attention to ablution and personal cleanliness on their parts, are required. It might be worth while to make some experimental inquiries into the condition of the atmosphere of institutions where ophthalmia prevails, especially as to its alkalinity and the amount of organic matter and moisture in it. And it is a practical hint, worthy of being borne in mind, that dust is frequently an exciting cause of ophthalmia, for we remember a case in which the surgeon of a regiment had recourse to a water-cart for watering the barrack-yard and parade-ground with manifest advantage.

The Report of the Select Committee of the House of Commons on the subject of the Hampstead Hospital for Fever and Small-pox, to which we briefly drew attention last week, finally sets at rest this long-vexed question. It will be remembered that the scope of the inquiry of the Committee was strictly limited to one question—viz., the action of the Metropolitan Asylums Board in respect of the establishment of this hospital; and their report is therefore mainly confined to this question. It was not, in fact, the principal function of the Committee to inquire whether the existence of the hospital on its present site could be proved to have been prejudicial to the health of persons or the interests of property in the neighbourhood, nor by what means such evil effects might be counteracted or remedied, or whether they were of such a nature as to necessitate the removal of the hospital; and although a large amount of evidence was gone into on these questions, the Committee appear to have framed their report from the strictly legal view of their powers, and to have limited themselves to the question of whether the managers of the Asylums Board had acted within their right in placing and maintaining the hospital in its present situation. It need hardly be said that the *onus probandi* lay with the opponents of the hospital, and that from this point of view any proof of evil results incidentally arising, or due to the action of others, was of no value as showing that the Board had acted in opposition to, or in violation of, the powers conferred upon them. And taking this strictly legal view of the case, the Committee, or rather the majority of them, were obviously averse from fettering the Board in the exercise of powers which have in the main been used with discretion and for the public benefit. Had the question been discussed from a different point of view, it is possible that they might have come to a different conclusion.

It is, we think, to be regretted that the Select Committee do not discuss more fully in their report the evidence given with respect to the actual dangers which have arisen from the hospital, and that they have made no recommendations for the suppression of evils which they allow to have existed. It is satisfactory to observe that they report that "medical evidence on both sides abundantly shows that infectious hospitals are not of themselves necessarily a source of danger to the adjoining district; that the evils inseparable from their existence may, by good management and proper precautions, be reduced to a minimum." At the same time they allow "that some alarm was experienced and some risk encountered in the immediate neighbourhood of the asylum during the period of the small-pox epidemic; although they are of opinion that such mischiefs have been exaggerated, and that they are not of necessity incidental to the existence of the hospital, but are mainly due to the carlessness of persons entering or leaving the same, or to the imperfect control which follows overcrowding." But seeing that the existence of such evils was established, and that similar conditions will always exist, and must operate far more injuriously in this situation than in many others, it would have been more satisfactory if the Committee had suggested some means by which the dangers might be diminished. And so with regard to the ambulances, concerning which there is some very strong positive evidence of the spread of contagion, owing to the neglect of the most ordinary precautions, the Committee, whilst careful to state that the Asylums Board have no control over them, and that they may be so regulated as to be free from objection, fail entirely to suggest any regulations, or to state by whom the precautions are to be enforced. It will be seen that the medical evidence on both sides, and the conclusions of the Committee as to the real sources of danger, agree in the most striking manner with the conclusions of the inquiry of our Sanitary Commission, the report of which we published eight months ago.

With respect to the alternative site (No. 3), the Committee allow that it possesses some advantages, but they do not consider that these are sufficient to counterbalance its greater distance from the dense population of St. Pancras, and the fact of its situation on the extreme verge of the metropolitan district.

In concluding the report, the Committee state that it has been made clear that the Hampstead Hospital is not required for the purpose of a third permanent infectious hospital, and that all that is now contemplated is the completion of administrative offices in substantial materials. Had this been stated some time ago, much of the agitation would never have been aroused; but, as a matter of fact, the plans for the complete rebuilding of the hospital as soon as the Board could afford the outlay were long ago completed. But for some time, at any rate, it appears that the hospital will only be used as an overflow hospital when the others are full.

The sole recommendation of the Committee appears to have been introduced with the view of preventing all such agitation in the future: it is that a compulsory power of purchase should be conferred on the Asylums Board, with corresponding power of compensation. This would doubtless be a great advantage if accompanied by sufficient safeguards, and might get rid of the suspicion of jobbery which has been necessarily associated with a more or less secret purchase from persons connected with the Board.

We hope that the result of the inquiry of the Committee will be to calm some of the excitement on the subject, and that the enormous outlay involved by the agitation and the inquiry will have brought about some good result. The somewhat extravagant laudations bestowed upon the Asylums Board will, we fear, rather mar the effect of the report, and will tend to support the idea of the Hampstead people that the Committee was not very fairly selected; but we trust they will accept the humiliation of defeat with as good a grace as possible, and make the best of the inevitable.

It is satisfactory to observe that Lord Sandon, in replying to Mr. Cowper-Temple's question as to the course likely to be taken by the Government next session in regard to the admission of women to the medical profession, spoke with much reticence. "At this late period of the session they did not feel themselves to be in a position to consider this important subject; but they would give it their best attention, and next session they would be prepared to state whether, in their judgment, legislation was desirable or not." Nothing could be more cautious than this answer. Lord Sandon, in the course of his remarks, only did justice to the great care with which the Medical Council considered the subject which was referred to them by the Government. It was natural, perhaps, that Mr. Cowper-Temple should give a somewhat partial view of the report of the General Medical Council on the subject, or rather that he should make the most of those suggestions of the Council which were in accordance with his own views. The General Medical Council, he says, made a suggestion which seemed very practical. They proposed not to interfere in any way with the existing examination or existing studies, but that a new and special examination should be provided for female students who might wish to prove their competence for admission to the Register. It cannot be too clearly remembered in what conditional form this suggestion of the Council was made. The qualifications are a most important part of the report to the Government. The report of the Council took very much the following shape:—The Medical Council are of opinion that the study and practice of medicine and surgery, instead of affording a field of exertion well fitted for women, do, on the contrary, present special difficulties which cannot be safely disregarded; but the Council are not prepared to say that women ought to be excluded from the profession. If it should appear to the Government and the Legislature expedient that women, who desire to obtain a legal status as medical practitioners in this country, should not be debarred from obtaining that status, the Council are of opinion that it should be under certain arrangements. Then follow the arrangements suggested by the Council; one of which—that mentioned by Mr. Cowper-Temple—is to the effect that, in the interests of public order, the education and examinations of female students of medicine should be conducted entirely apart from those of male students.

It will be seen from this that Mr. Cowper Temple gave to the House an imperfect view of the representation of this subject made to the Government by the General Medical Council. Mr. Russell Gurney also fell into much the same error in saying that the Council had expressed a decided opinion that women ought no longer to be excluded. They simply said that they are not prepared, notwithstanding the special difficulties in the way of women following medicine as a profession, to say that they should be excluded. They throw the whole responsibility of admitting them on the Government, on whom it should properly be thrown. We entirely approve of the Council's way of putting the matter, and we should not disapprove of the Government cautiously, and under the arrangements suggested, removing the legal obstacles to the admission of women. But nothing is to be gained by "disregarding the special difficulties" of this question. As Lord Sandon says, it is an important subject. If sex is to be no hindrance to the pursuit of the medical profession, it can be none to any other. In other words, the legislation which would admit women to medicine will mark a new era in social and political history, the effects of which may be more felt in other professions than in ours. It is in this large view that the question must be considered by statesmen, and they may well take the interval between two consecutive sessions for the purpose of such consideration. We are not afraid of being met in our profession by large numbers of competitors in the form of girl-graduates. At any rate, we prefer to rely on the protection afforded by "special difficulties," rather than on that afforded by laws which have an ungracious look of exclusion.

Annotations.

"Ne quid nimis."

THE HEALTH OF ENGLISH WATERING-PLACES.

The information now published once a year by the Registrar-General relating to the health of our principal English seaside and inland watering-places affords an indication of their relative sanitary condition which, if not scientifically accurate, has a well-defined value. The districts and subdistricts taken by the Registrar-General to represent the forty-six watering-places, treated of in his table, contained a population estimated in the middle of this year at little less than a million persons. The annual death-rate in this population during the second quarter of this year was 18·4 per 1000, against 18 in the same period of last year. This increase was less than the average increase which occurred throughout the country, due to the exceptional fatality from diseases of the respiratory organs. The death-rate from the principal zymotic diseases in these forty-six watering-places, which was equal to 2·2 per 1000 in the spring quarter of 1874, declined to 1·3 in the three months ending June last; this may be accepted as evidence of improved sanitary condition. The zymotic rate did not exceed 0·5 per 1000 in Bognor, Worthing, Sidmouth, Harrogate, Dover, Southend, Cheltenham, and Buxton; while it exceeded 3 per 1000 in Folkestone, Whitby, and Eastbourne. During the quarter ending June 30th last the fatal prevalence of whooping-cough caused an excessive zymotic rate in Eastbourne, Whitby, and Southport; while the high rate in Folkestone and Aberystwith was due to measles. It is open to discussion how far the comparative sanitary condition of watering-places may be judged from their general death-rates; the value, however, of information as to the relative fatality of zymotic disease in different communities for such a purpose can hardly be doubted.

THE CHEMISTRY OF THE BLOOD.

In a recent communication to the Académie des Sciences, M. Gauthier describes a series of experiments on the influence of salt on the coagulation of the blood, an extension of the observations of Hewson, Davy, Dumas, &c. He found that the known effect in retarding coagulation was produced equally by chloride of potassium and by chloride of sodium, and that the maximum influence was obtained, in the case of the blood of the bullock, sheep, dog, and rabbit, when the proportion of the salt was 5 or 6 per cent. The retardation amounted to nearly twenty-four hours. A larger proportion had less effect. The corpuscles preserved their form, and even exhibited slight contraction, and, by simple filtration, could be separated from the plasma. The plasma could be preserved almost indefinitely as a clear liquid, coloured a slight rose tint. On the addition of water, which of course lessened the percentage of salt, it formed a firm and transparent coagulum. The plasma he found could be dried in a vacuum, and reduced to a greyish powder, which would redissolve in the same quantity of water, the resulting solution speedily coagulating on the addition of more water. The dried plasma did not lose its property by exposure for an hour to a temperature of 110° C.; its solution in water coagulated on dilution just as did the undried plasma. The coagulability of bullock's blood was unaffected, he found, by hydrocyanic acid, cyanide of potassium, arsenite of soda, strychnine, curara, or sulphuretted hydrogen; but the clot had less contractility, and yielded a smaller amount of serum, especially when arsenite of soda or cyanide of potassium had been added. M. Gauthier considers his experiments fatal to the idea that the coagulation of the blood is in any degree a vital act, a theory which had indeed already sufficiently vanished. He thinks that the red corpuscles yield to the serum carbonic acid, and that that is the determining cause of the coagulation. He does not appear to have made any special experiments to determine this point, which should easily be settled. The theory is hardly consistent with some of the known experimental facts.

AN "UNHEALTHY AREA."

To the Holborn District Board of Works belongs the honour of having taken perhaps the first active step towards applying the provisions of the Artisans' Dwellings Act to one of the "unhealthy areas" within the metropolis. Some days ago a deputation from the Holborn District Board of Works, as the local sanitary authority, attended at the Metropolitan Board of Works to inform that body that the medical officer of health of the Holborn district had officially reported that a considerable number of houses, courts, and alleys within an area bounded on the north by Portpool-lane, on the south by Holborn, on the east by Leather-lane, and on the west by Gray's-inn-road, are unfit for habitation, and dangerous to health. It was moreover stated that the construction of these houses and streets, as well as their condition, was such that the evils complained of could only be remedied by an improvement scheme for the re-arrangement and reconstruction of the streets and houses within the area. The Metropolitan Board is asked to pronounce this area as *unhealthy* within the meaning of the new Act, and to take such measures as may be necessary to enforce the provisions of the Act with reference to the area. The importance of this application may be judged when it is stated that the area referred to consists of nearly 14 acres, including no less than 24 courts and alleys in Gray's-inn-lane, which is now one of the most densely populated spots in London. About 230 houses and more than 1000 families would be temporarily displaced if the improvement scheme is sanctioned. It was incidentally mentioned that some of the wretched alleys within this area were only 4 ft. wide. The result of this attempt to put the provisions of the Artisans' Dwellings Act in operation will be watched with much interest.

THE LATE BISHOP THIRLWALL.

It is not, we believe, generally known that this eminent and enlightened divine was remarkable in showing in his early childhood intellectual attainments of a very high order; and it is well to advert to this here, if only to show the falsity of the doctrine that such early ripening of the mind tends to weaken or impair the vigour of the intellect before the prime of life. The deceased prelate lived to the age of seventy-eight, retaining his highly-cultured intellect almost to the last, having enriched the world with many valuable productions, of which his History of Greece and translation of Niebuhr are perhaps the best known. Yet, when he was but "three years of age he was taught Latin, and at four read Greek with an ease and fluency which astonished all who heard him." Our quotation is from the preface (written by his father) to a volume of Essays and Poems published in 1809, and purporting to be written by Connop Thirlwall when but eleven years old. In this remarkable juvenile precocity the late Bishop of St. David's resembled his friend John Stuart Mill, who has recounted in his autobiography that he began to learn Greek when he was three years of age, and Latin when he was eight. Each has left his mark upon the age in which he lived, and each has thoroughly fulfilled the promise thus held out in his earliest childhood—the one became one of the foremost scholars of the time; the other one of the greatest of modern philosophers.

BROMIDE OF CAMPHOR.

A brief monograph on the physiological and therapeutical properties of bromide of camphor—a powerful and somewhat uncertain remedy introduced to the notice of the profession chiefly by Bourneville and Lawson—has recently been published by M. Pathault, of Paris. Experiments on animals have shown that it reduces the number and force of the pulsations of the heart, and causes narrowing of the calibre of small arteries by its action on the vaso-motor centres—conclusions somewhat at variance with one another, since whilst it has an inhibitory effect on the central organs, it acts as a stimulant to the sympathetic in the peripheral portions of the vascular system. It is also stated to have a lowering influence on the rate of respirations and on the temperature of the body, the reduction in the latter respect being rapid and very marked (as much as 3° C. in an hour). Dr. Pathault has found that the elimination of the bromide by the urine begins within six hours after administration of the drug, and is not completed for two days. On the nervous centres it acts as a hypnotic, and also gives rise to clonic convulsions and muscular tremors. Dr. Pathault gives myographic tracings from frogs poisoned with the drug, and shows that they differ from those produced by strychnine (with which it had been commonly compared) in resembling almost entirely the physiological tracing. The drug has been given in doses varying from four to sixty grains with variable results in cases of delirium tremens, insomnia, chorea, infantile convulsions, hysteria, epilepsy, neuralgia, and in some affections of the genito-urinary organs.

THE FREEDOM OF UNIVERSITY EDUCATION IN FRANCE.

FOR some time past the cry in this country has been, as regards medical education, "One-portal," but this end is still far from being attained. A change in the contrary direction is now advocated in France, and a multiplicity of portals may be created. It remains to be seen how far the free faculties of medicine will be able to compete with the five now existing, Paris, Montpelier, and Nancy being the old ones, Lyons and Toulouse those recently and officially instituted. We know that in this country there is a wide difference between certain schools of medicine and certain licensing bodies; the same distinctions will probably spring up in France when free faculties are founded in various parts of the land. Judging from the past, no great advantage will be derived from private undertakings of this nature. The promoters will be anxious to get pupils and disposed to make the obtaining of diplomas as easy as possible. Such was, in fact, the case in France in former times—namely, before 1792. At that period there were seventeen faculties, of which seven only had any, and merely local, importance. Good teaching was only found in Paris and Montpelier, and when any doctor of other faculties wished to practise in Paris, he was obliged to undergo a fresh examination in that capital. The provincial faculties were held in so little honour that the time spent in them counted only half when the student repaired to Paris. These provincial faculties competed with each other who should grant diplomas on the lowest terms, and it may be guessed whether the rejections were frequent. It is to be hoped that such a state of things will not be reverted to.

HEALTH OF KENSINGTON.

DR. T. ORME DUDFIELD, medical officer of health, has just issued a Report on the Health of Kensington for the four weeks from June 27th to July 24th, 1875, to which is added a special report on the subject of scarlet fever. The deaths from this disease were 11 in number, or 5 above the corrected average during the last 10 years. With one exception, all the fatal cases occurred in children between the ages of three and nine years, and in streets wholly inhabited by the poorer classes. Alluding to the disinclination of the parents of affected children to report the circumstances, and to other causes of difficulty in procuring information of fresh outbreaks, Dr. Dudfield refers to a fatal case that had been attended by a non-qualified practitioner. The child died at the end of the second week, and the existence of scarlet fever in the house only became known on the registration of the death. The two rooms occupied by the family contained seven persons. Successively the father and two children contracted the disease, and were removed to hospital. The rooms and clothing were disinfected, and the mother and two remaining children were reluctantly compelled to leave the house; but no sooner had they done so than the elder child fell sick, and was sent to hospital. On the day following the burial of the deceased child another family of nine persons left the house. They have been traced, and two children found to be ill. These have been isolated and, as far as practicable, separated from the rest of the family. Among the requirements in sanitary legislation, Dr. Dudfield thinks that none is more needed than power to provide quarantine for the apparently healthy members of poor families in which infectious disease has broken out. From inquiries among the medical practitioners resident in Kensington and other sources of information, Dr. Dudfield concludes that scarlatina is not generally prevalent, that it has not shown a tendency thus far to spread widely, and that the rumours in regard to the fatality of the disease have been, to say the least, much exaggerated.

WHAT IS THE VALUE OF A MEDICAL OFFICER OF HEALTH?

IN a health-resort like Leamington we should at least expect to find a proper value put upon everything appertaining to its sanitary condition and organisation. At a recent meeting of the Town Council, however, a discussion took place on the subject of the reappointment of the medical officer of health to the borough which shows that at least some of the members have a very inadequate idea of the duties which now devolve upon the medical officer of a borough like Leamington. It appears that Mr. Baly, of Warwick, has satisfactorily filled the post of medical officer of health to the borough of Leamington for two years, at an annual salary of £50. Finding, however, that the duties of the post had considerably increased of late, Mr. Baly, in offering himself for re-election, asked for a larger stipend. It was accordingly proposed that the salary of the medical officer of health should be increased to £80. An amendment was proposed to the effect that the salary should be £70, and that Mr. Baly should also be appointed borough analyst, at £10 per annum. Mr. Baly, however, declined this appointment. Another member then expressed his opinion that the increase from £50 to £80 was too large, and proposed that the salary should be fixed at £60. To the credit, however, of the Town Council, the original motion was carried; and we cannot but think that a town like Leamington, with little short of 25,000 inhabitants, is to be congratulated on securing an efficient medical officer of health for £80 per annum. The health of Leamington has of late been very satisfactory, as the annual death-rate from all causes during the three months ending June last did not exceed 16·9 per 1000, and the rate from zymotic diseases was as low as 1·0 per 1000.

MOLLUSCUM CONTAGIOSUM.

THIS interesting and by no means infrequent skin affection has long been debated by dermatologists. Some, as Hebra, deny its right to the term "contagious"; but the majority of writers, at least in this country, adduce ample evidence in favour of its being communicable by inoculation. Nor is there unanimity of opinion as to its pathological nature. Many hold it to be an affection of the sebaceous glands; others, as Virchow, not being able to detect any true fatty materials in the characteristic softened contents of the little growths, believe they arise rather from the hair-follicles. There are again others who, thinking to assimilate the contagiousness of the affection with its pathogenesis, affirm it to be parasitic, and have described certain large fungus-spores (molluscous bodies) in the contents of the growth. Dr. C. Boeck, of Christiania, in a recent paper (*Viertkljahresschr. für Dermat. ü Syph.*, 1875, part i.), shows that none of these views are correct, but that the idea propounded by Retzius as to the seat of affection being in the rete Malpighii is the correct one. Retzius, however, thought the affection was parasitic, and here Boeck differs from him. In the paper from which we quote, the learned Norwegian dermatologist describes fully the histological characters of the molluscous tumour, and shows conclusively that the characteristic contents are formed by retrogressive changes occurring in the cells of the deep layer of the epidermis, the so-called "molluscous bodies" being nothing else than modified epidermal cells swollen and altered by peculiar refractile substance, neither of fatty nor of lardaceous nature. He has never found this change in other conditions, as in comedones or acne pustules, but it is constantly present in this disease; the contagious property of which, he thinks, may be explained either by the self-multiplication of the diseased cells when transferred to other individuals or by their setting up, by "action of contact," similar changes in the part to which they are transferred.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE combined effect of the low temperature during February and March, and the more than usual variableness of the weather during April, caused the death-rate during the second quarter of this year to exceed the average. The annual rate of mortality during the three months ending June was equal to 21·9 per 1000, instead of 21·4 as in the corresponding quarters of the ten years 1865-74; it was, moreover, higher than in any spring quarter since that of 1866. The excess of deaths during last quarter was confined to those of infants aged under one year, and of persons over sixty years of age. The most satisfactory feature of the return is the decline of deaths from the principal zymotic diseases, which were equal to an annual rate of 2·6 per 1000; the rate from these diseases in the corresponding quarter of the five years 1870–74 was 3·1 per 1000. Although 4063 deaths in the three months were referred to scarlet fever, this number showed a further decline from those in the two preceding quarters, which were 8562 and 5050. The manufacturing and mining populations of Lancashire and Yorkshire again showed the highest death-rates from scarlet fever and other forms of zymotic disease; this is due in great measure to the large proportion of urban population which these counties contain. The health of Leeds and Sheffield has recently shown a marked improvement, but in many of the smaller manufacturing towns and mining villages of the north there is the strongest evidence of the need for sanitary reform. The zymotic rate, which was but 1·2 per 1000 in Suffolk and Hertfordshire, was 3·4 in Nottinghamshire, and 4 5 in the East Riding of Yorkshire. The fatality from typhus and enteric fever continues to decline in England and Wales, especially in large towns.

SUDDEN DEATH AFTER THORACENTESIS.

M. ERNEST BESNIER, physician to the St. Louis Hospital of Paris, brought before the Medical Society of the hospitals, the case of a lady aged forty-three, who was attacked with pleurisy and effusion. There was much weakness; the medical attendant became alarmed, and called M. Besnier in consultation. The patient was very fat, and as dyspnœa was considerable, it was resolved to evacuate the fluid. Everything was carefully prepared, the patient placed herself cheerfully on the side of the bed, and the trocar (No. 2 of Mathieu's apparatus) was introduced through a rather thick layer of fat. The escape did not occur at once, but the trocar being freed from obstruction, a horribly fetid pus flowed into the receptacle of the apparatus. From ten to twelve ounces had been obtained in about two or three minutes, when the patient was observed to turn deadly pale, and ceased to breathe. In spite of all the known means of resuscitation she could not be revived. M. Besnier, in the absence of a necropsy, thinks that the slight wound determined an *arrest of the heart;* and he pointed to the extremely rare occurrence of gangrenous pleuritic effusions.

COMPULSORY VACCINATION AND THE KEIGHLEY GUARDIANS.

THE Keighley guardians, who have been served with a writ of mandamus from the Court of Queen's Bench calling upon them to give directions to their vaccination officers to prosecute all persons within the union who refuse to have their children vaccinated, have also been served with a side-bar rule calling upon them to make a return to the mandamus within eight days. This was served upon two of the guardians, but the board has since refused, by votes of eight against six, to make a return. They also refused at a former meeting, to give directions to their vaccination officers to prosecute the defaulters. The fifteen or twenty thousand people who have the misfortune to have such guardians of the public health as this board, are entitled to the commiseration of all sensible communities. We shall watch with interest the contest between the Law Courts and the guardians. The question now is elevated into one of the respect due to law and to the law courts. It would serve the guardians but right to depose them from an office the duties of which they refuse to discharge. If other persons holding the same opinion should be chosen in their place, and the population should one day experience the due result of their stupidity, they will be entitled to little sympathy.

HOSPITAL SATURDAY.

THERE seems reason to hope that this institution will prove a little more equal to its purpose this year than it did last. The most gaudy and least defensible part of the Saturday arrangements—that of ladies standing with boxes in the streets supported by boys with bannerets—has so far been more productive than last year. Respectability and strength in this movement can only be secured by the skilful organisation of effective means for the reception of systematic payments from working men towards the support of the hospitals of London by which they and their families are so enormously advantaged. For the working men of London to give £5000 or £6000 to these institutions is altogether inadequate, and implies discredit either to them or to those who undertake to represent them in the collection. None will be more happy than we if the result of this year's Hospital Saturday should prove to be a worthy sum.

THE SANITARY CONDITION OF MAIDSTONE.

WE wish we could agree with Mr. Barham, the medical officer of health for Maidstone, who, in his last published monthly report relating to June, stated that on the whole the public health of the borough during that month might be considered "most satisfactory." After deducting three deaths that occurred in the County Lunatic Asylum, the deaths in the town during June were 37; of which 6 resulted from scarlet fever, 2 from measles, and 1 each from small-pox and enteric fever. Thus 27 per cent. of the deaths resulted from the principal zymotic diseases; which is hardly consonant with a satisfactory condition of health, although it is stated that the annual death-rate from all causes during the month did not exceed 18 per 1000. It appears that the deaths in Maidstone during May had been 60, and the decline to 37 deaths in June; which constitutes, perhaps, the only satisfactory feature in the June report, the fatal cases of scarlet fever having decreased from 9 in May to 6 in June. This disease was described by Mr. Barham, in his June report, as being prevalent throughout the town, although in a mild form; and enteric fever is also described as considerably prevalent. The medical officer states that the "stowage of manure and rags has much increased in the town within the last few years, and that he has received frequent complaints of the smell arising therefrom." We cannot agree with his opinion that, where this stowage takes place in spaces "well open and exposed to all winds, it cannot come under the denomination of a nuisance injurious to health." This unsound decision affords but poor satisfaction to those who are being poisoned by the stench from these manure stores. We shall be very glad to hear that the health of Maidstone shows an improvement upon what its health officer describes as its present "most satisfactory" condition.

LUNACY.

The Twenty-ninth Annual Report of the Commissioners in Lunacy, which has recently appeared, shows that at the beginning of the current year 63,793 persons were registered in England and Wales as being of unsound mind, an increase of 1766 as compared with the previous year. In the course of the last seventeen years insane paupers have increased from 16·14 to 23·55 per 10,000 of the population, and private patients from 2·53 to 3·09 per 10,000. The Commissioners remark that a large proportion of patients in the county and borough asylums consists of chronic cases, "which might be adequately provided for in well-organised workhouse wards." Remarks are also made as to the difficulty that exists in inducing boards of guardians and medical officers to carry out the improved dietary scale for imbeciles and lunatics recommended by the Board.

The percentage of recoveries of the insane in the county and borough asylums of England is 37·90 per cent. In the provincial licensed houses the average for the last year was 29·86 per cent.

OVERCROWDING AT LIVERPOOL.

Dr. Trench, medical officer of health for Liverpool, has presented to the corporation of that town a valuable report as to the means that should be adopted to carry out effectually the provisions of the Artisans' Dwelling Act. Liverpool was quoted by the Home Secretary in introducing the Bill as one of the towns specially requiring reformation, in that it contains a vast number of close courts, with cellar or underground habitations, and small houses placed back-to-back, nearly all of which are entirely unfit for human habitation. Dr. Trench does not, however, recommend wholesale demolition, inasmuch as such a plan would, until new houses were constructed, force decent families to leave small, self-contained houses, even in badly-constructed courts, "to seek shelter and herd with the improvident and vicious in those dens of misery in the low sublet districts of the town." Subletting appears to be one great evil at Liverpool, leading to all sorts of indecency, as one of the necessary results of overcrowding.

TRINIDAD.

The Trinidad Medical Board lately presented a very graceful and complimentary address to Thomas Murray, Esq., Doctor of Medicine of Edinburgh, and member of the Trinidad Medical Board, on the occasion of his completing fifty-five years of arduous practice in his native island. We gladly join our congratulations to those of the Trinidad Board on a feat so creditable as that of fifty-five years of honourable practice. Dr. Murray responded to the address in very beautiful and cordial words, and spoke of the better prospects of the profession in Trinidad, owing to the increased encouragement offered by successive Governors. Another great improvement, he said, is the appointment, on its present footing, of a Surgeon-General, who forms a tie between the Government and the profession.

ABSORPTION THROUGH THE SKIN.

Wolkenstein, from experiments made with frogs, cats, rabbits, and mice, finds—1. That the skin is permeable to dilute but not to concentrated watery solutions. 2. An increase in the temperature of the solution augments the absorptive capacity of the skin; and, in fact, the amount of fluid absorbed stands *in limine* in direct relation to its temperature. 3. In young animals the skin absorbs better and more quickly than in old animals of the same species. 4. Hair and wool interfere with the rapidity of absorption. 5. A few alkaloids are capable of being absorbed and giving rise to the peculiar symptoms of their toxic influence.

The report of the Board of Management of the Huddersfield Infirmary, read at the annual meeting of the governors of the institution last week, was of a satisfactory character, financially and otherwise. The balance-sheet showed an increase of £730 in the receipts as compared with last year, the total income being some £160 over the expenditure. A very welcome gift from Mr. G. Brooke was announced, in the shape of a set of medicated baths—a remedial accessory the need of which is, we are glad to know, becoming very generally recognised by the managers of hospitals, as well as by those who are interested in the efficiency and completeness of these institutions. The Convalescent Home at Meltham, in connexion with the infirmary, appears also to be in a flourishing condition, 503 patients having participated in its benefits during the year, an increase of 119 over the number admitted within the previous twelve months.

The action brought, in the Vice-Chancellor's Court, by Mr. Hope, V.C., against the Romford Local Board for non-fulfilment of contract with regard to the sewage of the town, has resulted in a compromise to refer the case to Sir J. Bazalgette, the engineer of the Metropolitan Board of Works, to report to the Court, and say whether the works as they then existed were sufficient to deliver to the plaintiff all the sewage of the town of Romford, or such part thereof as should fall by gravitation into the outfall sewer which, on the 16th of May, 1870, conducted the sewage into tanks constructed on the farm, in the lease of that date mentioned, and, if not, whether anything and what ought to be done or left undone to give him such benefit.

In London last week 2362 births and 1422 deaths were registered. The former exceeded by 106, whereas the latter were 388 below, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two preceding weeks had been equal to 22·4 and 22·3 per 1000, further declined to 21·5. The rate was 21 per 1000 in the west, 21 in the north, 20 in the central, 20 in the east, and 24 in the south groups of districts. The deaths included 1 from small-pox, 44 from measles, 87 from scarlet-fever, 6 from diphtheria, 63 from whooping-cough, 23 from different forms of fever, and 137 from diarrhœa.

In a report to the Liverpool Health Committee it was stated that 226 deaths were registered in the borough last week, showing the large decrease of 120 compared with the corresponding week of last year. The deaths from zymotic diseases numbered 53, being 71 below the average. Altogether, the health of the town is at the present time in an extremely satisfactory condition.

Surgeon-Major Alder, who was charged with the murder of Lieutenant Walker at Fort Hubberston, having been tried at the Pembrokeshire Assizes, has been acquitted on the ground of insufficient evidence.

In consequence of the nuisance caused by cargoes of condemned fish being sent down the river in barges, and so polluting the atmosphere on the river and about the banks, the Corporation of London, as the sanitary authority of the port, have issued a special official notice on the subject, requesting all persons interested to give immediate information to the medical officer of health, at the Port Sanitary Offices at Deptford, in order that these foul cargoes may be seized and destroyed under his supervision.

The Local Board of Sevenoaks had a meeting on Saturday to consider a report from Dr. Baylis, the sanitary inspector, as to the condition of the town. Dr. Baylis stated that forty cases of fever had come under his notice, and two new cases had just been reported to him. The fever arose from the existence of cesspools and the bad construction and filthy condition of certain buildings. He recommended the extensive use of disinfectants, which the board ordered to be supplied as required.

Meteorological statistics show that the month of July was unusually cold and wet. The mean temperature at the Royal Observatory, Greenwich, was 59 deg., and 2·6 deg. below the average July temperature in 103 years. The amount of rain in the month was 5·3 inches, measured on sixteen days, which exceeded the average rainfall of July in 59 years by 2·8 inches. The rainfall of the first seven months of this year amounted to 15·1 inches, and was 1·8 inches above the average.

The bust of Dr. Hughes Bennett, in white marble, was formally presented to the Senate of the University of Edinburgh on Monday, immediately after the ceremony of "capping," in the presence of a large assemblage of distinguished visitors and professors and officers of the University.

In the House of Lords on Tuesday the Commons' amendments to the Lords' amendments of the Public Health Bill were agreed to, and their lordships resolved not to insist on any of their amendments which were distasteful to the lower House.

The death, at Paris, is announced of Dr. Marchi, one of the most celebrated physicians of Italy, who saved the life of Prince Humbert, when attacked by dangerous illness about ten years back.

Sir Alexander Armstrong, K.C.B., Medical Director-General of the Navy, commenced this week his annual tour of inspection at Haslar and other naval hospitals.

We regret to announce the death, in his seventy-third year, of Mr. John Churchill, the medical publisher.

THE NEW FELLOWS OF THE COLLEGE OF PHYSICIANS.

At a meeting held last week, the following gentlemen were elected Fellows of the Royal College of Physicians of London:—

Adey, Charles Augustus. M.D. Edin., St. Leonard's.
Burder, George Foster, M.D. Aberd., Clifton.
Corfield, William Henry, M.D. Oxon., Bolton-row.
Falls, William Stewart, M.D. St. And., Bournemouth.
Fearnside, Henry, M.B. Lond., Preston.
Matterson, William, M.D. St. And., York.
Monckton, Stephen, M.D. Lond., Maidstone.
Montgomery, James Barclay, M.D. Glasg., Penzance.
Ord, William Miller, M.B. Lond., Brook-street.
Semple, Robert Hunter, M.D. St. And., Torrington-square.
Shepherd, Augustus Burke, M.B. Oxon., Seymour-street.
Thorne, Richard Thorne, M.B. Lond., Inverness-terrace.
Tuke, Daniel Hack, M.D. Heidelberg, Falmouth.

THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The forty-third annual meeting of the British Medical Association has been held during the present week in the illustrious city of Edinburgh. The number of members who made their way to the University, the head-quarters of the Association, on the morning of the 3rd instant, was unusually large. At the University a reading and writing room, an inquiry office, post, telegraph, and cab offices, and refreshment-rooms—in fact, everything calculated to enhance the convenience and comfort of visitors—had been prepared. The local secretaries were Dr. J. Batty Tuke, Mr. John Chiene, Dr. McKendrick, and Dr. Bishop. At eleven o'clock the opening service was held in St. Giles's Church, which was filled to overcrowding. An appropriate sermon was preached from 1st Peter ii. 17., by the Rev. W. Lindsay Alexander, D.D., who eloquently discoursed on the honour which we owe to all classes and conditions of men. At one o'clock there was a private meeting of Committee of Council, and at half-past two a meeting of Council.

About three o'clock in the afternoon the members began to congregate in the Free Church Assembly Hall, in order to be present at the first general meeting, and to hear the President's address. When the President appeared, amidst tremendous cheering, at half-past three, the hall was full. The business was commenced by the retiring president, Dr. Copeman, of Norwich, who, in a brief speech, thanked the members of the Association for the honour they had conferred upon him by electing him president. Dr. Copeman then resigned the presidential chair to Sir Robert Christison, who was received with the loudest acclamations. A vote of thanks having been accorded to Dr. Copeman for the able and courteous manner in which he had filled the office of president, he was made a vice-president of the Association on the motion of Dr. Sibson.

Baillie Tawse, in the absence of the Lord Provost, in an able speech, welcomed the Association in the name of the City Corporation, the members of which were present in their official robes.

These preliminaries having been gone through, Sir Robert Christison delivered his address.

THE PRESIDENT'S ADDRESS.

After some words of welcome, and an expression of gratitude and thanks for being selected as president during the meetings of the present annual session, Sir Robert Christison took for the subject of his address—"What sound reason exists for a fundamental change in medical education and medical examinations?" Disclaiming all intention of undertaking to treat it methodically and in whole, he meant to view the question from a quarter whence it had not yet been looked at. "I propose," said the President, "to give you historically some insight into the school life of one of our chief seminaries of medical education, in the hope that there may be found in its history some safe guidance in the present somewhat wild struggles of our profession to improve itself, to redress what seems faulty, and to frame, if possible, a masterpiece of medical examination and precursory study. In singling out for this end the medical school within whose walls we are to be assembled, I do so from no vain-glorious pride in the school to which I have myself for many years belonged, but because—firstly, I know its history, constitution, and work best; secondly, being here, you will probably take some interest in a subject with which most of you are but slightly acquainted; and, thirdly, because it is most surely worth while to inquire in the present conjuncture into the causes which have led the medical department of the University of Edinburgh, situated in an outlying quarter of the kingdom, to become for wellnigh a century, with little interruption, the most populous medical school in the British Islands.

"The University was founded by James I. (of England) in 1582. In the following year, the Faculty of Arts was started at once by the teaching of six of the seven subjects now required for graduation in that faculty; and the Theological Faculty was instituted at the same time by the founding of a chair of Divinity. A Law Faculty was not initiated till a few years after the commencement of last century; that of Medicine had its beginning in 1685, through the energy and influence of three of the most remarkable medical men of the day in Scotland—Sir Andrew Balfour, Sir Robert Sibbald, and Dr. Pitcairn.

"Botany seems to have been their first object. Fifteen years earlier Balfour and Sibbald created the rudiments of a botanic garden, one object of which expressly was to introduce into Scotland the cultivation of foreign plants yielding medicinal products, which, in those days of not easy intercourse among nations, were not readily got when wanted. Our modern Royal Botanic Garden of twenty-seven acres, too small for its 340 students, had its origin in 1670 in a little plot of ground close to Holyrood Palace, measuring forty feet square, in which, nevertheless, were reared no fewer than 900 plants. The site was soon transferred to a large garden, where now flourishes the City station of the North British Railway. But one relic survives in a fine yew now adorning the garden in charge of Dr. Balfour and Mr. Macnab, twice transplanted successfully after becoming a considerable tree, and proving its own age by the *modulus* of De Candolle, according to which it must be above two hundred years old. The success of the Physic Garden was so great, owing to the fostering care of its promoters and the ability of its first keeper, James Sutherland, originally a clever young gardener, that, in 1676, an Act of the Town Council of the city, then the founders and patrons of professorships, established in Sutherland's favour a Chair of Botany in the University. But, for some unknown reason, the Act was not given effect to, so that a second Act of Foundation became necessary to make him effectually a University Professor in 1695. In the meantime Sibbald had influence enough to obtain also in 1685 the establishment of a Chair of Medicine.

"It is a fact not unworthy of notice, as throwing some light on the early history of medical education in this country, that, in every other university of what is now the United Kingdom, there existed for a long period of years only a single professorship of Medicine. Oxford had its professor of Medicine first in 1535, and no other medical professor for nearly a century. Cambridge got its Chair of Medicine in 1540, and no other till 1702. Dublin began in the same way in 1637, without addition till 1783. Of the Scottish Universities, Glasgow was slow to undertake the teaching of medicine, its professorship of Medicine having been founded in 1713, of Anatomy in 1718, of no other branch till 1807. St. Andrews had its first professor of medicine in 1722. Singularly enough, the University of Aberdeen has the merit of having anticipated all others, even Oxford and Cambridge, and been the very foremost in the United Kingdom to possess a chair of Medicine. Under the name of Mediciner, King's College, Aberdeen, had a professor 'before 1522' (Calendar, 1875), probably so soon as 1505. In the younger Marischal College there was a professorship of Medicine in 1701, but no support to it till a chair of Chemistry was erected in 1793.

"Plainly, then, it was understood in all these universities for more than a century that one man was competent to educate students for the medical profession. Sir Robert Sibbald and his coadjutors were the means of establishing, for the first time in Britain, three professorships of Medicine in the University of Edinburgh. Thus they may have introduced the valuable novelty of dividing its special branches among special men. But it is not now known how they taught, or even that they did all teach. Their teaching, at all events, made no graduates; for there was no medical graduation in Edinburgh till 1726, forty years almost after their appointment.

"The University of Edinburgh was not the only theatre in which efforts were early made to institute medical education in the Scottish capital. The Royal College of Surgeons also appear to have given it encouragement. But the College of Surgeons never established a School of Anatomy and Surgery. I should add, perhaps, that lectureships, in default of professorships, were appointed for several branches of medicine by the Universities of Glasgow and Aberdeen; but not till last century was far advanced. In Edinburgh alone were the roots of a medical school, in the true sense of the word, fairly planted in its University so early as the end of the seventeenth century, and brought to maturity in the first quarter of the century following.

"The school of Sibbald and Pitcairn was but a beginning, and probably not very successful; but soon afterwards matters took the right direction towards a separation of subjects, by the establishment of a lectureship on Anatomy in 1705, and the foundation of a professorship of Chemistry in 1713. In fact, it was not till the appointment of Alexander Monro *primus* to be professor of anatomy in 1720, that the University School of Medicine put on a shapely form, and entered upon its career of prosperity.

"Monro has his place in history as one of the European anatomists of the last century. But anatomy was not his sole gift by any means. Highly educated, favoured by his conspicuous office, which he entered when only twenty-three, and bringing to the task he had set himself an intimate knowledge of the organisation of the schools of Paris and Leyden, he won the confidence of men of station and influence. He not only soon placed the University Medical School on a sound and prosperous footing, but likewise mainly created the Royal Infirmary. In the University he found ready to his hand a chair of Chemistry and a chair of Botany; there was also the old chair of Medicine, capable of being moulded into the fitting shape of Practice of Physic. Anatomy and surgery were his own province. In 1724 was added a chair of Theory of Physic, which then embraced physiology, pathology, and therapeutics. In 1726 midwifery was also provided for, and materia medica was early taught by the professor of botany in the winter, botany itself occupying his attention during the summer months. Thus the whole round of medical science and practice came to be skilfully partitioned, each subject being taught separately; surgery, too, by one of the six professors, and materia medica by another of them. This arrangement—extensive, complete, and harmonious for the times—was carried into effect very long before anything of the kind was attempted at any other university, or, indeed, so far as I can discover, in any other school of medicine in the United Kingdom. Several of these professorships have been subdivided since that time. But all branches were taught from the first, and the only new creations in the University have been those for natural history, medical jurisprudence, and clinical medicine and surgery. The first of these is a general rather than a medical chair. In the establishment of the three others, the University of Edinburgh took the lead by a long way of all other British schools, as it had done in the organisation of a school, complete, according to the times, immediately after 1720.

"I have said that Monro was mainly instrumental in originating the Edinburgh Royal Infirmary. In 1728 subscriptions enough had been got to set on foot next year a small hospital. A larger one having been subsequently built and gradually extended, a Royal charter of incorporation was obtained in 1736. Monro evidently had designed from the first that the hospital should be devoted not more to the cure of the sick poor than for the education of students of medicine. The culmination of the fabric, so far as education is concerned, was the inauguration of the teaching of clinical medicine in 1748 by Dr. John Rutherford, Professor of the Practice of Physic. The hospital managers espoused warmly the cause of clinical teaching. In consequence, Rutherford was joined ere long by some of his colleagues; and in 1756, as we find from the infirmary records, clinical instruction was given by Rutherford; Whytt, Professor of Theory of Physic; Cullen, then Professor of Chemistry; and Monro himself. The coalition of four such men in training up a medical school from its infancy was a mighty element of success. Priceless, too, was its own organisation, as fashioned by the genius of Monro." The President then went on to trace out the success of this new University School of Medicine from the time that Monro himself began his lectures on anatomy and surgery in 1720, with 57 pupils, up to the present date. So far as the relations of Ireland to the Medical School of Edinburgh is concerned, he said, it has accomplished the isolation aimed at by the Irish people in weightier matters: in medical education Home-Rule has been attained effectually.

The President then proceeded to inquire into the causes of the great prosperity of the University, the organisation of which has been so very different from the not less prosperous universities of England. From the leading particulars in the history of the medical department of the University during the last 150 years, he proceeded to draw attention to the inquiry proposed at the outset: Whether this narrative may not yield some useful lessons to the many who, with praiseworthy zeal, have lately proposed to alter and innovate largely in medical education and medical examinations.

"I submit that the Edinburgh School of Medicine—as proved alike by the great afflux of students, and by the multitude of men of mark trained in it who have held a high professional place in all parts, and in all public medical offices, in the British dominions—has thus been so eminently successful, that its system deserves great consideration; perhaps for guiding other schools, but certainly in dealing with itself. Nevertheless, there are some essential parts of that system which the opinions of some recent reformers, if acted on, would abrogate or dangerously injure.

"Take, for example, the duration of the courses of lectures. The ordinance of the Universities' Commissioners of 1860, on medical education, which by statute has the force of an Act of Parliament, requires that the courses of instruction during the winter session shall extend to at least one hundred lectures, and during the much shorter summer session to fifty. But a late eminent authority, whose name, were I to mention it, would be received with universal high respect in his department, used to sneer at this regulation whenever it was spoken of, and held up his hands in horror at the idea of the poor student being compelled to listen to one hundred lectures in a session. Other men, taking more precise views of this subject, have urged that such full courses may be reduced to fifty, as sufficient at least for any branch except anatomy. It has even been propounded in print that some branches of medical instruction, which in Edinburgh are taught in one hundred lectures in winter, may be advantageously disposed of in thirty-five summer lectures in London and the English county schools. At length, one confident writer in a weekly journal made the discovery that it might be better if certain of these subjects were not lectured on at all; and in one sense of the question I am disposed to agree with him.

"It is true that these thorough reformers go further, and contemplate the substitution of practical teaching and home study for lectures. Reading, however, at the student's home forms an essential ingredient equally of both systems of tuition. It is scarcely necessary to say, that every student who means to profit fully by a course of lectures, possesses works of reference for enforcing, recalling, and expanding what he hears in the lecture-room. But reading cannot be advantageously substituted altogether for what he hears. The poet's maxim,

'Segnius irritant animum demissa per aures
Quam quæ sunt oculis subjecta fidelibus,'

applies to the relative influence of the description and the exhibition of visible things or events, not to the respective effect of hearing and of reading about them. On the contrary, the theatre, the pulpit, and the bar prove familiarly to all how impressive are the words of a speaker compared with the words in a book.

"Moreover, in teaching the medical sciences, demonstration to the eye may generally be employed to aid demonstration through the ear. Our predecessors of last century seem not to have been so fully aware of this as we ourselves are. Anatomy, chemistry, botany, and natural history were indeed taught by them with that aid. But during my four years' course of study the professor of the practice of physic did not so much as once make use of a specimen, a drawing, a diagram, or a black board. So was it with his colleagues of clinical medicine, of physiology and pathology, and even of materia medica. It was not till my predecessor, Dr. Duncan, succeeded to this chair in 1821, that demonstration by specimens and experiment was added to lecturing. But now, in every branch of medical instruction, the eye is appealed to as well as the ear. Wisdom is let in at both entrances, and at small additional expense of time, and no pecuniary cost to the student.

"In order that lectures may be attractive, however, they cannot be very brief. When too much curtailed, they must consist mainly of bald principles and naked facts enunciated with the scantiest garnishing, and thus all zest is lost. No observant lecturer can fail to notice that, so long as he is dealing with abstract principles, general statements, bare descriptions, and dry facts slightly associated, it is difficult to secure the attention of his students. It is quite different when his discourse is argumentative, when he supports his propositions by suitable instances, when his description of objects is made clearly diagnostic by comparison with others, and, above all, when he is under no restraint in the copiousness of illustration by examples. The attention of his hearers is then fixed, and if he can prop up a conclusion by a well-chosen, telling case of his own, all heads are raised and all ears on the alert to take in his information. This blending of general statements with richness of illustration it was which constituted the charm of some of the lecturers in my younger days, and eminently of Dr. James Gregory, Professor of the Practice of Physic. Gregory was the most captivating lecturer I ever heard. His course of a hundred and twenty lectures was attended to the last day with great regularity by classes of from three hundred to three hundred and sixty students. Every one acquainted with the history of British medicine during the present century knows how powerful an impression Gregory made on medical practice throughout the whole British dominions. Right or wrong, he was the apostle of bloodletting, which stood the test of half a century's experience. The sway of his doctrines was owing entirely to his lectures, and to the publications of his pupils, for he himself never published on any branch of the practice of medicine. But would Gregory have found scope for his rare talent in the *beau ideal* course of fifty or eighty lectures—the hobby of present-day reformers? Let Gregory himself supply the answer. In his annual course of a hundred and twenty lectures he overtook only two-thirds of his subject.

"Those teachers and guardians of youth who lament, and those students who complain, that it is found irksome to attend lectures at the schools where the very short courses of instruction I refer to have been adopted, will now probably understand the cause. Some teachers at these schools have themselves made the discovery. It will probably be also understood why, when tuition by systematic lectures has been made so very barren on any subject, I agree with those most radical of all reformers that it is well to have on that subject no systematic lectures at all.

"Practical instruction cannot take the place of systematic instruction. For, in the first place, the latter is an essential preliminary to the former; and, secondly, the student's period of study is much too short for his acquiring an extensive acquaintance with the great leading details of all the required subjects by practical study.

"Systematic instruction is an essential preparation for practical study. This no man, I presume, will deny. But the more thorough the systematic instruction, the better the preparation. Take anatomy for example. Practical anatomy is studied longer and more thoroughly by the general mass of students now than fifty years ago. But I have never understood that the systematic teaching of it has been curtailed on that account at any of the great medical schools. On the contrary, in consequence of the extension of anatomical science, what is called 'anatomical demonstrations'—which formerly meant daily demonstration by the professor or his 'demonstrator' of what had been done during the day by each dissector in the practical rooms—has been converted at several schools into an additional course of systematic lectures on anatomy, carried on at a second hour. How far ought other branches of medical education to be treated differently? What of chemistry, for instance, the importance of which to medical science and medical practice is becoming more and more apparent every year? Chemistry was the next science after anatomy which was taught effectively in this University in the practical way. For many years Dr. Hope offered his students no opportunity of practical instruction. At length, in 1823, the teaching of practical chemistry was begun by his assistant, Dr. Anderson; it has been improved, and ever since continued, by Anderson's successors in office; it has been long adopted by every extra-academical lecturer on chemistry here; and it was considered by the Universities' Commissioners of such value to the medical student that it was added by them in their Education Ordinance of 1860 to the curriculum of study for medical degrees. Dr. Hope, I have said, gave no opportunity for practical study. But, as I well know from personal experience, his course of 136 lectures on systematic chemistry was so complete, and so fully illustrated by never-failing experiments, that no diligent student ought to have found difficulty in taking up any branch of the subject practically, after learning the use and the handling of instruments and apparatus. I found none, at least, when subsequently at Paris

I embarked in what were then the highest objects of chemical research—the analysis of the gases, the proximate analysis of vegetable poisons and medicines, and the elementary analysis of nitrogenous organic bodies. No such thorough preparation, however, could have been attained by the brief systematic course of sixty or eighty lectures proposed by the practically-minded of the present day. The introduction of practical chemistry into the University qualifications for medical degrees was not the cause of the reduction of our winter session from six to five months; and I am much mistaken if that change has not been found to cramp the systematic instruction given by the Professor of Chemistry, to limit unduly the branches included in it, and to curtail the experimental illustrations of those which he is able to overtake. A third branch of medicine in which practical study is imperative on candidates for graduation in the University of Edinburgh is pharmacy. It is enjoined to be taken at the laboratory of a hospital, dispensary, or private practitioner, and it cannot now be studied in the University. But provision will soon be made for supplying that defect; and when it is made, the course of lectures on materia medica may be relieved and shortened by being confined chiefly to therapeutics. A fourth branch is midwifery, in which practical instruction may be taken at a hospital or dispensary, or by attending the private practice of a medical practitioner. But besides all these subjects, botany, physiology, pathology, and natural history have been successively made the subjects of practical instruction by their respective professors. In several of its branches, surgery, too, is now taught practically, and there is no reason why medical jurisprudence should not be taught in like manner. Great success has attended such instruction in every branch of medicine in which it has been undertaken—in none more than in physiology. Hence some have proposed to add several of these newer practical studies to the imperative list, especially physiology and pathology.'

"But now we meet in the face a formidable question. Trusting to found on the theory of practical education a mode of escape from one horn of a dilemma, are we about to rush on another precisely similar? Can the usual time-limit of medical study admit of such diversified practical training? Systematic instruction cannot be given up, were it merely as preliminary to practical instruction, and it cannot be given in short space. Whatever extent of it be held to be necessary, no part of it can be curtailed without practical instruction being extended to supply the loss. But for every detail thus withdrawn from the former, treble or even quadruple the time is required to teach it by the latter method. This will be acknowledged by all who are conversant with both—by teacher as well as by pupil. In the same space of time the lecturer can go over in his systematic course, even with the addition of demonstrations and experiments, three or four times the amount of details which the student can overtake in any plan of practical study. It is a mere hallucination, then, to suppose that the latter can materially take the place of systematic lectures. In every way in which we look at the question with the eye of experience, it will be seen that in a sound system of medical instruction systematic teaching must be the principal means, and practical teaching ancillary only. Care must therefore be taken that the practical method be not extended beyond due bounds. These considerations lead me to observe that many labour under an exaggerated and mistaken idea of the extent to which the medical sciences can be acquired by the practical method in the course of a student's curriculum of study. In fact, some teachers, in consequence of the same mistake, have erred, I think, as to the kind of practical instruction which they have endeavoured to impart. Some aim at covering a large extent of ground, and thus making the student acquainted practically with a great variety of objects. By this way the knowledge acquired is necessarily superficial, and consequently fugitive, besides proving not very serviceable afterwards in actual practice. Others, confining the attention to comparatively few objects, teach familiarity with instruments and other means of research, the principles of scientific investigation, and skill and invention in inquiry. The information so gained, though limited as to objects, is precise, profound, lasting, and such as enables the pupil to study any other similar subject with accuracy and success. The one method crams the student with surface knowledge, much of which he soon forgets. The other trains him to research, and teaches him, in short, how best to acquire knowledge for himself. The latter surely is the real object of school instruction. But it is apt to be lost sight of by modern theorists, who seem to think that the purpose of education at a medical school is to furnish the student with all the professional knowledge he needs, and to turn him out an accomplished physician or surgeon. I wish practical teachers would turn their minds to this question. For my part, I entertain considerable doubts of the real utility of those courses of practical instruction which aim at embracing a great variety of matter. In regard to practical chemistry, for example, I well remember the time when a highly popular course of the kind was given in this school, and that on one occasion I found my four clinical clerks, who had all gone through it, were unable to make a filter, to pour a fluid securely into it, or to boil wine with confidence in a glass tube. The conclusion I come to on the whole question of medical training is that the most efficient system consists of full systematic lectures and auxiliary practical instruction carefully chosen and limited. Such has been the system pursued in the University of Edinburgh, and hitherto the University of Edinburgh has been eminently successful.

"I have purposely reserved for separate notice the most important of all practical training, clinical study, because it is somewhat peculiarly circumstanced. Clinical teaching ought to comprise lectures, demonstration of actual cases, and examination on them. This constitutes practical instruction auxiliary to the systematic courses on the practice of physic and practice of surgery. But by practical clinical instruction is meant something more: every student ought also to acquire such experience as is gained in the office of clinical clerk in an hospital. Unless he has served as clinical clerk, or in a similar capacity in a dispensary or with a private practitioner, so as to have been brought into close contact with cases of disease, and in a position of some responsibility for the knowledge and treatment, he is not yet prepared for entering upon independent medical practice. Herein lay a great mistake of our predecessors. The majority of their graduates and licentiates were sent forth into independent practice, possessing no more practical acquaintance with disease than was got from clinical lectures, and, indeed, at most schools in the kingdom, with no more than they could pick up for themselves by what was aptly called 'walking the hospitals'—that is, looking on as they best could, without lectures, beside demonstrations, examination on cases, or any other help or guidance whatsoever. But now the rule, at least at this University, is for the graduate, if not already trained as clinical clerk, to seek that or some similar opportunity of thorough practical study before taking advantage of his newly-acquired legal right to settle in independent practice. If this rule be so general—almost, indeed, universal, as I suppose it to be, here at least, there is, perhaps, no call to enforce it by educational statute; and there is the serious objection to a statutory rule, that it is one very difficult to define and enforce without inflicting frequent hardship—owing to the impediment which is sure to start up in the way of all important additions to medical study, the limit of time allowable for a student's education. But if this, the most valuable of all his practical training, is to be demanded of all medical aspirants, it may be effected in one of two ways. The first mode is to induce the student to commence his professional studies, not with the month of October or November, as is usual, but in the beginning of the previous May, so as to take his Botany and Natural History before commencing his statutory four years' curriculum. It is gratifying to find that very many of the students of the University of Edinburgh are now doing so of their own accord. If they could add to these Chemistry in the preceding winter of preliminary education, so much the better. The four usual 'Anni Medici' would thus escape crowding; and the last six months might be left nearly clear for a clinical clerkship. This clear half-year could be obtained with certainty, if the present courses of lectures were better co-ordinated. Some are too long; several are too short; and at least two, Anatomy and Practice of Physic, are much too short. But by altering the sessions, from a winter period of five or six months and a summer period of three months, to two equal periods of four months, with an interval of one month for holidays or graduation examinations, I am convinced that almost all our courses of lectures would be materially improved, none injured, and the concluding six months left free for clinical clerkships, or other practical training of the same kind.

Under the present system four years of study are rather too short a period. Under a different system they would generally suffice. But it would be said, why not lengthen the period of study at once to five years? This measure was a favourite one in the General Medical Council during the first years of its life. But no more has been heard of it since the following objection was mentioned. The additional year cannot be subtracted from the years for preliminary education, but must be added to the four professional years; and, therefore, licence or graduation must be postponed to the age of twenty-two. But if a man may join the Church, the Bar, or the Senate at twenty-one, why not the Profession of Medicine too, especially as many years must elapse before he can attain to remunerative practice. Moreover, a careful examination of the books of this University proves that, although of 200 graduates in two successive years, four-fifths took at least five years of medical study, and graduated at a greater age than twenty-one, the remaining fifth who graduated at twenty-one, after four years of study, comprised three-fourths of those who passed their trials with distinction. Why then should these forty young men be prevented from beginning professional life early, and thus be defrauded of the advantages of the talent with which they had been blessed by Providence? And why in the profession of medicine alone? Another way of securing the advantage of some such practical study as a clinical clerkship affords, is to require it to be taken, as I have said that a great proportion of the students of the Edinburgh school actually do take it—immediately after graduation or licence, and before settling in practice for themselves. In that case let it precede registration; for which purpose remove the present statutory prohibition against entering certain subordinate offices before being registered. But it may be said that there ought also to be a further examination. By all means. I think there is an insane rage for examinations at the present time. But there can be no great objection to a clinical examination at any period of life Every new case of disease which a medical practitioner has to treat is a clinical examination to him. Of course a young man, who has just passed through the required training, and who professes himself competent to enter upon independent practice, may well be called on to prove his competency by examination—that is, by exemplifying what his practice is to be. Such examinations might be fitly conducted by any of the present examining boards. Or, if a Government pass be advisable, as many believe, to serve as a check on these boards, and for a greater surety to the public, there is here offered a simple and effectual opportunity for interposing a separate and independent board, to secure the sole object for which a conjunct board, or Government board—which are one and the same thing—can be reasonably demanded—viz., to see that a young man is competent to enter upon the practice of medicine independently on his own account.

"Thus I approach the last topic with which I propose to occupy your attention at the present time. It is one about which the general sense of this Association and my humble opinion may hitherto have been not much in accord. But I entertain hopes that the case may prove different before we part. For many years past there has been outcry in our Profession, and murmuring even among the general public, against a multiplicity, or even a plurality, of examining boards for licensing entrants into the medical profession. Many have seen, as they think, such evils in that system as even to have advocated the establishment of a single board to supersede, or at least to override, all those now existing. Out of this feeling has been engendered the scheme of a conjunct board or boards, to be made up of examiners selected from the existing boards, and whose province it should be to examine all candidates whomsoever, and necessarily either to supersede existing examinations, or to repeat and multiply them. At first measures of this kind were very popular—very much so with the General Medical Council, and not less so, I believe, with some men of note, members of the British Medical Association. For my part, however, I very early took quite a different view of the proposed revolution. There was no opportunity of stating in the General Council what could be said against it before my retirement from that body. But I have raised my warning voice since then in several other Councils, and also in correspondence. Whether from this cause, or more probably through the influence of calm reflection which time has allowed to all public bodies concerned, the result has been that every licensing board in Scotland is now opposed to the change; and in the two other divisions of the kingdom, where all boards seemed about to rush into one another's arms for the purpose of being conglomerated and individually extinguished, zeal has of late been greatly cooled in this direction, and there has arisen a prudent hesitation in coming to closer quarters. Let us then look a little into the whole matter with the aid of the light which time has thrown upon it. At a period not very distant some licensing examining bodies were too short-handed. Others were undoubtedly too facile. Corruption even was charged; with what justice it is needless now to inquire. To correct these faults was one of the well-understood objects of the Medical Act of 1858, and one of the duties of the Medical Council which that Act has founded. Has the Act been found to fall short of its purpose in this particular? Certainly not. The Council may have set about the work of reforming the examinations rather slowly, but they are not to be blamed on that account. They had much besides on their hands. They were too numerous to deliberate promptly. It was well that they should gain public confidence before approaching the most delicate of their tasks. Their powers were thought not clear enough, nor sufficiently direct for vigorous action. Nevertheless much good has been done in several directions; and now the Council appear to have set about the duty of controlling examining boards with determination. It is well that they have done so in the present crisis; for the results will supply, if I mistake not, valuable advice in the present conjuncture. I have gone carefully over the reports of the able inspectors who have finished this year's duty, and I find that they pronounce various examinations to be all but faultless—that they point out an important fault in the examination of one of the most powerful medical bodies in the kingdom, a fault which, I doubt not, will be at once mended—and that they declare one board so far behind in duty, that both the examination and the Board of Examiners must be remodelled. The Medical Council therefore now know that they can command the services of inspectors who will report to them the truth without fear or favour. The Council are also already made aware of insufficiency existing in some quarters. But have they power enough to correct? Hitherto they have carried all their other measures by persuasion merely. But if in the present matter persuasion fail, have they the power to employ force? Such power is given by statute; but it is roundabout. A charge must be laid against the accused board before the Privy Council, who may, or may not, confirm it and enforce the remedy. The statute has been thought in this respect too feeble. It must not, however, be treated as such until it is tested by actual trial, and the trial has not yet been made. If the statutory power prove too feeble when fairly tried—for example, against a powerful recalcitrant adversary—I see no reason why the Medical Council should not receive direct power to enforce its mandate, subject to appeal to the Privy Council. Such appeals are apt, indeed, to be costly. But, perhaps, so much the better; there will be no appeal by a board not quite satisfied of being in the right. But the Medical Council and the public now know, also, that no small number of the examining boards of the country are without fault. Therefore they can point to models from which defective boards may take example, nay, must do so. Therefore, too, they may say to Government and the public, and the members of this Association who have taken a strong and laudable interest in the reform of examinations—'In regard to the former bodies, there is no call for any legislative interference. In respect to others, we know what is to be done with them; let us try whether we can do it with the powers already entrusted to us; it is probable that no further legislative aid will be required.' This is a plain and reasonable policy. Surely it is right that the Medical Council be not disturbed in their present efforts and perpetually paralysed at the opening of every Parliamentary session by new Medical Bills, founded on mere theory, proposing to revolutionise and overturn what has gradually arisen as adapting itself to the wants and wishes of the nation. One condition, however, must be admitted to be indispensable. As every physician ought to be educated in surgery, and every surgeon in physic, so every board, which singly qualifies a man for registration, must possess the power and the means of examining on all required subjects, medical and surgical. The Universities, with few exceptions, enjoy this advantage. The three corporate colleges in Scotland have found no difficulty in acquiring it by combining together. In London, however, the medical corporations have hitherto been unable to unite, or mutually lend examiners, for reasons the cogency of which it is not easy to comprehend, but which assuredly ought to be put an end to one way or another. If these bodies cannot combine, why should they not obtain by charter the right to do, each of them, that which the Edinburgh University lately accomplished without either difficulty or delay under its new constitution granted by Parliament in 1858? It possessed twelve Professors specially qualified to examine, each on a special subject, and in addition three examiners from without, who examined on any of the subjects. But the Professors saw the advantage of having twelve non-professorial examiners, specially qualified like themselves on each of the twelve subjects of examination, to do duty *pari passu* with themselves. In two or three months the legal forms were gone through, and twelve first-class men obtained—five in Edinburgh, two in the Scottish counties, five in England, and three of these in London. You will now understand what I meant by the 'elasticity' of this University. There is, in fact, scarcely any right and wise thing wanted which may not be attained under its constitution, provided the cost be forthcoming; and that, too, is seldom long in being supplied. Why should not each of the important Royal Colleges of England possess, for their efficiency, the same power with the University of Edinburgh, of borrowing all round them, completing their examinations, and each qualifying singly for admission to the register in the fullest sense of a practitioner entitled to practise according to his education? Why not indeed, but for mutual jealousy and the antiquated fondness for keeping up a bygone distinction—a distinction which really exists no longer, except for the limited few who stand at the top of each branch of our profession. Nevertheless, these bodies are said to countenance at the same time a complicated project of conjunction for themselves, and unhappily for all their sisters too, and for all the Universities likewise, which threatens to imperil the prosperity of all, and the very existence of several of them. This is the erection of a joint examining board for the whole kingdom. Much has been said in Council and in print in praise of some such measure. But what has been uttered hitherto has been addressed to the general question only; and no one, so far I am aware, has looked either to details or consequences. Those who do so will not be much enamoured with it. A favourite idea with many is that there should be, for entrance into the medical profession, what they call a 'one portal system,' a single-door scheme, a single examining board, to subject every candidate in the kingdom to one uniform system of examination. In England no one has yet done more than announce the theory, which, however, has met with a favourable reception. From Ireland there was sent over a few years ago a scheme of the kind, which went so far as to recommend an examining board of twelve, and for each a fee of ten guineas a day. There are, however, ten subjects of examination, for each of which we must have two examiners sitting constantly together, or twenty in all. Let us see what will be the amount of their work. From a return, for which I am indebted to the kindness of Dr. Hawkins, registrar of the General Council, the annual additions to the register may be taken in round numbers, for the last three years, at 900. To these may be added 60 for those who, going to the colonies or for other reasons, do not require to register. On calculating the returns of all examinations for two years, as annually published by the General Medical Council, 240 rejections must be added, in order to make up the total number of persons to be annually examined by this single board. Long experience warrants the conclusion that the oral examination of 1200 candidates will occupy each examiner at least 400 hours. Experience also teaches that, for a moderate continuity of time, four hours of such monotonous uninstructive occupation are as great a strain upon the human mind as most persons will sustain. Further, large experience shows that the setting, watching, perusing, and judging written examinations will take each member of the board 184 days, on the assumption that 200 candidates are set at work at one time; but as this sort of labour is of a more contemplative kind, we may ask each examiner to give eight hours a day to it. Thus his whole annual duty will occupy 124 days, so that, deducting Sundays and half-holiday Saturdays, he will be engaged, if continuously, for five entire months. As such lengthened absorption of time involves the surrender of almost every other ordinary professional object, and the members of such a board must be men of the first water in their several spheres, to secure public confidence the proposed remuneration will not prove so unreasonable as it might appear at first. The cost of salaries would thus consequently be 27,000*l.*; and secretary, clerks, halls, offices, and examination expenses would certainly raise the whole cost of the single board to 30,000*l.* annually. What return is to be got for all this inordinate outlay? In the first place, as the scheme charges the cost upon the candidate, each of them will have to pay at least 25*l.* for his examination. The candidate, at least in Scotland and Ireland, will be subjected to the additional expense of travelling a long distance to the seat of examination, which may be presumed to be destined to be London. Thirdly, one half of them will have to wait for their turn three, four, or five months after being ready for examination on completing their studies. Fourthly, all this trouble and expense are in addition to what are required for their degree from a University or their license from a corporation. Corporation licentiates, indeed, may be relieved of part of the expense, and all the superfluous annoyance of a double examination, by adopting the provision of a different joint scheme to be mentioned presently; which provision would make the single-door examination sufficient for obtaining also the license of any of the incorporated bodies. It will be seen by-and-bye whether the corporations can safely thus give up their own examinations. But in the meanwhile what about the Universities? The single-door examination, being the winding up of the general Medical Council's plan of medical study, which is avowedly a minimum, cannot be a major examination. If not also a minimum, it must at least be minor. The examination of the Universities, however, generally is, and must be made at all of them, a major examination; and the Universities cannot give it up for one which is lower. Thus would arise the absurd anomaly, that, after paying smartly in time and study for a high title obtained through a high examination, the University candidate would be called on to undergo another and minor examination, and to pay another large fee for the superfluity. Fifthly, it is unnecessary to add in the present place the risk of a single national board of examiners, conducting a minor examination, over all the kingdom, without rivalry, becoming the fountain of mediocrity in all things medical, in education, in professional qualifications, and in scientific advancement. This result of centralisation and loss of freedom was so luminously put by Mr. Lyon Playfair years ago in the House of Commons, in his speech on one of the great education questions, that few can have forgotten the deep impression which it made upon the country. So much or the candidate. The case of the examiner should also be ooked to. I presume this single door, or national board, like the General Medical Council, would consist of a half from England and a quarter each from Scotland and Ireland. Hence one-half of the members would have to pass annually almost half the year from home. I have not hitherto met with an examiner of some experience who did not find his duty in no long time irksome. A fortnight of such work four hours a-day would try the powers of most men of the stamp of which such a board ought to be composed, the duty is for the examiner so monotonous and so unimproving. Five continuous months of such mental torture would probably land half the examiners in a lunatic asylum. In order to meet some of these evils, it might perhaps be proposed that the work should be divided between two, three, or any other necessary number of similar boards. The cost would be the same, the labour would be endurable, and the convenience of candidates would be consulted. The expense to candidates, however, would remain the same, and the vexatious absurdity of a double examination. Moreover, what would become of the one-portal theory with more than one board? The written questions might be made the same for all, but not the appraisement of the answers. As for the oral examinations, it is evident that the differences could not be slight, and might be quite as great as now. Changing the examiners, and centralising their place, but leaving a plurality of boards, could tend but little towards uniformity of examinations. Such a scheme, in short, is no one-portal system at all; and it differs in no material respect, even in details, from the scheme of conjunct boards which has been for some time before the General Medical Council and the licensing bodies of the kingdom. According to that scheme, all the Universities and all the Corporations are to unite in forming three boards, one for each division of the kingdom. In England, however, the labours of a single board would be intolerable for the examiners; and their sittings would be too protracted for the reasonable convenience of candidates. In Ireland and in Scotland the duration of duty would be less, yet still too great; and in Scotland the hardship on candidates would be severely felt, because all the school-sessions come to an end at the same time, and consequently the candidates of one school, instead of being examined there at once, as now, would have to wait till the other schools set the examining board free. The work of such a conjunct board could not be done to the satisfaction of the schools and the country with less than three or four sets of examiners for England, three for Scotland, and two for Ireland. This so-called conjunct scheme has therefore some disjunctions; and it has no alliance to the device of a single board. In order to escape as far as possible the absurdity of double examinations—one for license or graduation, and another for registration—a complex plan of equivalents and exceptions has been proposed under this scheme. The Corporations are to accept the examinations of the Conjunct Board for their licenses, and give up their own examinations altogether. The Conjunct Board is to receive as equivalent to to their own the University examinations on the fundamental medical sciences. The University examinations on practice, such as Physic, Surgery, Midwifery, Pathology, Therapeutics, Medical Jurisprudence, are not to exempt graduates from the examinations of the Conjunct Board on these subjects; but graduates so re-examined are to be let off easy in the matter of fees. Why University graduates should be exempted from the operation of the board in one class of subjects, and not in others, it is not very easy to perceive. The University examination is, or ought to be made, a major examination on every subject alike. Why a second, and minor, examination should be requisite for security of the public is to me at least a profound mystery. Another part of the conjunct scheme is that the candidate whose aim is a Corporation licence shall receive one on passing his trials. For this favour the Corporations are to divide among them a large proportion of the fees. That most ticklish of all points, their respective shares, has wisely not been mooted hitherto. But this much we know. The Corporations will receive large fees without taking the slightest trouble for them—a provision which looks odd when thus plainly expressed, but which is necessary to compensate them for the loss of fees now received for their own examination and licence. The reasonableness of some such compensation is apparent to us of the present generation; who will therefore easily submit to it. But our followers in the next generation, probably as restless and fond of change as ourselves, will be apt to take a different view, when they find themselves severely mulcted for little or nothing—for no privilege whatever—for an empty title only. It is mere vanity to set forth as an equivalent the advantages of museums and libraries; which no one can enjoy who is not a resident of one of the three capitals. In no long time a new agitation will arise upon the most hateful, but most potent, of all themes—a money question; and it is easy to foretell the result. In fine, the Universities may withstand the threatened revolution. But the Corporations will be in danger of becoming mere clubs. Universities are a necessity for the highest walks of professional education in every civilised land. Corporations are not so situated. In the whole Continental kingdoms there is not, and there never has been, anything approaching in constitution to our British Incorporated Colleges. Some perhaps may be disposed to ask—'Why, then, should Corporations exist in any country?' and a rumour has reached us here that this question has been actually whispered among some vigorous reformers in the South. But I apprehend that such a question will find no resting-place in this Association or in any other public medical body; and I mention it merely to give a little cogency to my fears, that, if the Corporations part with their present important privilege, and the most important of the duties for which they were chartered—that of examining themselves the candidates for their licences—they may find they are opening the door for the question being seriously raised at some future period. Why, then, venture on a complex plan of examination difficult to carry out, far from sure to attain its object, fraught with hidden dangers, and opposed by some of the chief professional bodies concerned? Why not rather take advantage of the present system—itself, indeed, complex enough, but nevertheless the gradual product of the wants and the wishes of a free people, not, therefore, to be lightly set aside? Why not correct it, and improve it through means which the Legislature has not long ago put into the hands of our Profession for the very purpose? The present entrance-door to the Medical Profession is not really, though nominally, a University, a Royal College, an Apothecaries' Hall, or a Faculty of Physicians and Surgeons: it is an examination. There is no reason I can discover why the examinations of all these bodies, numerous though they be, may not be brought up to a reasonable standard of equivalence, now that the Medical Council have put forth their strength towards that end. Let their endeavours have a fair trial. Should the result prove unsatisfactory owing to insufficient control, support them in obtaining more direct powers; and allow time for further trial. This, surely, is a wiser course than to rush upon untried treacherous ground, and daring measures entirely novel, which, though on the surface they promise reform, at bottom threaten revolution. Allow me, in conclusion, to add a brief word or two on the general question. In this kingdom three denominations of practitioners are provided by education and examination:—(1) The ordinary class of general practitioners in town and country; (2) high-class physicians and surgeons, who practise chiefly in cities and large towns; and (3) an intermediate order, educated on the footing of the highest attainable education for the greatest possible number, and whom circumstances may attach, some to the first, some to the second class. The Corporations provide the first class by their licence, and most of them, by means of their Fellowship, enable licentiates to pass into the second class, if they please. The two great and old English Universities, through means chiefly of a protracted education, and the London University by elaborate examinations, aim at producing the second class, at least in physic, ready-made, so to speak. The founders of medical education, as well as their successors, in the three Scottish University schools, and likewise, I think, in those of Ireland, have aimed at supplying the third class, by supplying the highest education attainable by the greatest number. It is no part of my present undertaking to settle which of the three educational aims is the most important. They are all highly so. It is as little a part of my present undertaking to inquire which of the three objects have been satisfactorily reached by the several bodies entrusted with them. All have undoubtedly been more or less successful, and none can be charged with failure. But I claim for the Scottish Universities, and eminently for the University of Edinburgh, that they have attained the object for which they were destined, by supplying to the greatest number the highest education of which that number can take advantage; that, also, they enable men of superior original talent or industry to go out from their schools with high qualifications, not inferior to those of the graduates of any of the English Universities; that these results flow from their system of education and examination, the fruit of long educational experience; and that their elasticity is such as to render it easy for them to adapt themselves to the progress of knowledge and of public opinion. It is well known that the Universities' Commissioners, under the Act of 1858, took infinite pains to effect such adaptation at that time. I have put before you the remarkable result. Surely it is not too much to ask that the Universities of Scotland shall not be disturbed by further and doubtful innovations during so important an experiment, following recent and serious changes; and I venture to submit that their neighbours may do worse than watch a little longer the experiment going on here before they venture upon dangerous innovations for themselves."

Although the Address was, as might have been anticipated, an able one, there was a general feeling amongst those present that the subject was for that occasion neither appropriate nor interesting. After Sir R. Christison had dilated for about an hour on the history of the Edinburgh University and on its excellences, many unmistakable symptoms of fatigue showed themselves in the audience. One by one the assembly thinned, until at last not more than half of those present at the commencement were left to hear the vigorous onslaught on the proposed Conjoint Scheme, and on the functions of some of the Medical Corporations.

No better manifestation of the high respect that every member of the profession bears towards the venerable President could have been given than that, notwithstanding the tediousness of the address, and the uninteresting nature of the topic to the vast majority of the audience, more than three hundred remained to the end. Those, however, who did stay evidently had a keen relish for the quaint humour of Sir W. Fergusson, who, in one of the best speeches we have heard from him, proposed a vote of thanks to Sir R. Christison. When Sir William humorously remarked that in the brief space of an hour Sir R. Christison had given the outcome of many years of careful thought, the spontaneous and simultaneous movement of all faces towards the clock was simply ridiculous—the fact being that the delivery of the address occupied more than two hours.

Then followed a mighty exodus. Not more than about eighty of the 800 present at the opening remained at the first general meeting. And when it is borne in mind, that even of the eighty many were members of the Council, it will be no exaggeration to say that the meeting was not a representative one.

It was first proposed that, as it was so late, the Report of the Council should be accepted as read, and entered on the minutes. This unparalleled procedure was of course opposed by Mr. Walter Rivington, who moved an amendment that the Report be printed and circulated among the members, for consideration on the following day. This amendment was lost by 31 against 35, the thirty-five against the amendment including the members of the Council themselves.

Dr. Sibson then proposed that the altered bye-laws of the Association be accepted *en bloc* without discussion. In his usual pleasant manner he besought all present to waive discussion and to propose no changes. There were, he said, few differences from the old bye-laws, and anything that appeared undesirable could, he said, be brought up for discussion next year. There were, he confessed, changes made which he was sure would be unmade next year.

Mr. Husband followed in the same strain, and begged the members to take the word of the committee and accept the bye-laws without reading them or discussing them.

To this strange proceeding Dr. Chadwick entered a vigorous protest, as there were several most important questions involved in the bye-laws which he should like to have discussed.

After a little discussion the dominant party gained the day, and the few members who stayed accepted for the great body of the members, without reading them, the altered bye-laws.

After the formal re-election of office-bearers the meeting, which had altogether lasted over three hours, broke up, and the members went home to late dinners.

At half-past nine in the evening the President held a reception in the Music Hall, George-street, where, notwithstanding a very heavy fall of rain, a very large number of the members of the Association and their wives made their way. Upwards of 1600 were present.

At half-past nine on Wednesday morning, the 4th inst., there was a private meeting of the Council, 1875-76.

At the same hour Professor Lister gave demonstrations of antiseptic surgery in the theatre of the infirmary.

The demonstration was an instructive and entertaining one. In it Mr. Lister showed all the various apparatus required in the practice of antiseptic surgery, including the preparations of instruments and dressings, and the precautions to be taken by operator, assistant, and patient. He then illustrated the mode of employing antiseptic dressings.

The first case that was treated was a simple but striking illustration of the practice of antiseptic surgery. A man who had previously been successfully operated on for the removal of a collection of fluid under the deltoid muscles, was admitted with an effusion into the right knee-joint. As the fluid had persisted in spite of the ordinary method of treatment, it was deemed advisable to evacuate the fluid by operative interference. The limb was therefore washed with a solution of carbolic acid (1 in 20), and the atmosphere surrounding the limb was rendered aseptic by means of a carbolic acid spray (1 in 40). A free incision was then made along the outside of the patella with a knife that had previously been lying in a carbolic acid solution (1 in 20). After the divided vessels had been secured with a fine catgut ligature, and all bleeding had been arrested, the capsule was opened and the fluid evacuated. The finger, previously made aseptic, was then passed into the joint to examine its condition, and a band which prevented the free passage of the finger was divided with a probe-pointed bistoury. Two prepared drainage tubes were then put into the joint to ensure free escape of fluid, and the wound was then dressed by means of the protective and well-known gauze with the piece of mackintosh. It may here be observed that in our columns Mr. Lister described the recent improvements in the apparatus employed in antiseptic dressings, and in the mode of using them.

A second case was then shown, in which the ankle-joint had been opened a fortnight previous on account of pain and swelling. When the dressings were removed, the wound was found partly healed, there was no putrefaction, and the original blood was lying in the wound, and evidently undergoing organization, for when it was cut it bled profusely.

In a third case, Mr. Lister had operated twelve days before on the femur in a man for united fracture. The wound was healed where it had been stitched. There was no inflammatory reaction, and everything was progressing satisfactorily. The whole of the limb was fixed in a plaster of Paris splint, and a permanent cure is confidently expected.

At the conclusion of this interesting demonstration, in which all the minutiæ of antiseptic surgery were elucidated and the advantages of this practice fully proved, Mr. Lister was loudly cheered.

The second general meeting of members was held in the Chemistry Class-Room at half-past eleven of the same day.

After some discussion, Brighton was appointed as the place of meeting for 1876, and Sir J. Cordy Burrows was chosen president-elect. An attempt, which seemed at one time likely to be successful, was made to have Liverpool appointed as the place of meeting next year. In favour of this proposition it was urged that whereas many members of the profession in Brighton had petitioned against the holding of the meeting at Brighton, a numerous requisition had been sent from Liverpool requesting that the Association would hold its next annual meeting at that town.

The thanks of the Association were then accorded to Mr. Southam for his services as President of Council. Dr. Falconer, late Treasurer, was elected President of Council, and Mr. Husband was appointed Treasurer.

After some other unimportant business was got rid of, Dr. Oliver Pemberton, of Birmingham, said that he noticed among those appointed to read papers were two ladies, and he presumed they were members of the Association. He did not know by what means these ladies had been made members, but he felt that on a question of that kind the opinion of all the members of the Association should be taken. He therefore moved—"That it be an instruction to the Secretary, between now and the next annual meeting, to issue a circular addressed to every member of the Association, requesting an answer, yes or no, as to the admission of female medical practitioners to membership."

This was duly seconded by Dr. Marshall, who complained that the members of the Association had too little opportunity for the discussion of its own affairs, and he called upon the members generally to insist on their right to take a more active part in the management of the business of the Association.

After some remarks from Dr. Carpenter and Mr. E. Hart, the motion was carried almost unanimously, there being only one hand held up against its acceptance.

Dr. Warburton Begbie then delivered his able address, which we publish *in extenso*. After a vote of thanks had been accorded to Dr. Begbie, on the motion of Dr. Gairdner, who spoke in high praise of the orator's qualities, socially and professionally, the meeting broke up.

In the afternoon the business of the sections was proceeded with.

On Wednesday night the President and Fellows of the Royal College of Physicians gave a *conversazione* at the Museum of Science and Art. The assemblage was large and brilliant, the spacious halls and corridors being well filled. The company on their arrival were received by Dr. Lowe, President of the College, and Mrs. Lowe.

At half-past nine on Thursday morning Professor Lister gave a second demonstration of antiseptic surgery. At ten the third general meeting was held, and while Mr. Lister was addressing a crowded theatre the Council were reading the Report of Committees to almost empty benches, the said reports being received in silence by the audience. At the commencement not more than twenty-five members were present, and the number did not at any time exceed fifty. At eleven o'clock Professor Spence delivered the Address in Surgery, in which he ably reviewed the general progress of surgery.

In his address the President of the Section of Public Medicine referred to the recent attempts at sanitary legislation. He strongly condemned the haphazard manner in which medical officers of health are appointed, and denounced the inequality of the size of the districts allotted to each. He affirmed moreover that the Local Government Board has not yet fully recognised its preventive functions, and expressed his determination to ascertain whether the machinery of the Board is competent to secure the prevention of preventable diseases. He warmly advocated the registration of disease, which he held was of equal importance with the registration of deaths, which, after all, only gave the number of wrecks after the storm, whereas the registration of diseases would indicate the state of the barometer that precedes the storm, so that we should have warning to avert it, or fly from danger.

EMIGRATION.

The sanitary aspects of emigration are so numerous and important that we naturally scan with great interest the annual returns on this subject furnished by the Board of Trade. The exodus of persons from the United Kingdom to the United States and the colonies during the past year exhibits a total decrease of 22·40 per cent. as compared with 1873, the falling off being wholly due to the emigration to North America, attributable to the high rate of wages now given in this country, and also to the commercial depression in the United States. These passengers were conveyed in 664 vessels, 536 of which were steamers, and 128 sailing ships. Of the steamers, 423 went to the United States, 92 to British North America, and 8 to Australia. No mortality returns have as yet been received in respect of the Australian ships, but it is necessary that they should be published, as several epidemics have occurred in these vessels among children. Among 156,776 passengers in steamers to North America, 30 deaths occurred, being at the rate of ·02 per cent., which, taking the voyage at twelve days, is equal to a mortality of 5 81 per 1000 per annum. The 34th section of the Act passed last year to amend the law relating to births and deaths, and to consolidate the law respecting the registration of births and deaths at sea, obliges the master of every British ship, under a heavy penalty, to furnish a return to the Registrar-General of Seamen of every birth and death that occurs on board. It is to be hoped that plain directions are given to the masters enabling them in some sort to classify diseases, inasmuch as the last returns of mortality at sea gave 60 deaths from "natural causes," and 161 from "unknown causes." A total of 33 deaths occurred among 5879 passengers to Australia, being at the rate of ·56 per cent., or, taking the voyage at seventy days, equal to a mortality of 29 per 1000 per annum. The miserable loss of the *Cospatrick* by fire caused the death of 470 persons, but no other casualty occurred during the year, which speaks well for all concerned.

These returns, though compiled carefully and summarised well, are yet very incomplete as regards particulars of what may be called the sanitary aspects of emigration. As we remarked above, no particulars are recorded relative to several epidemics that occurred on board Australian ships last year. It is proper that the causes of deaths, too, should be included in these reports, that special notes should be sent by the medical officers of the ship to the Board of Trade as to the general hygienic state of the vessel during the passage, and the general sanitary condition as regards sickness (without mortality) of the passengers. These notes should be collated and summarised at headquarters, and thus a valuable addition to knowledge in sanitary science afloat would gradually be amassed. We refer, of course, chiefly to Australasian emigrant ships, for the North Atlantic passages are too short to admit of much or precise medical observation. The medical officers of the army and navy, and civil practitioners in charge of convicts, coolies, or army drafts afloat, are all required to keep a very strict diary of the cases under their charge. Why should not this plan be adopted as regards our emigrants, who are in most other respects very well cared for? We are informed that the scales of medicines, medical stores, and instruments required to be carried in emigrant ships are being, or have been, revised and simplified; and that some pains are likely to be taken to ensure that none but registered practitioners shall take service afloat. This latter reformation has been shown to be necessary in consequence of a return submitted to Parliament some few weeks ago, on the motion of Captain Bedford Pim.

All these reforms are in the right direction; but recent revelations and many circumstances that have lately transpired with reference to the Merchant Shipping Bill that has just been "massacred," all tend to show that the Marine Department of the Board of Trade is very much overweighted. Inasmuch as the Board is now responsible for the proper conduct of many matters connected with medicine, hygiene, scales of diet, accommodation of crews, ventilation, antiscorbutics, &c., all of a purely technical character, it is eminently advisable that the political and permanent chiefs should have the continuous aid of a professional officer, to whom all such matters would be referred from the outports, who would conduct all official inquiries, look to the qualifications of ships' surgeons, the condition of medicine chests, &c.; and furnish an annual report, such as we have indicated above, on the sanitary condition of emigrants and emigrant ships, as well as of the mercantile marine.

Correspondence.

"Audi alteram partem."

CHLOROFORM OR ETHER.

To the Editor of The Lancet.

Sir,—I beg to thank you for the very impartial manner in which you have referred to the subject of the relative dangers of ether and chloroform as general anæsthetics. If I have committed any error in publicly calling attention to this important question, I can only urge in extenuation that my object has been based entirely on general and professional good—not on personal interest. I never administer an anæsthetic. I have witnessed death take place from the administration of chloroform more than once, and my deepest sympathies have been with the administrator on such occasions. I am therefore glad, so far, that you have again an occasion to refer to this subject.

There are two points on which I hope you will still further prosecute inquiry, and bring your powerful influence to make each more clear:—The first is as to the actual number of deaths—well authenticated—from the effects of pure ether, and their complications; the second is as to the proper preparation of ether to be used in inhalation.

With respect to your observations in reference to deaths from ether, it appears to me that you have, to some extent, taken too much for granted. After referring to the death, in 1847, at the Hôtel Dieu d'Auxerre, you state that, "In the course of the same year other deaths, assumed to be from ether, and certainly on as good evidence as has been often assigned since in relation to deaths attributed to chloroform, were reported in this country."

Dr. Snow devoted much time at St. George's Hospital to the administration of ether when first introduced. I saw much of his practice, and all who recollect his honest and painstaking method of work will agree with me that he would not have hesitated to publish any fatal results, however much they might have told against his administration of the novel anæsthetic. I write subject to correction, but I have no recollection of any such cases. With respect to chloroform, it is far different.

But let us look practically at the facts as we find them. In 1872 Mr. Haward states (Med.-Chir. Soc. Trans., vol. xlv., p. 7):—"The Committee appointed by this Society to investigate the use and effects of chloroform report 109 fatal cases. In the *British Medical Journal* for July 2nd, 1870, is a table of 18 more cases, and in an appendix to this paper I have given 13 others, not included in either of these collections." I do not stop to inquire how many fatal cases have occurred since that paper was written; suffice it to say, we have here a total of 130 deaths.

What are the results of all we at present know of death from ether? "Dr. Andrews states that in 92,815 cases in which ether was given, in only 4 cases it was fatal. M. Pétrequin, of Lyons, also states that for the fourteen years that ether has been exclusively given in that city there has been no death from it." (Med.-Chir. Soc. Trans., vol. xlv., p. 6.)

Mr. Haward informs me that he has administered ether in more than 700 cases, and has never met with a case which occasioned him the slightest anxiety. Ether has now been administered at St. George's Hospital between four and five years, and in every variety of operation, and, so far as my personal observation goes, I can state that I have not once witnessed a symptom indicative of danger.

There is one advantage in the administration of ether, irrespective of the question of safety, which, I think, has not been sufficiently appreciated. I allude to the benefits derived from the stimulating effects of ether, in cases of severe injury, with great prostration, and in which an operation is requisite—or in any formidable operation. In two instances of amputation at the hip-joint under my care, Mr. Haward, who was the administrator of the ether, observed that the condition of the pulse was better and stronger after than previous to the operation. I always felt anxious while formerly engaged in operating on patients under the influence of chloroform, and more than once had considerable cause for anxiety. Since the use of ether has been established I have had no cause for anxiety, but much satisfaction in its employment.

It is most desirable to obtain all particulars of the conditions attendant on reported cases of death from ether. A late recorded case was evidently due to the employment of ether prepared for local anæsthesia—not pure ether. The case reported in the last number of The Lancet of death from the effects of chloroform would probably have proved fatal under the effects of ether. The patient appears to have had but little spare lung to allow of natural respiration carrying on life, much less could life be safe with any additional interference to the entrance of pure air to the damaged lung. A case related by Dr. Bigelow, in which ether was fatal, would come under a similar explanation.

No one can doubt that ether can be made to kill; but when it proves fatal in a case of diseased or consolidated lung, chloroform would probably prove equally unsatisfactory; but neither anæsthetic should be condemned under such circumstances. But chloroform has destroyed life in the most healthy subjects, often without any warning, and prior to the commencement of the operation for which it was intended. Nor does there appear to be any preliminary symptom by which its unfavourable effects may be predicted. The sudden cessation of the pulse is the only symptom antecedent to death.

With respect to the quality of ether to be used for inhalation, I give no opinion. I am informed that pure washed anhydrous ether should be alone employed. You will do good service by having this point set at rest.

The cost of an anæsthetic should not be of a moment's consideration when safety is placed in the balance. Nor is the difference of time required to produce perfect anæsthesia of any importance, when it is found to be only about a minute or two in favour of chloroform.

Allow me to say that if I have appeared in any degree to have overstated the advantages of ether, I have only reported the results of not a slight observation of its effects, and with a conviction, from such observation, that in the hands of a large number of our profession it is the safest and a perfectly safe anæsthetic. Chloroform, administered by one who possesses the tact, experience, and judgment of Mr. Clover, is reduced in danger to a minimum. It is not everyone who can command his experience and judgment, nor is it everywhere that his method of administration can be adopted. The "rough and ready" method of administration by lint, towel, or sponge must be had recourse to, and thence the danger.

I now take leave of this subject. If what I have said should in the remotest sense serve to lessen the dangers of anæsthetics, or be the indirect means of saving a professional brother from the distress of witnessing a fatal case, I shall be amply rewarded, and the profession generally will have to thank you for having once more brought this question prominently forward.

I am, Sir, yours obediently,

Grosvenor-street, W., Aug. 3rd, 1875. George Pollock.

To the Editor of The Lancet.

Sir,—In your leading article last week, on the subject of the relative advantages of chloroform or ether as an agent for the production of surgical anæsthesia, you represent the question as one which is still open to doubt, and you speak of the existing experience of chloroform as being enormous, and of that of ether as if it were comparatively small. May I be permitted to say, with great submission, that these are views in which I cannot concur, and which appear to me to be entirely at variance with well-established facts.

It may be true, as you allege, that the deaths produced by chloroform are only as one to every two thousand five hundred cases in which it is inhaled; but it is inhaled so frequently that this small proportion amounts to a very serious aggregate. I am acquainted with one surgeon, practising in London, who asserts that he has witnessed *sixteen deaths* from chloroform (all of them, I believe, in the course of operations upon the eye); and with another who has witnessed *six deaths.* The mortality, such as it is, is totally without warning. No experience can foresee in what cases it will occur, no skill can do anything to prevent its occurrence. There have, it is true, been a few instances in which life has been threatened by failing respiration, but in these the patient may always be saved if proper treatment is adopted. The deadly cases are those of syncope, or paralysis of the heart, and this, whenever it occurs, appears to place the victim beyond the reach of human aid.

The loss of one life in two thousand five hundred inhalations would not, I think, forbid the use of chloroform in surgery if chloroform were the safest of our anæsthetic agents, or even if it offered any great practical advantages to the administrator or to the operator. But I contend, first, that ether is in all respects as available and as effectual as chloroform; secondly, that it is *absolutely safe.* I do not believe that it has ever destroyed life, nor do I believe that it has any tendency to destroy it.

With regard to the efficiency of ether, I may say that I finally abandoned the use of chloroform three years ago. Since that time I have performed at least fifteen hundred operations upon the eye at St. George's Hospital, and a smaller number at the Royal South London Ophthalmic Hospital, using ether as my sole anæsthetic. Its administration requires from two to four minutes, and the anæsthesia which it produces leaves nothing to be desired. It has been in use at St. George's Hospital for a still longer period in general surgery; but until Dr. Joy Jeffries, of Boston (U.S.), taught me, in 1872, the proper method of administering it, I did not consider it available for ophthalmic operations. Unless given with great freedom, it does not completely relax the muscular system.

My experience may, I venture to think, be accepted as conclusive with regard to the *efficiency* of ether; and to those who have not found it efficient I would suggest that they have something to learn, as three years ago I myself had all to learn, with regard to the method of administration. On the question of safety, let me remind you that, in speaking of our experience of ether as small, you leave out of sight the colossal experience of our brethren in the United States, who, I believe, use ether almost exclusively, and who have had no deaths from its employment. I will not dwell on this part of the subject, because I have written to ask Dr. Joy Jeffries to favour me with an account of the American experience, which, when I receive it, I will transmit to you for publication. My own cases are, of course, insufficient to establish the safety of ether; but they enable me to say that I do not recognise, in the *nature* of its influence, anything which is calculated to be deadly—nor, supposing common care to be taken, do I see in what mode it could produce death. I fully believe in the correctness of Dr. Joy Jeffries' assertion, that, as long as the patient receives air enough to prevent suffocation, you could not destroy life by ether if you tried. No one who has seen much of the use of chloroform can have failed to recognise the oftentimes deadly tendency of its action.

You say truly, Sir, that deaths from ether have been recorded, but it does not follow that they have taken place. In one recent case, for example, the fluid administered was not ether, but a highly dangerous compound which is used to produce refrigerating spray. In another case, death occurred during an operation on the tongue from the passage of blood into the glottis, and this, although it may have been due to the anæsthesia, could not have been due to the anæsthetic. Among the "recorded" instances there may be some in which the facts are not now ascertainable; but I believe I am correct in saying that wherever the facts have been examined, the case against ether has broken down. It must be understood that I speak of pure sulphuric ether, and of this only.

On the grounds which I have thus endeavoured to set forth, I hold that the use of chloroform in surgery can never be necessary, and, as an inevitable consequence, that it can never be justifiable. I make an exception in the case of young children, for whom chloroform is scarcely dangerous, and I do not refer at all to the practice of midwifery, in which the quantity and method of administration are such as to make surgical experience inapplicable. But I hold that no medical practitioner, merely because he has used chloroform without accident until now, or merely because he has not learnt how to use ether, is entitled to expose a patient to the risk of being the one person who will die, although two thousand four hundred and ninety-nine others may escape.

I am, Sir, your obedient servant,
Wimpole-street, August 3rd, 1875. R. Brudenell Carter.

To the Editor of The Lancet.

Sir,—For the safe and efficient administration of ether vapour for producing anæsthesia, several things are needful to be known and remembered, which are chiefly these:—

1st. That kind of ether should be used which is fittest for the purpose of inhalation, and this is the pure anhydrous washed ether, sp. gr. 720; free from alcohol and water. Robbins's "ether for local anæsthesia" is a dangerous compound for inhalation. It was this last which was used in a case recently fatal at Manchester.

2nd. The ether should be given in such a way that the inhalation may be commenced with a very weak vapour, which, after a few inspirations, can be rapidly increased in strength. If we begin with too powerful a vapour, the air-passages are intolerant of it, and the patient resists the inhalation; but after a few moments' inhalation of a weak vapour, its strength can be increased without inconvenience, and the patient rapidly brought under its influence. I think a cone of felt, covered with thin mackintosh, is the simplest and best apparatus for this purpose.

3rd. Stimulants should not be administered before the inhalation. Ether is itself a stimulant, and can be safely given in cases where there is great depression; but, as Mr. Clover has pointed out, it is very undesirable to have alcohol in the stomach when ether is being inhaled.

4th. Whatever danger may belong to ether has relation to the respiratory function. The breathing should therefore be watched; and, I may add, it is desirable so to place the head of the patient that the saliva (the secretion of which is increased by the ether) may run out at the corner of the mouth rather than into the trachea.

The superior safety of ether over chloroform is not, I think, by anyone doubted, and in my paper read at the Medico-Chirurgical Society in 1871, I pointed out the advantages which it possesses. A greatly extended experience has confirmed the opinions I then expressed, and, with your permission, I would repeat the words with which I concluded that paper. "It has been said that one great advantage of anæsthetics is the mental tranquillity with which a person is enabled to regard the prospect of an operation which is to be robbed of its pain; but I am not sure that this is not often counterbalanced by the dread of an anæsthetic which it is known may of itself prove fatal. It seems to me, therefore, that for this, as for the other reasons I have herein advanced, we should avail ourselves of an anæsthetic so safe as ether appears to be, rather than of one, however much it has to recommend it, to which is attached the danger which unquestionably pertains to chloroform."

I am, Sir, your obedient servant,
J. Warrington Haward.
Montagu-street, Portman-square, July 28th, 1875.

P.S.—May I ask the favour of a reference to the record of fatal cases of ether inhalation mentioned in an article in The Lancet of July 31st, as I am desirous of ascertaining the number of recorded deaths from the use of that anæsthetic. J. W. H.
August 2nd.

⁂ The instances of death either from or presumed to be connected with the administration of ether which we had in our minds whilst writing the article were:—Case recorded in the *Gazette Médicale de Paris* for March, 1848. Jobert, two cases related to the Academy of Medicine, Feb. 16th, 1847. Nunn's case, *Medical Gazette*, vol. xxxix., p. 414. Case in 1847, in which the late Mr. Robinson, of Gower-street, administered ether for an amputation. Robb's case, *Medical Times*, March 27th, 1847. Barrier's case, *Gazette des Hôpitaux*, June 18th, 1853. The Lancet, Oct. 18th, 1873. Ibid., April 17th, 1875. Ibid., July 3rd, 1875. The independent diligence of our correspondent would probably supply him with further similar examples of it were he bent to the task.—Ed. L.

AN APPEAL.

To the Editor of The Lancet.

Sir,—I respectfully invite the attention of the medical officers of the public services to the following particulars of a sad case.

An assistant-surgeon, whose name it is not, perhaps, necessary to give, but which can be given to any subscriber who desires to know it, lost his health in the Crimea, and, after a lingering illness, died from softening of the brain, leaving a widow and five children in circumstances of extreme destitution. This officer's ill-health was not brought on by imprudence or bad habits. Those who have interested themselves in this case, and whose names are given below, know that his habits and conduct were always such as to command the respect of his friends. It must also be added that he made such provision as he could for his family by insuring his life in the Army and Navy Insurance Office, afterwards amalgamated with the "European." It is useless to add that no benefit was derived from this insurance, as this office disastrously failed. When this occurred the state of the assistant-surgeon's health was such that a second insurance on his life was impossible. For several years before his death he supported his wife and family, and met all the expenses of his long illness, on his half-pay of 8*s.* a day. Not having served for ten years, his widow is not entitled to a pension.

It is proposed to raise a sum of money for the purchase of an annuity for the benefit of the widow, who at this time depends on the charity of her neighbours for daily bread for herself and children.

The following gentlemen will be happy to receive subscriptions in aid of this fund:—Major-General Lewis, Shirley, Southampton; Lieutenant-Colonel Begbie, Shirley, Southampton; Dr. Parkes, F.R.S.; Surgeon-General Longmore, C.B.; and Surgeon-General W. C. Maclean, C.B., Royal Victoria Hospital, Netley.

I am, Sir, your most obedient servant,
Netley, 30th July, 1875. W. C. Maclean, M.D.

THE TREATMENT OF HÆMORRHOIDS AND PROLAPSUS BY THE CLAMP AND CAUTERY.

To the Editor of The Lancet.

Sir,—In reply to Mr. James Lane, allow me to state that with regard to the main and most important feature in his "criticisms" of my operation, contained in his communica- for Sept. 2nd, 1865, I made no misrepresentation. The point I wished to call attention to was this, that he had freely given his opinion of, and as freely criticised, a mode of treating hæmorrhoids which he had not once tried himself. In his present communication Mr. Lane confirms this statement of mine, and I must repeat my opinion that when he made these "criticisms" Mr. Lane was not in a position to give any effect to his statements, and I think it was peculiarly unfortunate of him that he did not defer passing judgment until he had had at least some personal experience of this operation. I am glad, however, that a lapse of ten years has made him a wiser man, and more able to give weight to his criticisms, for he tells us that since then he has repeatedly practised the method in question; and as one of my main objects in publishing my papers on this subject is to gain converts, I am greatly pleased at this forward step on Mr. Lane's part.

As I have already laid my experience fairly before the profession, with the reasons which led me to follow this particular plan of treatment in preference to the ligature, I need not discuss the various questions raised by Mr. Lane; but with reference to a remark quoted by him from my original Lettsomian Lectures, to the effect that "It is *not possible* that tetanus or pyæmia can occur after this operation," I beg to state that on a valued friend pointing out this passage to me I withdrew the word *possible*, and substituted for it the word *probable*, in the last edition of my lectures. Of course Mr. Lane has not observed this correction, otherwise he would have acted in a similar manner to one of my most severe critics, Mr. Allingham, who has not overlooked this change in the word, and has pointedly referred to it at page 103 of his book on "Diseases of the Rectum."

With reference to Mr. Lane's hope that I may be converted to the employment of the ligature, I must beg him to dismiss this from his mind—should the anticipation of it give him the slightest amount of pleasure,—for the word *conversion*, as we employ it, means a turning towards something better, a condition of mind and practice we all ought to adopt; but so long as I have the power of discriminating between two courses, I shall certainly never think of going back to the practice of the ligature. After my previous experience of this plan and my present means of the clamp and cautery, I could not conscientiously do so; for I repeat, notwithstanding Mr. James Lane's opinion (and I think I am warranted from my large experience in saying so), that I have repeatedly proved that, as regards the three most important elements of the saving of life, of diminution of pain, and of less prolonged convalescence, the method by clamp and cautery is far superior; and it is a great pleasure to me to hear this statement continually verified by practitioners from the country, and from all parts of the world, who have seen me operate either in King's College Hospital or in private.

I am, Sir, yours, &c.,

Wimpole-street, August 3rd, 1875. HENRY SMITH.

QUACK MEDICINES.

To the Editor of THE LANCET.

SIR,—My attention has been called to a letter written by Dr. O'Neill (accompanied by an analysis of my Blood Mixture), which was published in THE LANCET of the 24th inst. I have no wish to enter upon the question of the correctness or otherwise of the analysis, which, as far as I can judge, must have sadly disappointed Dr. O'Neill, at whose instance it was made; but I am much mistaken if you do not share my opinion that the following facts should be brought to the notice of the readers of THE LANCET, whose columns, though open to *bonâ-fide* discussions of public interest, should be closed against communications having other objects.

On the 21st June last I received from Dr. O'Neill an application for £44 2s. for alleged attendance on myself and my wife in 1864, 1865, and 1866. He at the same time forwarded to me two other bills against relatives of mine, for which I was in no way responsible. His letter admitted that he never previously delivered the account, but stated he had forty-two visits down against me. I am not indebted to Dr. O'Neill, and I hold a bill of his dated Christmas, 1869, to which his receipt is attached, and which does not in any way allude to a previous charge. On the 27th June my solicitor wrote to him denying any liability, but offering to refer the question either to arbitration or to a court of law, *and undertaking to contest the claim entirely on its merits*, and without raising any technical line of defence which was open to me, and which would at once have put an end to Dr. O'Neill's case. A request was at the same time made that the dates and particulars of the forty-two alleged visits should be supplied. No statement has up to this time been delivered, nor has Dr. O'Neill made any attempt to procure a decision on his claim. Instead of taking such a course, he sends his letter and analysis to your paper.

My blood mixture has been advertised for the last twelve years, during the whole of which time Dr. O'Neill has been residing in Lincoln. I have been told on many occasions that he has stated (though incorrectly) that the mixture was made from a prescription of his. But what I wish especially to bring to your notice is that not until Dr. O'Neill has been unsuccessful in his attempts to obtain forty-two guineas from me does he make any effort "to confer a great boon on the profession and a greater boon still on the public at large" by having my blood mixture analysed and the analysis published. From the facts above detailed, your readers will be able to judge whether Dr. O'Neill has induced THE LANCET to "devote some of its valuable space" to the publication of his letter in order to do "great good to the medical profession and to the public at large," or whether his object is not altogether a different one.

I am, your very obedient servant,

Lincoln, 26th July, 1875. F. J. CLARKE.

*** For the sake of fair play we willingly insert Mr. Clarke's letter. But with Dr. O'Neill's motives in writing to us we have nothing to do; and it is very obvious that Mr. Clarke's letter in no way impugns Dr. Taylor's analysis, nor does it affect the only question in which the public are interested—viz., the propriety of administering such an agent as iodide of potassium, not only without medical supervision, but without even the knowledge of the patient himself.—ED. L.

Obituary.

W. J. CLARKE, M.R.C.S.

THE profession in Huddersfield has sustained a great loss by the death of Mr. W. J. Clarke, which took place at Cambridge on Sunday, July 25th, at the age of sixty. His vigour of body and mind, apparently unimpaired, seemed to promise a long life, but for some time he had suffered from occasional attacks of gouty pain. He missed his shooting in the autumn of 1874, and during the winter fell off still further in health. In April he went to Ventnor, and while there had a severe attack of hæmoptysis, which greatly reduced his strength. No structural disease of the lungs, however, could be detected, and he recovered so far as to go on a visit to his brother at Queen's College, Cambridge. Here pleurisy with effusion came on, and, notwithstanding the kind care of Dr. Paget, proved fatal.

Mr. Clarke deservedly held a leading position in Huddersfield. He was for many years surgeon to the infirmary, but, as is usual in the provinces, practised medicine as well as surgery. He was a man of remarkable vigour of character, clear sighted, strong in will and purpose, and thoroughly upright and honest. These qualities, carried into his professional work, made him an excellent all-round practitioner. His diagnosis was solid; he was alive to all the modern advances in therapeutics, but while ready to adopt everything that was valuable, he held fast the best features of the old school of practice which prevailed when he entered the profession. In surgery he was painstaking and cautious, and could show many instances of success in conservative procedure, but when the occasion required he was firm in recommending and bold in carrying out operations.

Mr. Clarke was universally respected, and had many firm friends among the leading men of the town; but it was only during his illness that the extent and depth of the regard in which he was held was known. His sterling worth was appreciated by the educated classes, and the poor had learned to distinguish behind a firm exterior genuine kindness of heart. Only a strong nature could inspire the respect and attachment entertained for him by the unimpressionable Yorkshiremen of the West Riding.

EDWARD WOAKES, M.R.C.S. ENG.

MR. WOAKES was born at Worcester in 1802, and received his early education in that town. Having chosen the business of chemist and druggist, he spent some years in the house of Messrs. Southall of Birmingham. While there he was appointed apothecary to the Birmingham Eye Infirmary, and henceforth became an industrious student of medicine. He subsequently entered at St. Bartholomew's Hospital, and, having passed Apothecaries' Hall in 1828 and the Royal College of Surgeons in 1829, settled in practice at Luton, where he pursued the arduous career of a country practitioner with the energy and zeal peculiar to the men of his day. In 1861 he retired on the dearly earned fruits of his labours, his constitution being greatly impaired by upwards of thirty years of work. Symptoms of softening of the brain set in a few years afterwards, and at length terminated fatally on May 9th, at the age of seventy-three.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on July 29th :—

Bernays, Sydney Adolphus, Acre House, Brixton.
Leigh, Reginald Heber, Aberdare, South Wales.

The following gentlemen passed the Primary Professional Examination on the same day :—

Bouton, George Charles, St. Mary's Hospital; John Bridwell Stelfox, Owens College, Manchester; Thomas Chant, London Hospital; Henry Seymour Atkinson and Thos. Frederick Hugh Smith, King's College; John Alex. G. B. Messum, Wm. Parsons Feltham, and William Henry Gaze, St. Bartholomew's Hospital.

Vaccination Grants.—The following gentlemen have been awarded grants by the Local Government Board for efficient vaccination :—Mr. W. A. Sumner, St. Marylebone, the sum of £149 18*s.* Mr. J. Acworth Angus, Western District of the Newcastle-upon-Tyne Union, £54 3*s.*; Mr. Jonathan Dalgliesh, of the same district, £43 16*s.* Dr. J. H. Gordon, Salisbury, £29 8*s.* Mr. Peter Swales, Sheerness, £25 2*s.* Mr. George J. Berry, Melksham Union, £12 2*s.* E. N. Carless, Devizes Union, £16 9*s.* Dr. C. F. Harding, Whittlesea, £10 11*s.*

The John Propert Memorial Festival.—The Council of the Epsom Medical College celebrated the first festival in pious memory of its founder on Wednesday, 28th July, at the Ship, Greenwich, Mr. Erasmus Wilson, F.R.S., in the chair, supported by the Rev. Dr. West, the head master of the school, Drs. Sieveking, Chas. Hogg, Carr, and Bradley, and Messrs. Burford Hancock, Bransby Powys, Marshall John W. Eccles, &c. Mr. Wilson, in proposing the "Pious Memory of John Propert," remarked that his labours would, as a Godlike work, abide to all time, and teach for ever the blessedness of doing good in life. In proposing the "Health of the Chairman," Dr. Carr said that whilst all the members of the Council laboured to the utmost of their power to carry on the good cause of the College, none had done so much for it as Mr. Wilson, on whose shoulders the mantle of its founder had fallen. To Dr. Chas. Hogg is due the credit of the movement, which the Council and the friends of the College hope to continue annually.

Medical Appointments.

Allen, A. H., F.C.S., has been appointed Public Analyst for the Northern Division of the County of Derby, vice Scott, whose appointment has expired: 21*s.* per analysis, and 42*s.* per day when attending before magistrates to give evidence.

Barkus, B., M.D., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Gateshead, vice Rolf, deceased.

Barron, T. W., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the St. Marylebone General Dispensary, vice White, resigned.

Bull, W. H., L.R.C.P.L., has been appointed House-Surgeon to St. George's Hospital, vice Bennett.

Callcott, J. T., M.R.C.S.E., has been appointed Assistant Medical Officer to the Durham County Lunatic Asylum, Sedgefield.

Childs, C., L.R.C.P.L., has been appointed House-Physician to St. George's Hospital, vice Sherwood.

Constable, J. J. C., M.D., has been appointed Physician to the St. John and St. Elizabeth Hospital, Great Ormond-street, vice Power, deceased.

Cobe, W., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Muthill, Perthshire, vice Marshall, resigned.

Garraway, E., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Faversham, vice Spyers, deceased.

Goode, H., M.B., has been appointed Public Analyst for the Southern Division of the County of Derby, vice Scott, whose appointment has expired: 21*s.* per analysis, and 42*s.* per day when attending before magistrates to give evidence.

Grace, H., L.R.C.P.L., M.R.C.S.E., L.M., has been reappointed Medical Officer of Health for the St. George Urban Sanitary District, Gloucestershire, his appointment for two years having expired.

Greenway, A. S., M.B., C.M., has been appointed House-Surgeon to the Huntingdon County Hospital, vice Pike, appointed a Medical Officer to the Leicester Provident Dispensary.

Heygate, W. H., M.R.C.S.E., has been appointed Medical Officer of Health for the Crediton Rural Sanitary District, vice Body, deceased.

M'Kenna, W., L.R.C.P.Ed., L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Carrickmacross Dispensary District of the Carrickmacross Union, Co. Monaghan, vice Tagert, resigned.

Morison, J. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the Pembroke District, vice Reid, resigned.

Phillips, E., L.R.C.P.Ed., L.M., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Castletown Dispensary District of the Navan Union, Co. Meath, vice Hamerton, resigned.

Robertson, J., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Glenbervie, Kincardineshire, vice Henderson, deceased.

Rooney, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kingscourt Dispensary District of the Bailieborough Union, Co. Cavan, vice Langan, resigned, and appointed to the Longford Dispensary District, Longford Union.

Rowe, T. S., M.D., M.R.C.S.E., has been appointed Medical Officer to the Convalescent Home for Orphans, Harold-road, Margate.

Sabb, D. P., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for No. 1 District of the Pembroke Union, vice Reid, resigned.

Smith, F. A. A., M.D., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2 District, and Medical Officer to the Workhouse of the Mere Union, Wilts, vice Provis, deceased.

Spong, W. N., M.R.C.S.E., has been appointed Medical Officer to the Faversham Union Workhouse, vice Spyers, deceased.

Stedman, F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Castleton District of the Chapel-en-le-Frith Union, vice Haslewood, resigned.

Thompson, J., A.B., M.B., L.K.Q.C.P.I., M.R.C.S.E., has been appointed to the Police Force for the Borough of Royal Leamington Spa.

Tomkins, H., L.S.A.L., has been appointed a Physician's Assistant to the Royal Infirmary and Dispensary, Manchester, vice Gallimore, resigned.

Wadsworth, R., L.R.C.P.Ed., L.F.P. & S. Glas., has been reappointed Assistant Medical Officer to the Shoreditch Parochial Infirmary, Kingsland-road.

Wilson, A., M.R.C.S.E., has been appointed a Physician's Assistant to the Royal Infirmary and Dispensary, Manchester, vice Smith, appointed Senior House-Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

Cartwright.—On the 30th ult., at Leintwardine, Herefordshire, the wife of John A. T. Cartwright, Surgeon, of a daughter.

Ferrier.—On the 3rd inst., at Upper Berkeley-street, Portman-square, the wife of David Ferrier, M.D., of a daughter.

Inglis.—On the 31st ult., at Worcester, the wife of A. M. Inglis, M.D., of a son.

Leake.—On the 31st ult., at Blythe-road, West Kensington, the wife of Jonas R. Leake, L.R.C.P., Surgeon H.P. H.M.'s Army, late 80th Regiment, of a daughter.

Perry.—On the 25th ult., at Melksham, the wife of George J. Perry, M.R.C.S.E., of a son.

Roche.—On the 20th ult., at Springfield, Boswells, Chelmsford, Essex, the wife of F. E. Roche, B.A., M.D., Surgeon West Essex Militia, of a daughter.

Ticehurst.—On the 21st ult., at St. Leonard's-on-Sea, the wife of A. R. Ticehurst, M.R.C.S.E., of a daughter.

MARRIAGES.

Sangster—Hatfield.—On the 28th ult., at St. George's, Tufnell-park, Holloway, Alfred Sangster, M.B., to Ann, daughter of the late John Hatfield, Esq.

Williams—Pink.—On the 29th ult., at St. Alphege, Greenwich, Leonard Williams, M.B., to Bessie Frances, daughter of H. N. Pink, Esq.

DEATHS.

Bragge.—On the 9th of May, at Hawthorn, near Melbourne, Australia, John de la Roche Bragge, M.R.C.S.E., aged 58.

Byrne.—At Great Brunswick-street, Dublin, Thos. Byrne, M.B., F.R.C.S.I., aged 73.

Franklin.—On the 2nd inst., at Folkestone, H. Franklin, C.B., Inspector-General of Hospitals, aged 88.

Jones.—On the 26th ult., at Ystrad, Geo. T. Jones, L.R.C.P.Ed., late Medical Superintendent of the North Wales Counties Lunatic Asylum, Denbigh, aged 55.

La Croix.—On the 24th of June, at Roseau, Dominica, Frederic La Croix, M.R.C.S.E., late of Winchester, aged 50.

M'Keever.—On the 31st of May, at Dublin, Thomas M'Keever, M.D., aged 84.

Pridie.—On the 19th ult., at Edinburgh, Robt. Pridie, M.D., aged 68.

Thomas.—On the 19th ult., at Hardy-street, Liverpool, Richard Thomas, Surgeon, aged 39.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Green on Pathology and Morbid Anatomy.
Mr. Erichsen on Concussion of the Spine.
Dr. Bennett: Report on the Antagonism of Medicines.
Dr. Rumsey: Essays and Papers on some Falacies of Statistics.
A Report on the Hygiene of the United States Army.
Dr. Holland on Health in the Nursery.
Dr. Ashe on Medical Politics.
Mr. Morant on Game Preservers and Bird Preservers.
Vernon Galbray on the Empiric.
Mr. Henry: Posological and Therapeutical Tables.
Transactions of the New York Academy of Medicine. Vol. I.
Report on the United States Marine Hospital Services.
The Monthly Microscopical Journal.
Hardwicke's Science Gossip.
The Leisure Hour. Sunday at Home.
Street's Indian and Colonial Directory. 1875.

Notes, Short Comments, and Answers to Correspondents.

THE SCHOOL OF SALERNO.

MUCH doubt hangs over the origin of this famous temple of physic, and particularly over the genesis of its "Regimen Sanitatis." A few notices, therefore, culled from a recent Italian chronicler, who has investigated the facts anew, may not be unacceptable. From the ninth century onwards, physicians of note were found in Salerno, flourishing under the protection of the Norman Princes, who possessed the city, together with Apulia and Calabria. At the close of the eleventh century, Robert, one of the three sons of William the Conqueror, was returning from Palestine to England, where the crown, which had become his through the death of his elder brother, awaited him. On his way he stopped at Salerno to get cured of a fistula contracted during the siege of Jerusalem, and, thanks to the skill of the Salernitan surgeons, his cure was complete. Before taking his leave, he asked them for a "rule of life" to keep himself in good health, and accordingly they set themselves to the task of compiling a book of sanitary precepts. The chief contributor to it was the most learned of their number, John of Milan, and in the year 1100 it duly came forth. Its success was immediate. Edition followed edition—the chief commentators being Arnaldo da Villanuova, the physician of Charles II. of Anjou; the two Giacomi, Curio and Crellio; and, finally, Renato Moreau and Zaccaria Silvio. It brought much fame and many students to Salerno, which accordingly took the lead among the medical schools of the Continent for many years. Between 1480 and 1763 it was published in almost innumerable forms, with translations into all the European languages. In some respects the best is that edited at Pavia, with an Italian version by the Cavaliere Magenta. Its "wise saws" are worthy even yet of "modern instances." What can be better than this, for example?—

> "Si tibi deficiant medici, medici tibi fiant
> Hæc tria: mens læta, requies, moderata diæta."
>
> "Where doctors are not, be thy doctors then
> Contentment, ease, and moderate regimen."

The "restorative school" cannot but subscribe to the following summary of the Salernitan *menu*:—

> "Ova recentia, vina rubentia, pinguia jura
> Cum similâ purâ naturæ sunt valitura."
>
> "Fresh eggs, red wine, and juicy broth to sup
> With wholesome bread, keep nature's system up."

We cannot suppose the homœopathists will claim the Salernitan school as addicted to the "similia similibus" dogma on the strength of this couplet:

> "Si tibi serotina nocet potatio, vina
> Horâ matutinâ rebibas et erit medicina."
>
> "The wine that, taken over-night, has hurt you
> May prove, next morning, not without its virtue."

But *jam satis*. That a collection of precepts so quaint, and, for their time, so shrewd and so popularly accepted, has hitherto found no adequate editor or translator in England is as much a "curiosity of literature" as the book itself.

Enquirer, (Manchester.)—The lectures were delivered at the College of Surgeons by Dr. Brown-Séquard.

Dr. Henry Thompson's lecture shall appear in an early issue.

MILITARY TYRANNY.

To the Editor of THE LANCET.

SIR,—A relative of mine, an officer in the army, on his last return from foreign service, was strongly advised by one of the most distinguished surgeons in Brighton to wear a beard as a preventive measure against diseases of the throat, to which he is liable, and which, while of no great gravity in themselves, might, if unchecked, lead ultimately to most serious chronic complaints. Armed with a medical certificate from this gentleman, my relative was granted permission to wear his beard, and this he has continued to do for some years with great benefit. Thoroughly healthy in all other respects, he was more exposed to the trying weather at Dartmoor than probably any other officer there, and he has done duty at all the manœuvres since with equal immunity from any evil results beyond an occasional soreness of the throat. He has now received a peremptory order to shave immediately after the close of the present manœuvres, and that in spite of strong medical certificates adverse to such a course. The result will be that either this officer (a notoriously able, zealous, and appreciated public servant) will have to surrender his professional prospects, and that the public will not only lose a good officer, but will have to pay some £200 a year (his half-pay) for twenty or thirty years for losing him, or that he must risk his health by shaving, in defiance of the strongest medical advice to the contrary.

Now for the *reductio ad absurdum*. This same officer is permitted to wear a beard in any warm country, and only expected to shave on return to this inclement climate (all the more inclement to those who have to serve in such varied climates). Again, the marines, both officers and men, are not only permitted, but are expected to wear beards when serving at home and doing permanent garrison duty alongside of those who in no way particular differ from them, except in that one detail of having smooth chins.

It has always been understood in the army that upon all subjects of health medical orders were to override every other consideration. Perhaps some of your correspondents can inform me whether the medical advisers of the Horse Guards were consulted at all in this matter. I think I may at all events depend upon you to disappoint those who thus set up their opinion upon a medical question as superior to that of medical men.

I remain, Sir, yours truly,

July, 1875. EVERY MAN TO HIS OWN TRADE.

DAMIANA.

DR. J. J. CALDWELL, of Baltimore, calls attention in the *Medical Monthly* (New York) to a plant "new to the medical world," named damiana, to which he ascribes powerful aphrodisiac properties, and which is found on the western borders of Mexico. The tincture and extract of the plant are said to increase the flow of urine as well as the sexual appetite. The virtues of damiana are believed to reside both in the root and in the leaves. There are two classes of the plant. The best bears a white blossom and has a small leaf; the other has a yellow blossom and a large leaf, and is much inferior in aroma and strength to the former.

Mr. W. M. Farnell, (Cape Town.)—We cannot give space for the paragraph. It is a quack remedy. The disease is not curable.

A Visitor.—We must decline to notice the matter at present.

Mr. Lowe, (Lincoln.)—Next week.

THE TREATMENT OF CONTAGIOUS DISEASES.

To the Editor of THE LANCET.

SIR,—A great deal has been said and written of late in reference to the erection of hospitals for the isolation and treatment of contagious diseases. This discussion has, for the main part, been limited to the question of the selection of an intra- or extra-mural site for such hospitals; but, with your permission, I am desirous of raising the larger question whether the time has not arrived when the whole subject of the suppression of contagious, and therefore preventable, diseases should be considered with a view to efficient and sufficient legislative action.

We have heard a good deal about "*Sanitas sanitatum, omnia sanitas*," since it was made an election cry of; but next to nothing has been done. The Public Health Act was passed before this cry was raised, and in it measures are indicated rather for the *repression* of contagious diseases than for their *suppression*. I say indicated; for its provisions are, for the main part, permissive, and not compulsory. Permissive Acts of Parliament are, as I understand them, educational in their chief purpose; but I trust they are meant to lead up to their logical sequence, Compulsory Acts of Parliament, if people will not do what they are taught is for their own and for the common good. None, I presume, but Malthusians will deny that the utter suppression of contagious diseases must be for the greatest and highest good of the people. Bountiful nature has afforded us exceptional facilities for such suppression. Composed of islands, our country is surrounded by a sanitary cordon of a most perfect character. International intercourse will, doubtlessly, lead to the breaking of this cordon from time to time whatever may be done; but this danger may be greatly lessened, if not obviated, by the institution of a scientific quarantine.

For the successful suppression of contagious diseases in this country, it appears to me that the following provisions are imperatively required:—

1st. That contiguous to every centre of population there shall be provided a hospital for the reception and treatment of all cases of contagious disease which may occur in that population. Isolation as perfect as may be compatible with necessary accessibility being secured by the selection of the most eligible site on which to erect such hospital.

2nd. That there shall be compulsory registration of disease. Registration of the "cause of death" only enables our sanitary officers in too many cases to "lock the stable door after the horse is stolen."

3rd. That local sanitary authorities shall have power, and it shall be their duty, to compel the prompt removal of contagious cases to the hospital provided for their reception.

Were this the "law of the land," we should in a very short time, as I believe, "stamp out" contagious diseases, and on their reimportation "nip them in the bud."

I know there will be a great outcry against such stringent legislation raised by many, but mostly by the short-sighted. As you have well said on a kindred subject, resistance will be more likely to come from the "rich and selfish" than from the poor. It will be said, "I would pay any money or run any risk rather than my dear child should be taken from its home to a hospital." But surely such an objector can be made to see, if he does not care about the common weal, that the temporary removal of one member of a family from beneath the roof-tree, for more thorough and perhaps skilful treatment, may be for the good of that member, and must be for the good of all the other members of that family. At all events, if the "times are not ripe" for obtaining legislation which shall prevent the annual sacrifice of thousands on thousands of our people to the Moloch of contagious disease, there can be no doubt the time has arrived when the question of the desirability of such legislation should be well agitated with a view to forming the necessary "public opinion."

I am, Sir, your obedient servant,

Brighton, August 2nd, 1875. JOSEPH STEPHENS, M.D.

THE LEGAL VIEW OF INSANITY.

D. C. L.—The juries show more than common sense. They show that they recognise the truth that doctors know more of insanity than lawyers, and refuse to take the direction of the Judges.

Mr. Thomas Savill.—We heartily congratulate our young friend. The examination is very severe. We believe the percentage of "plucks" is about 65.

PRESCRIPTIONS *versus* DISPENSING.

To the Editor of THE LANCET.

SIR,—I have sometimes written to you in the interest of the profession as far as regards "a return" for their labours. I have met with a glaring instance to-day only of how the "workers" are robbed in the present day of their just rewards. A gentleman came into a chemist's where I happened to be, and asked the assistant to send him a copy of a prescription, as he wanted to send it into the country to a friend, he having previously borrowed it of another friend, and having returned it without copying it. This was consented to. I remarked afterwards to the assistant that such a proceeding appeared to me to be a system of wholesale defrauding of prescribers. He told me it was a constant practice, and that it was very difficult for them to refuse. Another chemist only the other day told me he always charged 5*s*. for a copy of a prescription. Well may junior physicians and prescribers be starving after having invested their capital and worked with their brains if this kind of thing is allowed to go on. Yours very truly,

July 23rd, 1875. M.D.

A NEW INVENTION.

A NEW variety of cooking stove has recently been brought to London from New York, which for summer work commends itself to favourable attention. The apparatus consists essentially of an oven, placed by means of a sort of tripod over a large lamp, with several felt wicks burning kerosene oil. The essential peculiarity of this lamp is that the wicks are constantly surrounded with water, which keeps them cool, and prevents any charring at the burning point, so that no smoke or smell is produced. The ovens may be obtained of several sizes. Meats can be roasted or boiled, bread pies, &c. baked, and water heated. The entire first cost is about £3, and the oil consumed costs about one halfpenny an hour.

Mr. H. G. Dyer, (Ringwood.)—We quite concur in the opinion formed by our correspondent of the pamphlet. It might be well to forward a copy to the Secretary of the Society for the Suppression of Vice.

Lord Osborne is thanked for his communication.

THE DEATH UNDER CHLOROFORM AT QUARRY BANK.

To the Editor of THE LANCET.

SIR,—I enclose my notes of the case of Matilda Wyatt, of Quarry Bank, to which you allude in your impression of the 31st ult. I had fully intended sending them before, but was prevented by great pressure of professional work.

I most sincerely trust that, in the interests of fair play, which you always uphold, you will publish the details of this case. I send at the same time a slip from a local paper, which will afford you full details of the evidence given at the inquest.

I think I have cause to complain of the way in which the evidence of Mr. Ashmead was given, and I beg to draw your particular attention to the points on which he laid most stress.

1. That the cause of death was suffocation. "The face," he said, "was swollen and discoloured, and bloody froth was exuding from the mouth and nostrils."

2. That she was an unfit subject for chloroform. This he most certainly did say in the first instance, though he withdrew it on cross-examination.

3. That the lungs were consolidated and extensively diseased. This he also very much modified afterwards, saying there was *only part* of the lungs consolidated.

4. That the nature of the abdominal attack was peritonitis, and that an operation was useless.

One other point I would draw your attention to was this: that the coroner allowed him to name his own time for the post-mortem, giving directions to the police to let us (Mr. Pearse and myself) know the time, in order that we might be present. I received a telegram from Brierley Hill at 5 P.M., stating that the post-mortem would take place at 6 P.M. I accordingly, at great inconvenience, went to the house at 5.55 P.M., where I met Mr. Pearse. We both remained until 6.55 P.M., but Mr. Ashmead did not make his appearance. We were then obliged to leave, both having engagements; but in returning home I met Mr. Ashmead on his way to the house. This was at 7.25 P.M., and he offered no apology whatever for the delay in keeping his own appointment.

With these few remarks I will leave the case in your hands, feeling confident you will act with your usual justice and impartiality.

I am, Sir, yours truly,
Cradley Heath, Staffordshire, Aug. 3rd, 1875. HUGH R. KER.

P.S.—I am unable to conceive how, in a case of death "from suffocation and impeded circulation through the lungs," the cavities of the heart could be entirely empty; and how in ordinary peritonitis so large a quantity of pus would be contained in the cavity of the abdomen.

On May 26th last I was called to see Matilda Wyatt, of Quarry Bank. I found her suffering from double pleuro-pneumonia of considerable severity. The patient continued for about ten days in a very critical state, about which time the respirations and pulse began to become less frequent. She continued to improve, though the temperature was never greatly reduced, until the fourteenth day, when the temperature again considerably increased, and she complained of great tenderness over the left ovary. I found the menses had ceased at the commencement of her illness, and had not reappeared. Most uncontrollable sickness came on about this time, and the pain was at times intolerable, accompanied by rigors. The temperature reached on several occasions 105°. I have unfortunately, however, lost the notes I took at the time of the temperature, and am therefore obliged to speak from memory on this point. About fourteen days after this, or four weeks from the commencement of the attack, I first noticed a distinct hardness over the left ovary, which gradually increased in size and in distinctness of limits. A week after this, or five weeks after the attack, I examined the girl very carefully, externally and per vaginam. I found fair breathing over nearly the whole of the left lung, and also over the upper lobe of the right lung. There was, however, considerable dulness over both bases and the middle and lower lobe of right lung. On examining the abdomen, I found the left iliac fossa apparently occupied entirely by a large hard tumour, extending upwards almost on a level with the umbilicus. On percussion, I found dulness over the whole of the swelling; but the right side was distinctly resonant, giving me the impression that the intestines were pushed over entirely to that side. On examination per vaginam, I found the uterus pushed to the right side, and occupying a considerably lower position than normally. There was a distinct bulging of the left wall of the vagina, though no fluctuation could be discovered either here or externally. I found the examination, even when using the greatest care, caused the patient most exquisite pain. I then explained to the mother the nature of the case as well as it was possible, and told her that, as soon as the patient was able to bear it, I should have to give her chloroform, and pass in a needle to draw off the matter. At the end of another week I found distinct fluctuation, and, in conjunction with Mr. Pearse, I determined to draw off the matter by means of the aspirator. The opinion I had formed of the case was that there was a large abscess occupying a great part of the left side of the pelvis; that the inflammatory mischief had probably commenced about the broad ligament, and was traceable in its origin to the sudden cessation of the menstrual flux.

July 7th.—Chloroform being administered by Mr. Pearse, a further examination was instituted, which resulted in confirming us in our diagnosis. Up to this period nothing untoward had occurred beyond a little struggling at the commencement of giving chloroform. I then took the aspirator needle in my hand, and was just going to plunge it in, when violent sickness came on. We desisted until the sickness had ceased, and then, finding that she had become partially conscious, Mr. Pearse proceeded to put some more chloroform into the inhaler. Just at this moment a gurgling noise was heard distinctly by Mr. Pearse and myself, and we were under the impression at the time that the bowels had been moved. Mr. Pearse then determined to give her some more chloroform; but just as he was going to place the inhaler over the mouth she gave one gasp and died. We immediately resorted to artificial respiration, and gave brandy, but to no purpose.

On talking the matter over afterwards, I suggested to Mr. Pearse that the abscess had probably ruptured into the peritoneal cavity, and caused death by syncope, and that the gurgling noise which we had heard must have been the rupture and diffusion of the pus. We found that no fæces had been passed.

Autopsy.—By order of the coroner the body was opened on Saturday, July 10th, by Mr. Geo. Ashmead. On opening the chest, extensive pleuritic adhesions were found on the right and left side, principally towards the bases and over the middle lobes. There was a small abscess in the middle lobe of right lung, containing about half an ounce of pus. The middle and lower lobe of right lung and lower lobe of left lung were *partially* consolidated; air distinctly escaped in numerous bubbles on pressure, but no part of the lung was placed in water. The heart was entirely empty, and perfectly healthy. On opening the abdomen, a large abscess was discovered, occupying apparently the whole of the left iliac fossa, and extending upwards as far as the umbilicus. In this part the wall of the abscess appeared to have become continuous with the wall of the abdomen. The whole of the intestines were entirely pushed over to the right side of the abdomen, to the right of the median line. About one and a half to two inches below the umbilicus the sac had ruptured, and a considerable quantity of the pus had escaped into the peritoneal cavity.

Mr. Ashmead did not, in my presence, make any further examination as to the origin of the abscess or the amount of pus in the cavity. I should certainly think from appearances that there must have been at least three pints of pus in the cavity of the abscess.

The fact of the right side of the heart being empty precludes the idea of death from suffocation. The very plain evidence of a large sac containing pus having burst in the abdomen points to syncope as the cause of death, curiously coincident with the administration of chloroform.

"VERMOUTH."

A CORRESPONDENT asks for information as to the properties and physiological action of vermouth, and whether it is, as represented, "a perfect tonic."

Mr. Berry's cases shall appear in an early number.

Enquirer, (Walsall.)—Dr. Eustace Smith on Wasting Diseases of Childhood, Churchill's Diseases of Children, and Dr. Walshe on Diseases of the Heart.

THE NARCOTIC INFLUENCE OF RAILWAY TRAVELLING.

To the Editor of THE LANCET.

SIR,—In your interesting paragraph on the above (24th July) we have an accidental definition of sleep, "a loosening of the links which bind together the centres of sensation and consciousness." If we take this statement to be true as it stands, it follows that there can be sensation without consciousness and consciousness without sensation, and that it is the conjunction of sensation and consciousness which is the waking state. To my thinking the whole of these statements are wrong, and if they are, there cannot be such a thing as the phenomenon of narcotism by the vibrations of sound gently loosening those links, &c. Consciousness is very far from being proved to be absent from any being or thing, and certainly seems to be the necessary conjunct of sensation and motion. To these two—sensation and motion—belong an equilibrium necessitating a common centre. Whatever position, then, we hold consciousness to be in with regard to sensation, its position is the same with regard to motion. But we cannot imagine sensation to be existent as sensation without consciousness—i.e., without the consciousness of sensation, and ditto with motion. Now, the waking state cannot be sensation and consciousness in any conjunction, because in the waking state sensation and motion are equilibrating. But if we elaborate consciousness, or follow up its development, as it were, we shall note as the mark of the truly waking state consciousness of the *equilibrium* of sensation and motion. Whenever this consciousness fails, sleep takes place; the consciousness of sensation remains since sensation remains, and the consciousness of motion remains since motion remains, but the consciousness of their equilibrium is gone.

You say again that the narcotism is due to the vibrations of sound. This is partly true, but it is as much or more due to the so-called vibrations of light—i.e., due to the *fatigue* of the ear and eye. Of course fatigue of the ear alone, or of the eye alone, is sufficient to produce sleep, but in the case of railway travelling these are conjoined, the monotony of the sound being the cause of fatigue of the ear, and the rapidity with which objects travel into and out of sight the cause of fatigue of the eye. It is this fatigue which abolishes the consciousness of the reciprocity of sensation and motion, and fatigue is only a name to express the reaching of the natural limit of sensation and motion—i.e., the reaching of those natural bounds of being where sensation ceases to co-respond to motion, and motion to sensation, the turning-point, as it were, the pause, before they begin again to equilibrate.

I remain, Sir, yours truly,
Glasgow, August, 1875. J. S. NAIRNE.

Mr. A. Hamilton, (Edinburgh.)—The Report of Dr. Adams, headed "Cremation and Burial," will be found in the Sixth Report of the State Board of Health of Massachusetts for January, 1875, published by Wright and Potter, of Boston, U.S.

A Student.—Write to Mr. Trimmer, College of Surgeons.

Mr. Lloyd Owen, (Birmingham.)—The article shall be inserted.

MEDICAL OFFICERS OF THE INDIAN AND COLONIAL SERVICES AND REGISTRATION.

To the Editor of THE LANCET.

SIR,—I have been waiting to see whether any of your correspondents would notice my statement that all medical officers of the Indian army and colonial services are not obliged to register. I do not find the names of several of these officers whom I know in the Medical Register, although the Medical Act appears most certainly to apply to them.

Your obedient servant,
July 24th, 1875. REGISTER.

The Use of the Mosquito.

Dr. S. W. Francis (U.S.A.) thinks he has discovered the *cui bono* in the economy of nature of this pest of warm climates. He believes the mosquito was created for the purpose of driving man from malarial districts; for, in his opinion, "no region where the chills and fever prevail can be free from this little animal. Now if man will not go after the warning is given in humming accents, then the mosquito injects hypodermically a little liquid which answers two purposes—first, to render the blood thin enough to be drawn up through its tube; and, secondly, in order to inject that which possesses the principles of quinine."

Mr. John Bligh, (King's Lynn.)—Blatchley, of 362, Oxford-street.

Embolic Gangrene.

To the Editor of The Lancet.

Sir,—The following case may possibly prove of interest to some of your readers.

Miss L——, aged seventy-three, was seized on May 27th, 1875, with a sharp attack of bronchitis, attended with the ordinary symptoms and physical signs. Up to this date she had enjoyed tolerable health, never having had any serious illness, though occasionally she had suffered from rheumatic pains. There was distinct evidence, however, of valvular disease of the heart. For a week she suffered considerably from cough and dyspnœa, her sleeplessness being very distressing. Her pulse, too, was unsteady, varying a good deal both in volume and rhythm, and being at times feeble and intermittent, so that her condition seemed rather a perilous one. On June 4th, however, she began to improve, and on the 7th convalescence had so far set in that she was able to sit up in bed and read the newspaper. On the morning of the 8th she expressed herself better in every way, but complained of having had an unusual feeling of drowsiness, which lasted for a few hours the previous evening. On the night of the 8th I received an urgent message to see her at once, as "she had just had a paralytic stroke." I found her complaining of intense pain in the right arm, running down from the elbow to the fingers, and accompanied with a sensation of "pins and needles." The hand and arm, she said, felt "cold, numb, and powerless." I found she could with difficulty raise it to a level with the shoulder, but no higher. There was a good deal of venous congestion about the fingers, and they felt perceptibly colder than those of the opposite side. There had been no loss of consciousness, no pain in the head, nor giddiness. There was no existing paralysis of the right leg, right side of face, or tongue, nor any change of sensation in these parts. The right radial artery could not be felt beating, nor yet the brachial, but the axillary pulsated forcibly. Judging from the signs and symptoms that embolism of the brachial artery had taken place, due probably to the escape of some valvular deposit into the course of the circulation, I had the hand and arm wrapped in a layer of cotton-wool, ordering an opiate to relieve the pain, and a free supply of nourishment and stimulants. For the next three days there was great tenderness over the course of the brachial, and the pain in the arm continued severe, causing the patient to be very restless. By this time she had regained the power of moving the arm freely; but the fingers showed distinct signs of gangrene, which subsequently extended upwards until, at the end of the fourth week, a well-marked line of demarcation had formed at the junction of the upper and middle thirds of the forearm. Her appetite during this time was satisfactory, and her general health continued good; the treatment consisting chiefly of ammonia and bark, with an opium and chloral draught at bedtime, and plenty of beef-tea, brandy, arrowroot, &c. On July 14th dyspnœa came on, attended with sickness and failure of appetite, and on the following day she died, apparently from asthenia. No post-mortem examination was obtained.

Although embolism in a case like this may be a pure accident, which might happen to the patient under any circumstances, I am inclined to think that the extra work thrown on the heart during the previous acute attack of bronchitis would strongly predispose to its occurrence. The unusual feeling of drowsiness complained of previous to the arrest of circulation in the arm may have been significant of a similar state of things in the brain—viz., embolism of some of the cerebral vessels. In regard to diagnosis, hemiplegia in a patient of the age of seventy-three would, of course, be a probable event; but I do not think a hemiplegic limb is ever pulseless at the time of the seizure, though its circulation frequently becomes weaker than that of its fellow of the opposite side.

The case seems interesting to me—first, as occurring in a patient of this age as a sequel of acute bronchitis; and secondly, because of the sudden arrest of circulation in the limb, with rapid supervention of gangrene, and yet absence of constitutional symptoms, and postponement of death till the beginning of the sixth week.

Perhaps some of your readers can tell me if amputation has ever been done successfully in such a case. I am, Sir, yours truly,

Deal, July 26th, 1875. R. F. Quinton.

V.—The name of a pupil cannot be entered in the Students' Register before he is entered at a recognised medical school or hospital, unless he produces a certificate from the Secretary of the Royal College of Surgeons of England to the effect that his pupilage is recognised by that College as the commencement of his professional studies.

Mr. J. D. Griffith, (Chesham.)—We do not publish a list of vacant appointments. Our correspondent will find all the announcements in our advertising columns.

Sir Duncan Gibb.—Other arrangements shall be made.

Mr. Charles M. Clarke.—We think the letter rather too strong for insertion.

A County Court Verdict.

To the Editor of The Lancet.

Sir,—I was called to attend Mrs. N—— in her confinement at seven o'clock in the morning. I remained two hours. During that time she made very little progress. As it was a case of natural labour, and all was right, I thought I might safely leave her for half an hour, as I lived within three minutes' walk from the house. When I returned the child was born. I tied the cord, removed the placenta, stopped two hours, as she threatened to have hæmorrhage, and attended nine days. At the end of that period she paid half the fee, promising the rest in a few days. I summoned for the remainder. The Judge nonsuited me because I was not there when the child was born. Yours &c.,

London, July, 1875. A. W.

An Electric Fish.

Among the specimens lately added by the Zoological Society to their living collection in the Regent's-park is a small fresh-water fish belonging to the family of siluroids, and remarkable for possessing an electric organ, like the better-known *Gymnotus*, or electric eel. When touched by the fingers on the lower side of the body, it gives forth a slight, but very perceptible, electric shock. The fish is from one of the rivers of West Africa, and is known to naturalists as the *Malapterurus beninensis*, from its having been originally discovered in the River Beni. A closely allied species—the *Malapterurus electricus*—inhabits the Nile, and has been long known for its electrifying properties. It is believed that no example of any of these singular fishes has been previously brought alive to this country.

Mr. A. H. Churchill.—The County Court would be the proper Court for trying such a question, if it is worth taking into a Court, which we scarcely think the case. It is not the less shabby on the part of the patient to refuse to pay the fee.

Dr. Henry Blanc, (Poona, Bombay Presidency.)—The communication shall appear soon.

Mr. Broadhurst, (Liscard.)—Thanks.

Idiopathic Erysipelas.

To the Editor of The Lancet.

Sir,—A few weeks ago I stumbled across a couple of rather queer cases of idiopathic erysipelas. I have never seen anything to resemble them. I cannot find any reference to such cases in books; and as two or three medical practitioners of some experience have never met with such, I hope you will allow me to submit them to the kind notice of the readers of your valuable journal, because there is always a chance for a young observer to find a mare's nest. Their character was so decided, their symptoms so coincident in period and relapse, that I have felt justified in thinking them examples of a relapsing erysipelas.

Case 1.—I was called on June 6th to see Harriet B——, aged ten. I found that she had had rigors; temperature 103°; had vomited; tongue thickly furred; refusing food; constipated; pulse 140, of moderate volume; face much swelled; eyes closed; large blebs forming on face; delirium at night. The next day the face was more swelled; contents of vesicles bloody; temperature 104°; pulse 140, not quite so good in volume; much delirium at night. On the 9th the face was less swelled; vesicles not so tense; catarrh of stomach and mouth decreasing; temperature 102°; pulse 140, firmer. On the 12th the swelling had almost disappeared; eyes open; conjunctivæ jaundiced; black scabs on cheeks; temperature 100°; pulse 100. 13th: Appetite returning; temperature 98°; pulse 94. Convalescence, seven days.—21st: Found her with relapse of all the symptoms, which continued to hang about for some days, at the end of which I had her removed to a new locality, and she made a quick recovery. I therefore concluded that this was a case of septicæmia, dependent upon her residence in a house the drainage of which I found upon inquiry to be bad. No other cases in this district.

Case 2.—On June 8th I was called to Ellen H——, aged three years. I found erysipelas commencing upon the face; temperature 102°. On the 10th the disease had spread to arms, chest, and abdomen, and on the 12th over the whole body. On the 13th it began to subside from the head and face.—16th: Slight thickening of skin only remains in places; the temperature is almost normal, the child taking food well; conjunctivæ jaundiced. Convalescence, seven days.—19th: Abscesses had formed very rapidly over the acromion and external condyle of humerus and the base of the neck on the left side.—20th: I made an incision into the one over the condyle. The abscesses that remained were rapidly drying up. On the 24th the child had a relapse; the disease again extended to the extremities, and, notwithstanding that stimulants and plenty of milk were afforded, she sank on July 12th, exhausted. No more cases in this district.

Yours truly,

Cleland Lammiman, L.R.C.P.L.,

July, 1875. House-Surgeon to Tunbridge Wells Hospital.

Non finis determinat probitatem actûs.—The matter is being fully investigated by a Commission at the present time. Therefore we think it best not to insert our correspondent's letter.

Mr. H. G. Trestrail's letter shall receive consideration.

Tyro.—At the Army Medical Department, Whitehall-yard.

The New Fever Department of the Sussex County Hospital.

To the Editor of The Lancet.

Sir,—I read last evening with much surprise a letter in your journal from Dr. Taaffe, of Brighton, making very free use of my name, and accusing me of "indirectly (a very indefinite expression) misrepresenting" him, and particularly of asserting that an article which appeared in The Lancet some weeks since upon the above subject was "inspired" by him, Dr. Taaffe. I beg to state most distinctly that I never for a moment thought or said anything of the kind. It never occurred to me that Dr. Taaffe had sufficient influence with the Editor of The Lancet to procure the writing of any such article. In fact, I never mentioned Dr. Taaffe's name either in my letter to you (which appears to have given him such great offence) or in any that I have sent to the Brighton papers.

As to the remainder of Dr. Taaffe's remarks, as the Brighton Town Council have decided by a very large majority that the proposed alterations at the Sussex County Hospital are unobjectionable, it does not appear to me necessary or desirable to prolong the discussion.

I am, Sir, your obedient servant,

William Kebbell, M.D.,

Brighton, July 31st, 1875. Physician to the Sussex County Hospital.

C. M.—Our correspondent's question has been overlooked. The firm can recover for medical attendance and medicines by virtue of the qualification mentioned.

Dr. C. Faber.—The paper may be forwarded to our Office. We shall be most happy to receive it.

Mr. Boridan.—Search shall be made for the article.

"The Odd Shilling."

To the Editor of The Lancet.

Sir,—Hitherto the correspondence respecting "the odd shilling" has been solely on one side of the question. I think there is something to be said on the other. Were this world a Utopia, the five per cent. state of affairs could not exist; but, as matters are, I contend that the debateable shilling smooths the practitioner's path immensely. Nurses have many opportunities for saving us a world of trouble. They might often send for the accoucheur long ere his aid is really required, and rouse him from his slumbers about two A.M., when they could, with a little forethought and care for the doctor's rest, permit him to remain undisturbed until a few hours have elapsed. As a young practitioner, I have generally found this the case; and were the nurses to give me unnecessary trouble, they know full well they would not receive their shillings. Of course, were nurses immaculate, their little fees would not affect their conduct; but for my own part I never regret this custom, as I am confident it secures the full alliance of those who reign paramount in the lying-in room, and this latter fact the oldest accoucheur cannot gainsay.

As regards vaccination, I always make a charge of half-a-crown for one guinea, five shillings for two and three guinea, and half a guinea for five guinea cases—a scale of charges that I find works well.

I am, Sir, your obedient servant,
London, July 24th, 1875. A. H. W. A.

Another Fraud.

To the Editor of The Lancet.

Sir,—I clipped the following advertisement from one of to-day's papers:—

"Examination.—Wanted, a gentleman to pass a simple examination in general education; will be well paid.—Medicus, Post-office."

The rogue or fool in this instance seems to have avoided the circumlocution that Mr. Gould's fool or rogue thought it primarily necessary to affect. If offers of this open nature can find ready insertion in the public prints, I fail to see why gentlemen in need of burglars, forgers, cut-throats, and so forth, should not address their peculiar public through similar channels.

Yours obediently,
July 26th, 1875. Gray's Inn.

Errata.—In Mr. Alderson's letter on Puerperal Fever, published in our last, p. 183, ninth line from the bottom of first column, for "low typhoid," read "pneumonia of typhoid type." And in the eighth line of last paragraph of the letter, for "Mr.," read "Dr."—In the obituary of Dr. Officer, p. 185, for "Dr. James," read "Dr. James Laing."—The fifteenth name in the list, published last week, of gentlemen who passed the examination for the Membership of the College of Surgeons, should have been printed "Colborne," not "Colborn."

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Mr. H. Smith, London; Dr. Henry Bennet, London; Mr. George Pollock, London; Mr. C. Hawkins, London; Mr. Brudenell Carter, London; Dr. Blanc, Bombay; Sir Duncan Gibb, London; Mr. Granville, London; Dr. Owen, Birmingham; Mr. Teevan, London; Mr. Anderson, London; Mr. Berry, Wigan; Mr. Thomas Savill, London; Mr. Condon; Mr. Street, London; Mr. Collins, Notting-hill; Mr. Perry, Melksham; Dr. Dickinson, Stalybridge; Mr. Bligh, King's Lynn; Mr. Pateman; Dr. Mercer, Beverley; Mr. W. Parker, Bath; Mr. P. Swales, Sheerness; Mr. Cannon, Penrith; Mr. Trestrail, Aldershot; Mr. Griffith, Chesham; Dr. Lowe, Lincoln; Dr. Leake, West Kensington; Dr. Gordon, Salisbury; Mr. Broadhurst, Liscard; Mr. Haward, London; Mr. Nairne, Glasgow; Mr. Fox, Warrington; Mr. Ker, Brierley Hill; Mr. H. Dyer, Ringwood; Dr. Harding, Whittlesea; Dr. Carless, Devizes; Mr. Barker, London; Dr. Richardson, Rhayader; Mr. Wray, London; Mr. J. Hall, London; Mr. A. Hamilton, Edinburgh; Mr. Hayward; Dr. Alderson, Hammersmith; Dr. Stephens, Brighton; Mr. H. Colborne, London; Dr. Lee, London; Mr. Churchill, Liverpool; Mr. Blyth, Barnstaple; Dr. O'Neill, Dublin; Dr. Thompson, Leamington; Dr. Houseman, London; Mr. W. M. Farmer, Cape Town; Dr. Wadsworth, London; Dr. Kebbell, Brighton; Wormwood; A. C. S.; Non finis determinat probitatem actûs; V., London; A Medical Officer; F.R.C.S., Cheltenham; Antipodes; Fair Play; Physicist; Enquirer; R. H., Waltham; B. A., Stockton; &c. &c.

Letters, *each with enclosure,* are also acknowledged from—Mr. Stannard, Croydon; Mr. Utting, Castleton; Mr. Winget, Torquay; Mr. Fairles, Montgomery; Messrs. Smith & Son, Birmingham; Mr. Owen, Beaumaris; Dr. Horner, Paris; Mr. Fox, Manchester; Mr. Suffield, Hednesford; Mr. Leggatt, Eastry; Mr. Adams, London; Mr. C. H. Smith, Liverpool; Mr. Wilson, Whitehaven; Mr. Roberts, London; Mr. Mouritz, Runcorn; Mr. Mason, Burton-on-Trent; Mr. Tanner, Worcester; Mr. Cartwright, Leintwardine; Mr. Fitch, Market Bosworth; Mr. Godfrey, Northampton; Mr. Roper, Croydon; Dr. Watkins, Des Moines, Iowa; Mr. Greenall, Manchester; Mr. Harrison, London; B. J., Newcastle; M. A., Bicester; R. H., Shaftesbury; C. F. S.; Oxalis; Medicus, Halifax; Locum Tenens; W. H. P., London; F. F., Oldham; Dupa, London; S. B., London; M. L., London; J. W. P., London; J., London; Zeta; M.R.C.S., London; De B.; R. N.; M.; J. B., Lydd; M.D., London.

Cook's Excursionist and Advertiser, Spectator, Graphic, Broad Arrow, Leeds Mercury, Liverpool Daily Post, Examiner, Academy, Pharmaceutical Journal, Welshman, Women and Work, Fairplay, Manchester Guardian, Gleaner (Kingston, Jamaica), *Pocket Edition of the Gleaner* (Kingston, Jamaica), *European Review, Cork Constitution, Sanitary Review, Shield, Solicitors' Journal, Derbyshire Times, Land and Water, Huddersfield Chronicle, Surrey Advertiser,* and *East London Observer* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Aug. 5th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
July 30	30·13	W.	59	65	107	76	58	...	Overcast
„ 31	30·15	N.	51	56	102	70	54	...	Overcast
Aug. 1	30·18	N.	52	57	103	69	52	...	Cloudy
„ 2	30·25	N.E.	51	54	111	73	51	...	Overcast
„ 3	30·12	E.	55	59	99	71	53	...	Cloudy
„ 4	30·13	N.E.	54	58	104	69	52	...	Cloudy
„ 5	30·05	W.	53	57	...	...	50	...	Cloudy

Medical Diary for the ensuing Week.

Monday, Aug. 9.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ A.M. each day, and at the same hour.
Royal Westminster Ophthalmic Hospital.—Operations, 1½ P.M. each day, and at the same hour.
St. Mark's Hospital.—Operations, 9 A.M. and 2 P.M.
Metropolitan Free Hospital.—Operations, 2 P.M.

Tuesday, Aug. 10.

Guy's Hospital.—Operations, 1½ P.M., and on Friday at the same hour.
Westminster Hospital.—Operations, 2 P.M.
National Orthopædic Hospital.—Operations, 2 P.M.
West London Hospital.—Operations, 3 P.M.

Wednesday, Aug. 11.

Middlesex Hospital.—Operations, 1 P.M.
St. Mary's Hospital.—Operations, 1¼ P.M.
St. Bartholomew's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.
St. Thomas's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.
King's College Hospital.—Operations, 2 P.M., and on Saturday at 1½ P.M.
Great Northern Hospital.—Operations, 2 P.M.
University College Hospital.—Operations, 2 P.M., and on Saturday at the same hour.
London Hospital.—Operations, 2 P.M.
Samaritan Free Hospital for Women and Children.—Operations, 2½ P.M.

Thursday, Aug. 12.

St. George's Hospital.—Operations, 1 P.M.
Royal Orthopædic Hospital.—Operations, 2 P.M.
Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Aug. 13.

St. George's Hospital.—Ophthalmic Operations, 1¼ P.M.
Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

Saturday, Aug. 14.

Royal Free Hospital.—Operations, 2 P.M.
Charing-cross Hospital.—Operations, 2 P.M.

NOTICE.

In consequence of The Lancet being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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Hunterian Lectures
ON
SYPHILIS,
AND ON
SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

By HENRY LEE, F.R.C.S.,
PROFESSOR OF SURGERY AND PATHOLOGY TO THE COLLEGE.

TREATMENT OF SYPHILIS.

Boerhaave, in a treatise on the venereal disease, states that he had not long been engaged in the practice of physic before the continual novelty of cases which occurred to him made him wish that all his reading had been spent among such authors only who, when they had well described a disease, did not omit to point out its most certain remedies. The new symptoms which arise daily in the selfsame disease, and the wonderful disparity among the usual ones, must necessarily leave a physician in the greatest doubt and perplexity, especially when the disease is grown desperate through neglect, or when, by a wrong treatment, it is become the patient's torment and the physician's reproach. All practitioners, he says, agree that no disorder is more liable to these mischiefs than that which we call the French disease. In the management of this malady things sometimes occur which the longest observation is never able to discern; and the oldest artist must, at least sometimes, confess himself a mere novice, and own his ignorance both of the nature of the complaint and its cure. Moreover, it is not uncommon in this disorder to be apprised of things which, though they seem as trifles hardly worth regarding, yet shall soon produce a train of horrible consequences. "Notwithstanding," he adds, "I myself have been a practitioner in this disease for above six-and-thirty years, and although I had always the opportunity of acquainting myself with the nature of this anomalous evil, and made good use of it too, yet has every year produced me something new and unobserved before." Acting upon Boerhaave's suggestion, I shall endeavour to give the treatment, general and local, of the different forms of disease which we shall have to consider; and in the whole range of medicine there are none which yield so readily to treatment as those which form the subjects of these lectures.

The morbid changes observed in constitutional syphilis have been divided into primary, secondary, and tertiary. In uncomplicated forms of the disease, as we have seen, there is no great difference in the kind of action between the primary and secondary symptoms—and the classification of secondary and tertiary syphilis is by no means an easy task. Some have regarded affections of the skin and mucous membranes as secondary, while diseases of internal parts, including the bones, they look upon as tertiary. The secondary symptoms have been supposed to require mercurial treatment, while for the so-called tertiary symptoms iodine, sarsaparilla, and tonics generally have been recommended. Practically, such distinctions are, in my opinion, of little value, and often lead medical men to treat the name which they may happen to apply in a particular case rather than the disease itself. As far as any such classification can be made, that adopted by Mr. Lane is perhaps the best. Among the secondary affections of the skin he classes roseola, lichen, tubercles that may desquamate, ulcerate, or encrust; psoriasis, lepra, and ecthyma. Among the affections of mucous or semi-mucous membranes there are the white aphthous-looking ulcers on the tonsils, soft palate, and fauces, superficial ulcers on the sides of the tongue and angles of the mouth, mucous tubercles or condylomata on semi-mucous surfaces, and deep excavated ulcers of the tonsils. To these are added iritis, muscular pains, arthritic pains, pains in bones, periostitis and nodes. In these affections Mr. Lane considers that the venereal poison still exists, and that it may be communicated by contact and transmitted to the offspring. In such cases Mr. Lane considers mercury as beneficial and iodine of but little or no value.

Tertiary syphilis, affections of the fibrous membranes, include periostitis, resulting in nodes, caries and necrosis of bones; inflammation of fibrous tissues of joints, arthritis; inflammation of the fibrous tissues of the testicles, orchitis; inflammation of the fibrous tissues of the globe of the eye, and sclerotitis.

Among the affections of the skin and mucous membranes in tertiary syphilis are classed rupia and cachectic ulcers of the skin, rapid ulceration of the soft palate, fauces, pharynx and larynx, rapid ulceration of the rectum, vagina, nymphæ, and labia.

In the same class are included deposits of fibro-plastic lymph, imperfectly organised—first, in the areolar tissue, constituting subcutaneous or submucous tubercles; and, secondly, in the muscular tissue. These are frequently met with in the tongue, and occasionally in other muscles; and similar deposits are met with as post-mortem appearances in the liver, spleen, kidneys, lungs, and other viscera. To this list Mr. Lane adds lardaceous and waxy deposits, occasionally found in the post-mortem examination of the bodies of persons of dissipated habits.

The pathological changes in this class occasionally, according to Mr. Lane's view, present themselves in patients who have passed through the primary and secondary stages of syphilis, but in whom the venereal poison no longer exists, and therefore cannot be transmitted. The remedies required in these affections are especially iodine and sarsaparilla,—and mercury, in Mr. Lane's opinion, is injurious.

Some such classification as the above is necessary for systematic teaching, and that now given I believe to be perhaps the most convenient that has yet appeared. But I am satisfied that no such classification can be practically relied upon, either as a matter of pathology or with regard to treatment. A node, for instance, which is generally supposed to be among the latest manifestations, will sometimes be the first symptom to attract attention; and, on the other hand, I have seen a well-developed syphilitic scaly eruption on the arm of an Indian officer who had had no primary affection for seven-and-twenty years.

The morbid processes which Hunter has described, without reference to time in this as in other diseases, are those which are the most true to nature, and which furnish the most reliable indications for practice.

At whatever period of the disease we find the existence of the specific adhesive form of action, whether developing itself as a primary manifestation in the shape of an indurated sore, or as an affection of the inguinal glands, or in the form of papular, tubercular, or scaly eruptions on the body, mercury is, in my opinion, sure, if properly administered, to be beneficial.

When the disease, whether primary, secondary, or tertiary, has a tendency to produce suppuration in the affected parts, mercury should be administered with great caution.

The same may be said, as a rule, where the affected parts run rapidly into ulceration, although in some of these, to be subsequently considered, one form of mercurial treatment is wonderfully efficacious.

Where mortification takes place, whether affecting minute or larger portions of the tissues of the body, mercury given so as to affect the constitution is, as a rule, injurious.

Mr. Pearson states that his opportunities of administering mercury had not extended to less than twenty thousand cases, and that he felt himself fully authorised to assert that it is a remedy always to be confided in, under every form of lues venerea; and that, where we have only that one disease to contend with, it is a certain antidote, and as safe in its operation as any other active medicine drawn from the vegetable or mineral kingdom. "Let me not be misunderstood," he continues, "to say that it is a certain and safe remedy in the hands of anyone who undertakes to dispense it. Quite the contrary; for a multitude of indisputable proofs might be adduced that ignorance and error often render it one of the most precarious and mischievous medicines in use." Mr. Pearson goes on to say:—

"The superior efficacy of mercury, as the genuine antidote of syphilis, is sanctioned by the experience of three hundred years; and, what is a circumstance deserving of consideration, not one medicine besides, derived from the animal, vegetable, or mineral kingdom, has maintained its credit, with men actually employed in extensive practice,

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during a tenth part of that period. Perhaps it would not be rash to assert that no other medicine has maintained a general good reputation as a specific against the venereal disease beyond the lifetime of its first proposer.

"Men may amuse themselves by declaiming against mercury as an uncertain remedy; they may utter querulous details of its baneful effects, and retail tragical stories of its malignant influence on the body and mind of those who use it; but surely all this turbulent eloquence may be directed with equal advantage, not only against every potent article of the materia medica, but against the very aliment by which we are sustained.

"Almost every department of physical science contains propositions which require exceptions, or against which objections may be brought that scarcely admit of a satisfactory solution. Yet, notwithstanding these, philosophers do not suppose it necessary to abandon duly verified axioms, because a few phenomena, not perfectly understood, seem to militate against them.

"He who shall discard all general rules, because they admit exceptions, ought likewise, for the sake of consistency, to renounce all science, because human knowledge is fallible and imperfect."

In recommending the use of mercury as an anti-venereal remedy, before all others yet introduced into practice, Mr. Pearson says that he neither intends "to conceal or deny that real inconveniences are sometimes connected with the administration of that medicine. There are certain peculiarities of constitution, where its irritating qualities predominate over its medical ones, and where the mode of its agency seems rather calculated to distress the patient, and to injure the health, than to remove the disease for which it is exhibited; hence it were highly desirable to acquire a medicine equally potent as an anti-venereal, and not possessing certain active properties peculiar to that mineral. But this concession forms no valid objection against mercury exclusively.

"There are other articles of the materia medica which produce ill effects on the animal system, even when administered with the utmost skill and judgment. It is sufficiently known that antimony, ipecacuanha, Peruvian bark, opium, digitalis, rhubarb, magnesia, honey, &c., when brought into conflict with certain idiosyncrasies, will excite great and serious mischief; the primary and direct effect of these medicines, on one or more parts of the animal system, militating absolutely against their medicinal qualities. But exceptions of this kind make no impression upon the minds of considerate men, unfavourable to the generally acknowledged merits of these drugs; they note the particular instances, and substitute other medicines in their stead, which possess qualities corresponding to the indication.

"The wish which I have expressed, that another medicine could be found on which reliance could be placed for the cure of lues venerea, does in no wise spring from any distrust of the sufficiency of mercury; it originates merely from the same source which would induce me to desire that the means of remedying every form of human misery were abundantly multiplied."

Mr. Pearson adds:—"I regard every effort used to increase the store of useful medicines as highly meritorious; and, notwithstanding my firm persuasion of the safety, efficacy, and pre-eminency of mercury, in all cases truly venereal, yet I should be guilty of a very perverse and contracted mode of thinking were I to oppose the introduction of another specific, or censure the experiments made to ascertain its intrinsic merits. What number of specific medicines may yet lie concealed among the arcana of nature can form no proper subject of conjecture; but that mercury is as indubitable a specific against lues venerea as any one article of the materia medica is against any one malady, is a fact too authentic to be disputed by any who have either employment or reputation to lose; and as for those who possess neither, their suffrages are not worth collecting."

Although we have, since Mr. Pearson wrote these remarks, now seventy-four years ago, had many new remedies introduced, and some of them of great efficacy in their way, yet I would still endorse his opinion that there is no remedy like mercury for the cure of syphilis. The iodide and bromide of potassium stand pre-eminent among the medicines introduced since Mr. Pearson's time, but their value consists, in my opinion, in removing symptoms, not in curing the disease. I am of course aware that after a person has once had syphilis an impression is left upon his system which is not effaced for years, and perhaps not at all, and what I therefore mean by a patient's being cured, is, that he shall have no further manifestations of the disease. That this condition is often obtained by a proper course of mercury I cannot doubt. I have now seen a large number of patients who have told me that since they underwent a mercurial course they had remained well, and many of these had not had any return of the symptoms for between ten and twenty years. Out of Mr. Pearson's 20,000 cases, a considerable number probably were instances such as I shall have hereafter to describe of local disease, which, with time, would doubtless have got well under the use of guaiacum, sarsaparilla, mezereum, walnuts, opium, the Peruvian bark, the mineral acids, the muriate of barytes, or any other of the remedies at the time in use, or even under no treatment at all. But no one can doubt but that a large proportion of Mr. Pearson's cases were really syphilitic, and were cured by mercury in a way that they would not have been by any of the other remedies which, in other cases, he had tried so extensively. Mr. Pearson's wish that another medicine, equally potent as an anti-venereal, and not possessing certain active properties peculiar to mercury, might be found, has then been realised—but much has been done in the same direction, not by finding a new remedy, but by administering an old one in a different way.

Mr. Pearson mentions that he had so far modified the treatment of syphilis by mercury that he did not consider it necessary to produce ulceration of the gums, and he was satisfied if the action produced a spitting of from half a pint to a pint a day. Coming more near to our own times, the general treatment was, perhaps, that described by the late Mr. Cutler, in the Report of the Committee appointed in 1864 to inquire into the treatment and prevention of venereal diseases in the army and navy. He says:—"As soon as I find that the breath is affected, or the gums are affected, or that the skin is very much affected, or that diarrhœa is produced, I consider that the patients are quite under the influence of mercury."

Mr. Cutler is asked whether he had ever witnessed the treatment of constitutional disease without mercury?—and he says that when he came to London the late Mr. Rose was surgeon to St. George's Hospital, and was then also surgeon-major in the Guards, and he wrote his paper on the anti-mercurial treatment. He then stated that he had never given one grain of mercury to any patient in the Coldstream Regiment of Guards for two years. Mr. Cutler got a letter of introduction to Mr. Rose, in order to see his practice at the St. George's and St. James's Infirmary, and to his surprise he found that nine out of ten of the syphilitic patients were taking mercury. Mr. Cutler asked, "Have you returned to the mercurial treatment?" "To be sure I have," said Mr. Rose. "I only wanted to prove that the disease in the bones and the worst form of secondary symptoms were occasioned by repeated courses of mercury," which were then given in all cases, whether the patients were debilitated by consumption or any other cause. Mr. Rose further stated that even in the Guards he found one case out of every three followed by secondary symptoms with the non-mercurial plan of treatment, and that this did not occur once in ten times when mercury was administered. The mercurial treatment, Mr. Rose also considered, cured patients in half the time required by the non-mercurial. I may add that, even with regard to those who were supposed to be cured without mercury, the evidence is not quite satisfactory, for I was informed directly by one who was in the secret, and who himself afterwards did some business in the same line, that a large number of the soldiers in the Guards, who were supposed to be undergoing the non-mercurial plan of treatment, were in the habit of resorting to a person living in Knightsbridge, who sold them quantities of medicine containing bichloride of mercury. But this was only a repetition of what had long before occurred. Mr. Pearson mentions that in the time of Morgagni mercury was interdicted by some of the most eminent physicians of Italy, and that strong prejudices existed against it as late as the middle of the eighteenth century.

Mr. Cutler's assertion, and the teaching of those who held the same opinion, that when the patient's breath became affected the patient was sufficiently under the influence of mercury, has led to a very wide-spread and mischievous error. It was assumed, and is still thought, by a large number of practitioners, that the mercury should be then discontinued. Nothing is more common in the history of a case than the statement that the patient's gums were touched and the mercury discontinued. Such, certainly, was not Mr. Cutler's practice. What he meant was that the mercurial action should not exceed that which he mentions, and his practice was to continue that action for a considerable period. It is true that when the internal administration of mercury affects the bowels to any great degree, or produces much salivation, that mode of administering mercury has to be given up; but all who have had much experience in the treatment of syphilis know that the disease is not cured in this way. The observations of Sir Benjamin Brodie are here quite in point. He says that, "except in the slighter forms of the disease, we really cannot depend upon the internal administration of mercury for a cure. We may in this way patch up the disease, but it will return over and over again." One reason of this is obvious—namely, that the mercury, in a very great majority of cases, irritates the bowels, so that it has to be left off before the patient is cured, and on a recurrence of the symptoms the patient perhaps is, on the whole, in a worse condition, as far as his constitution is concerned, and certainly in a less favourable state for proper treatment, than he was before. Sir B. Brodie, following Mr. Pearson, gives the decided preference to the inunction of the mercurial ointment to all other plans of treatment in use in his time. He says:—

"When the symptoms are not of a mild character, the patient should, if possible, be confined to the house, except perhaps for an hour or two in a fine day. The going out into the fresh air (as Mr. Pearson observed long ago) will counteract the influence of mercury. You never can be responsible for thoroughly eradicating the disease where the patient is at all exposed to cold or wet, nor where he does not lead a most regular and careful life in all respects.

"In all cases of syphilis in which you employ mercury, remember that you have two objects in view: the first, to cure the present symptoms; the second, to prevent a return of the disease. It seems to me that a great number of practitioners at the present day regard only the first object, and lose sight of the second. I have frequently seen a person who has taken mercury for a chancre, which has, perhaps, healed in a fortnight, and then has left it off, although a very hard cicatrix has been left. Under such circumstances, in nineteen cases out of twenty, there will be secondary symptoms. If mercury be taken for the primary symptoms, the patient should never leave it off till the hard cicatrix has disappeared, nor indeed for some time afterwards: and so, where it is given for secondary symptoms, it should be continued for a considerable time after they have disappeared. A man has an eruption of the body; it fades away, under the use of mercury, in the course of a month; but the remedy must be used as a prophylactic for another month. If a patient be confined to his house, or only allowed to go out a little in a fine day; if he be made properly to rub in the ointment, and the course be carefully watched and continued for some time after the symptoms have subsided, you will, I am satisfied, in the great majority of cases, make a real and permanent cure of the disease. I suspect that this is not the way in which it is administered by the majority of practitioners at the present time, but it was so administered formerly. You must not suppose that we have advanced alike in all departments of surgery; indeed, I am sure that in some things we have gone back, and I believe this to be one of them. I am much mistaken if the mercurial treatment of syphilis, as employed by the late Mr. Pearson during the greater part of his life, was not as nearly perfect as possible. At any rate, it was much more successful than the less careful treatment of modern practitioners. That gentleman was surgeon to the Lock Hospital; and having no general hospital to attend to, the powers of his mind were more especially devoted to the study of syphilitic diseases and their treatment; and the practice which I have now recommended was that which he usually adopted. When I was young in my profession I had frequent opportunities of meeting him in private practice, and of learning how profound a knowledge of the subject he possessed; and I may take this opportunity of recommending for your perusal his treatise on the various articles of the materia medica recommended for the cure of syphilis, in which he offers many excellent observations on the use of mercury, and enters into details in a way in which it is not my object to enter into them at present."

The preparations of mercury generally used were the blue pill, the mercurial ointment, calomel, corrosive sublimate, and the iodides and bromides of mercury; for fumigation, the grey oxide and the bisulphuret.

On account of its convenience, and the little trouble it gives, the administration of mercury in the form of pills is that which the patient prefers. But mercury can seldom, if ever, be given in this way long enough to cure the disease. It acts upon the patient's stomach and intestines before it has accomplished its object, and it then has to be discontinued. It may for a time, however, be usefully employed either by itself or in combination with external treatment. Three grains of blue pill, with half a grain of opium, night and morning, or half a grain or a grain of the iodide of mercury, with a quarter of a grain of opium, night and morning, are convenient modes of giving mercury internally, and will in general soon produce its specific action. The corrosive sublimate or perchloride of mercury can never be trusted to for the cure of syphilis, although it is a valuable auxiliary in some stages of the disease.

The inunction of the mercurial ointment is the plan of treatment recommended by Mr. Pearson and Sir B. Brodie. This answers very well if a patient will carry it out, but it is not often in private practice that this can be accomplished. It involves a considerable amount of trouble, and the patients object to the dirty appearance on their skin and on their clothes. This last objection has of late been partially removed by the introduction of the oleate of mercury. In some patients the skin does not bear the inunction of mercury well. A crop of pustules not unfrequently appears, and this sometimes gives the patient a considerable amount of annoyance. Mr. Pearson was in the habit of commencing by the inunction of half a drachm of strong mercurial ointment every night, and he was very particular during the treatment not to allow the patients to be exposed to the influence of cold air. He kept them to their room, and sometimes to their bed. The advantage of this plan he found to be that the stomach and bowels did not often suffer from the action of mercury as a metallic salt; a larger quantity of mercury could be administered; the specific powers of mercury could be obtained with great certainty, and sometimes advantage might be derived from the friction being employed near the seat of the disease. The inconvenience of the pustular eruption he found might be avoided by previously shaving off the hairs. All acids during a mercurial course were forbidden, and even tea, if it became acid on the stomach. No vegetables except potatoes were to be eaten, and occasional aperients were administered, as it was found that a common effect of the plan of treatment was to induce constipation. Mr. Pearson was in the habit of increasing the quantity of mercury used to one or two drachms, or even half an ounce. The salutary or specific and injurious effects he thus sums up:—

1. It may prove fatal by acting as a metallic salt, in which case it produces vomiting, fainting, diarrhœa, and dysentery. Where such symptoms arise, even if unattended with danger to life, the treatment will fail in its specific operation.

2. It may act as a mineral poison, not by its direct action upon the stomach, but by producing erethismus, inflammation of the joints, effusion into the bursæ, ill-conditioned ulcers, mortification of parts, and great debility. In all these cases the mercury acts as a mineral poison, affecting very much the mind and the constitution in general, and not producing its beneficial effects on syphilis.

3. Mercury often acts beneficially by promoting perspiration.

4. It promotes the urinous secretion, frequently rendering it turbid and offensive, and liable to deposit a white sediment.

5. It often produces inflammation of the glandular surface of the mouth, swelling of the tongue, and sponginess of the gums.

6. It promotes increased secretion of saliva, producing ptyalism.

7. It sometimes induces powerful depression of the animal functions.

The increased secretion from the skin, kidneys, and salivary glands, with depression of the animal spirits, were considered consistent with its operation as an antidote.

Mr. Pearson was of opinion that the gums should always be made tender and spongy, but this was only to be considered as an evidence of the action of the remedy, and as constituting no essential part of the process of cure. The plan of treatment was continued, if possible, until the symptoms had disappeared, and for some time afterwards, and this might occupy from seven to nine weeks.

I have been particular in giving an account of the action of mercury in Mr. Pearson's day, as, under the milder treatment now pursued, some of these results are seldom seen and little known. But another evil has crept in—namely, that patients who have been supposed to have undergone a mercurial course have done so very inefficiently; the gums have perhaps been "touched," the mercury has then been discontinued, and the disease has remained.

ABSTRACT
OF THE
ADDRESS IN PHYSIOLOGY,

Delivered before the Annual Meeting of the British Medical Association, at Edinburgh, August, 1875.

BY WM. RUTHERFORD, M.D., F.R.S.E.,
PROFESSOR OF THE INSTITUTES OF MEDICINE IN THE UNIVERSITY OF EDINBURGH.

THE VIVISECTION QUESTION.

PROFESSOR RUTHERFORD in his opening remarks said that much had been done in Germany and elsewhere to detach physiology from medicine, and develop it as a branch of purely natural science. Such a development, however, gave to physiology an aspect somewhat different from that which it wore when it was regarded, as in the Scotch schools, as the Institutes of Medicine. Therefore the latter title was useful to the teacher, inasmuch as it reminded him that he was more especially to dilate on those facts of physiology which were of value to the medical practitioner. Physiology was an experimental science. Apart from those which were the results of artifice, experiments of great physiological significance were being continually wrought by accident, and by disease, and the science had owed much in the past to those engaged in the daily study of those pathological experiments. Assuredly they could not afford to detach physiology from medicine, for, without doubt, in the future as in the past, the study of those bodily conditions that were abnormal would throw much light on those that were normal; while, on the other hand, those whose knowledge of physiology was most profound were precisely those who, as physicians, were able to conduct pathological analysis with skill and success.

At present there was reason for some anxiety in regard to the manner in which this much-needed knowledge of the Institutes of Medicine was to be attained by their students. In recent years the teaching of physiology had made a great stride in this country. Laboratories duly appointed had been and were being organised; and the method of physiological instruction had in most instances passed from the mere prelection illustrated by diagrams to an experimental exposition of the subject. In his student days the latter element was wanting, and at this moment there was distinct danger of a return to something like that miserable mode of instruction in consequence of the fanatical clamour of a number of persons excited, it must be admitted, by one or two members of their own profession. He could not suppose that any member of the Association entertained the idea that experiments on the lower animals were not justifiable for the discovery of new truth; but he was aware that there were some who entertained the idea that vivisection was not necessary when it had for its object the mere demonstration for educational purposes of facts already known. Those who held this doctrine appeared to him to forget that physiology was an experimental science, and that no right conception of the subject could be obtained unless the student was shown the experiments that were necessary for the demonstration of certain facts. No language, however clear, could depict the movements of the heart, of the circulation of the blood, so as to call forth a picture so vivid and true as that which without an effort sprang forth the moment those things produced an impression through the organ of sight. The manner in which the blood pressure was affected by retarding the heart's action, by dilating the arterioles, or by muscular contraction, the changes which followed division of the sympathetic nerve in the neck, the result of stimulating the cortex of the brain, the reflex power of the spinal cord, the tetanus from strychnine, and the paralysis of voluntary movement produced by curara—these and other equally great fundamental facts in physiology gave rise to nothing more than vague and feeble conceptions unless they were witnessed. Had not every teacher repeatedly observed the altogether different mental attitude which students assumed the moment he passed from mere description to a demonstration of phenomena? He far more forcibly arrested their attention, and far more deeply imprinted on their minds the facts he would bring home to them. The student was apt to forget that which he had merely been told, but the impression of that which he had seen was with difficulty effaced. There was, however, a great deal more than this. It was not enough that the student of medicine should be crammed with so many facts about the bodily machine; it was of infinitely greater importance that he should be really educated in a knowledge thereof. He could not be educated unless it was assumed that he had a right to question statements made to him, and to demand a demonstration of the truth of what was said. It was not enough that the teacher merely said in an *ex cathedrâ* manner that this or that was so; he ought on all possible occasions to prove to the students that it was so; he ought to appeal to them as individuals who could and ought to think for themselves, and therefore as individuals who were not merely to be crammed, but to be convinced. Every examiner in physiology must have repeatedly observed how glibly a student might repeat a statement of fact, but how sorely puzzled he often appeared when asked for the evidence on which his statements were founded. Moreover, everyone must have noticed how often the student lacked knowledge that was definite, and mingled together things that were uncertain with things that were certain, because he had not been sufficiently trained to examine experimental evidence. Of how little avail was this unreasoning knowledge when the student came to thread his way through the difficult analysis of disease! He either believed, or he doubted, too much; he oscillated from one extreme to another, because he was wanting in definite knowledge, and because his critical power had not been sufficiently developed. Now, he maintained that this definite and critical knowledge regarding the bodily organism could not be attained unless their students were shown experiments on living animals, and he held that those authorities who seemed to be of opinion that this method of tuition might be dispensed with, were entirely overlooking the vast importance, not only to the student himself, but to the whole race, of an experimental manner of laying the foundation of a knowledge of the institutes of medicine. It was, he believed, too much to assume that those who advocated a flimsy and superficial method of teaching physiology were altogether actuated by feelings that were termed humane. He feared there was lurking behind that disposition a feeling of indifference to what were the true principles of medical education; or, what was more likely, there was an incorrect appreciation of those principles. It must, however, be admitted that, notwithstanding the vast importance of physiological experimentation in the teaching of medicine, the circumstances under which it was displayed demanded serious consideration. No one could deny that animals daily suffered pain in order that they might be eaten by man, and also that man might not be eaten by them. If it was thought necessary to put countless animals to a painful death for the purpose of keeping the human race alive, might not physiologists inflict pain, not only for the discovery of new truth, but also for the right education of those who had to spend their lives in preventing or in healing disease? Was the one object of less importance than the other; indeed, was not the object in both cases precisely the same? Why, then, this clamour against physiologists? The pain produced in all the physiological experiments performed in this country in the course of a year was, he believed, as nothing compared to that inflicted upon animals by Her Majesty's Lords and Commons on an autumn holiday. He would not, however, for a single moment speak lightly of the production of pain, for it was the function of those who pursued medicine to alleviate pain and suffering. Their students would indeed be badly trained for the pursuit of a calling so humane as that of medicine, if they did not find their teachers on all occasions carefully avoiding the giving of pain that was not absolutely necessary. Therefore it was their duty, for this as well as for other and obvious reasons, to use narcotics in their experiments upon animals whenever it was possible. It was not necessary for a sound physiological education that their students should be shown all the experiments that were needed to demonstrate physiological truths; they probably did enough if they showed experiments on the cardinal points of physiology; and he averred that all the experiments on the higher animals that were really required for the purpose of education could be performed with the aid of narcotics. Seeing that this was so, why should it be that some had become convinced that, in consequence of the present inflamed state of the popular mind on the subject of vivisection, the right education of medical students must be abandoned? The popular mind had been abused by inaccurate and misleading statements regarding both their motives and their actions. He maintained that a great and deplorable error was committed when the unreasonable clamour of the anti-vivisectionists was met in the spirit of compromise instead of the spirit of stern resistance. He believed that the unfortunate Vivisection Bill which was laid on the table of Parliament conferred a dignity on the policy of the anti-vivisectionists which but for that Bill it would probably never have possessed. It was true that there had been a withdrawal of that singular Bill, according to which they were to have been fined fifty pounds or to have been sent to prison for two months if they had dared to show to their students any experiments, even upon a narcotised animal. But the effect of the Bill was not effaced; the increased boldness which it had given to the pretensions of the anti-vivisectionists was only too evident. All that they could now hope was that the good sense of the Legislature would in the end prevail, and that it would do nothing to hamper the education of medical men.

The learned Professor went on to explain, with the help of numerous diagrams, the results of a series of experiments he had made in reference to the action of certain drugs on the biliary secretion of the dog. These results, briefly stated, were as follows:—Croton oil was not found to be an important hepatic stimulant; podophyllin stimulated the liver enormously, and caused the production of a bile almost the same as that which was secreted without its action; aloes was a very distinct hepatic stimulant, and produced less intestinal irritation than podophyllin; rhubarb never failed to increase the secretion of bile, almost the same in character as that secreted without its help, while it caused less intestinal irritation than either podophyllin or aloes; senna stimulated the liver, but not to the same extent as rhubarb, and it seemed to render the bile more watery; colchicum caused the secretion of a large amount of biliary matter; taraxacum stimulated the liver, but not to any very great extent; scammony excited the liver, but not to a marked extent; calomel increased the secretion of bile in one experiment, but three others appeared to show that it was not a hepatic stimulant, at all events in the dog; gamboge produced strong intestinal irritation and profuse purgation, with a fall in the secretion of bile, probably owing thereto; castor oil showed decided purgative action, but produced a slight stimulation of the liver; alcohol did not increase the secretion of bile. It thus appeared that podophyllin, rhubarb, aloes, and colchicum had the most marked effect in increasing the biliary secretion of the dog; and as to their mode of operation, it appeared most probable that they were absorbed and directly affected the liver, though on this point it was not professed that anything had been definitely settled. A far more important practical point was the following:—How was it that these experiments proved podophyllin to be a hepatic stimulant, while in the experiments of the committee presided over by Dr. Bennett it was found that that substance diminished the amount of bile secreted? The only apparent explanation was that in the present experiments the dogs had been kept fasting for seventeen or eighteen hours, while in those of the committee they had had their usual food. The clinical observer would probably accept the facts as not opposed to clinical experience as regarded man, except in respect of calomel. It had simply been shown that while there were a number of substances supposed to be cholagogues in man which excited the liver of the dog, calomel was not one of these, although in the dog, as in man, it produced purgation, and although the researches of Dr. Bennett's committee conclusively showed that dogs could be salivated by mercury as well as man.

ABSTRACT

OF THE

ADDRESS IN SURGERY,

Delivered before the Annual Meeting of the British Medical Association, at Edinburgh, August, 1875.

BY JAMES SPENCE, F.R.S.E.,
PROFESSOR OF SURGERY, EDINBURGH UNIVERSITY.

PROFESSOR SPENCE, in the outset of his remarks, said that looking at some of the more prominent changes in surgical practice, a superficial observer might almost imagine that, instead of progressing, the science moved in a cycle, and were he disposed to be cynical, he might suggest that practitioners had come back to sheer mechanical force, complicated dressings, and red-hot knives. On more careful examination, however, it would be seen that even in cases where the practice was not absolutely new, the method of applying it had been so modified and improved as to constitute a real advance and acquisition to the surgeon's resources. In illustration of this proposition, Mr. Spence went on to speak of the method of treating fractures by extension, the development of periosteal surgery, the reduction of dislocations, the bloodless method of operating, and the treatment of croup and diphtheria, between which latter diseases he drew a broad distinction. The statements made had reference to a large extent to cases which had come under the lecturer's own observation, and were elucidated by diagrams and preparations.

Proceeding to speak of the treatment of wounds and surgical dressings, the learned Professor contrasted the old practice, in which stress was laid on digestion, mundification, and incarnation, and no wound was allowed to heal by first intention, with the truly philosophical views of the adhesive process taught by Hunter, and nowhere more intelligently carried out than in Edinburgh, through the influence and the writings of John Bell, Liston, and Syme. The results obtained from the latter system were, he said, excellent, and the system remained in use to the present time. Now, however, they were again in a transition state in regard to the treatment of wounds. The antiseptic method of Professor Lister was being pressed, in some quarters, to the exclusion of conditions which he could not but think, at least equally, if not more important in the treatment of wounds and operations. The present was not the place, nor was there time, to discuss the germ theory of putrescence, or the general value of the antiseptics now contending for pre-eminence; but some of the statements advanced for the antiseptic system so ignored the effects obtained by the simple dressing and treatment of wounds, and such infallibility was claimed for the effect of the special method, as to require some notice. When he read statements that the antiseptic method was to be regarded as one of the most important contributions to modern practice, inasmuch as it made wounds heal by first intention, instead of going through the painful processes of granulation and suppuration, he could only regard such statements as arising from want of experience in, or misrepresentation of, the simple method of treating wounds; for assuredly healing by granulation was neither the object nor the general result of that plan of treatment. Suppuration, he believed, was not unknown in the antiseptic system, whilst the average duration of treatment, as far as he could learn by hospital statistics, was not lessened. But when he found a German professor and hospital surgeon stating that, after a year and a half's experience of the antiseptic treatment he was able to guarantee with certainty the perfectly successful result of his operation, such an assertion challenged closer examination, and one demanded proof on the question how far, apart from other conditions, different modes of dressing stood in the relation of cause to successful results. The answer to this important question must rest on sufficient data—carefully weighed statistics. It would not do to point to some brilliant results in individual cases, because all methods of treatment could produce that kind of proof. Nor would it do to state that no death from pyæmia had occurred under the system. The statistics must indicate the nature of the disease or injury for which the operation had been performed, and the cause of death in fatal cases, not by a conventional term, but by giving the symptoms during life, and the organic lesions found after death. With extensive statistics of this kind, they should be better able to judge of the comparative advantages of different systems. It was curious that they heard so much of success from abroad; and he thought that sufficient time and scope had been given to the system in this country to enable those who used it to furnish statistics such as he had indicated, and thus enable the profession to judge more dispassionately of its results.

In comparing of late the results of his own hospital practice, he had been struck with the success which attended a very simple treatment; and this led him to question their progress in departing from it. During three years, out of sixty-three major amputations for disease, there were only three deaths; and out of twenty-three cases of excision of joints, only two deaths. The treatment consisted in thoroughly washing the surface of the wound by pouring tepid water over it, occasionally applying tincture of iodine on the flap, while the dressing consisted in a fold of lint or thin muslin over the same. Again, in preparing statistics of his amputations, he found evidence that certain conditions, such as the nature of the disease or injury, had a most important influence on the result; such an influence, indeed, as he could hardly have supposed till the statistics brought it distinctly before him. His later statistics corroborated his former; so that he could not accept the statement of the learned German professor to which he had referred.

Whilst he spoke of the antiseptic system, meaning the special method, he need hardly say that all surgeons had for their object the avoidance of putrescence, though their views might differ as to the best way of attaining it. He could not close without recommending the advantage, in treating lacerated wounds and burns of the extremities, of continuous immersion in the tepid bath and avoidance of all meddling with the injured part and the agony to the patient caused by the changing of dressings. In the case of burns especially its advantages were most conspicuous, for the constant moisture kept the superficial tissue pliable, and motion of the parts could be effected gradually while the limb was immersed in the bath. Here the antiseptic method could be carried out most thoroughly by mixing carbolic acid with the fluid in which the limb was immersed. The retrospect he had taken showed that when true principles had been disregarded or lost sight of they had ultimately had their value recognised, and, modified and improved, had become the advances of the present. So, for the future, he felt confident that all that was true and good in any system might emerge with all the greater beauty and usefulness that it had been purged of its dross by the test of observation and candid inquiry.

Dr. Frankland reports that the condition of the London waters during July was satisfactory. The advantage of the storage of river water in reservoirs is shown in the state of the West Middlesex water, which, in consequence of longer storage, exhibited scarcely half as much evidence of previous sewage or animal contamination as the Lambeth Company's water, though both are derived from the same source.

ON THE

DIAGNOSIS OF ENLARGED BRONCHIAL GLANDS IN CHILDREN.

By EUSTACE SMITH, M.D., F.R.C.P.,
PHYSICIAN TO H.M. THE KING OF THE BELGIANS;
PHYSICIAN TO THE EAST LONDON CHILDREN'S HOSPITAL;
ASSISTANT-PHYSICIAN TO THE VICTORIA-PARK HOSPITAL FOR DISEASES OF THE CHEST.

Enlargement of the bronchial glands is a very common lesion in early life. In many children the lymphatic glands generally over the body enlarge upon the slightest irritation, and when once swollen are slow to return to their natural size. It is in these cases that cheesy degenerations are apt to occur in the swollen glands, and suppuration, with the formation of an abscess, may be the consequence. This is common in the case of the cervical glands, and happens sometimes in those of the chest. In any case the presence of a cheesy mass is not unattended with risk, and its very existence is a sign of that vulnerability of constitution which predisposes to the so-called consumptive diseases, and is a constant source of danger.

Children who have been subject to repeated attacks of pulmonary catarrh are very liable to enlargement and caseation of the bronchial glands. Whooping-cough is also apt to leave behind it the same condition, and after measles it is frequently met with.

The seat of the enlarged glands is at the bifurcation of the trachea, and therefore behind the first bone of the sternum, and a little below it. They give rise to dulness on percussion at this spot, and the dulness often extends to each side of the bone, and also downwards to the upper part of the second bone. In the case of young children there is sometimes in health a little dulness on percussing the upper bone of the sternum, produced by the underlying thymus gland, but the dulness does not in such cases reach laterally beyond the limits of the manubrium. In the case of great enlargement of the bronchial glands there may be dulness also behind in the intrascapular region, but this is rare on account of the thickness of lung which intervenes between the glands and the posterior wall of the thorax.

The symptoms by which enlargement of the bronchial glands can be distinguished—viz., distension of the cervical veins, swelling of the neck, dyspnœa, spasmodic cough, and whispering voice—are all pressure signs due to the encroachment of the swollen body upon the parts around. They are, therefore, not present until the increase in size of the glands has become considerable. In these cases the dulness on percussion is usually marked, and if the glands are of sufficient size to compress the trunks of the large vessels, the ordinary stethoscopic signs of such pressure will be heard. At this stage the nature of the case is obvious; but at an earlier period, and before the enlargement has become sufficiently great to give rise to the signs enumerated above, the diagnosis of the lesion is much less easy, as the symptoms by which it is accompanied are few and obscure. At this time much assistance can be gained from the following experiment. If the child be made to bend back the head so that his face becomes almost horizontal and the eyes look straight upwards at the ceiling above him, a venous hum, varying in intensity according to the size of the diseased glands, is heard with the stethoscope placed upon the upper bone of the sternum. As the chin is now slowly depressed, the hum becomes less loudly audible, and ceases some time before the head is brought back again into the ordinary position. The explanation of this phenomenon I believe to be that the bending backwards of the head throws forward the lower end of the trachea, which carries with it the glands lying in its bifurcation, and the left innominate vein, as it passes transversely behind the first bone of the sternum, is compressed between the enlarged glands and the bone. In cases where this sign has been present there has often been some slight dulness over the manubrium, leading one to suspect the existence of enlargement of the glands, and the occurrence of the hum thus produced I now always consider to be evidence confirmatory of the suspicion. The experiment does not succeed in cases of flat chest where there is no reason to suspect glandular enlargement, nor can the hum be produced by the thymus gland in a healthy child. This gland lies immediately behind the sternum in front of the great vessels; enlarged bronchial glands lie behind the vessels in the bifurcation of the trachea. A swelling in front of the vessels does not appear to set up pressure upon the vein when the head is bent back in the position described. I have examined many children, with a view to test this point, and in no case have I found the characteristic hum produced except in cases where there was reason from other symptoms to suspect the presence of bronchial glandular enlargement.

The following cases furnish good illustrations of the symptoms in question:—

Arthur P——, aged eight years, had had scrofulous disease of the knee-joint for twelve months. The cervical glands were enlarged, and his skin generally was harsh and dry. For two months his breathing had been short, although he had had no spasmodic attacks of dyspnœa. During the same time he had been troubled with a dry hollow cough. There was slight dulness at the left supra-spinous fossa, and a little crepitating rhonchus was heard there at the end of inspiration. There was no dulness on percussion at the upper part of the breast-bone, but when the boy held his head back so as to turn the face upwards to the ceiling a loud continuous hum was heard near the left edge of the front bone of the sternum, and this ceased when the chin was brought down again into the natural position. This boy had no swelling of the cervical veins, spasmodic cough, or other sign of enlarged bronchial glands, except the peculiar and characteristic hollow, almost cavernous, breathing which is often heard in such cases, when the lips are closed, over the upper part of each lung. This, however, disappeared to a great extent when the mouth was open.

Alice T——, aged six years, a pale, thin child, had been weakly for several months, and had been getting thinner. She had no cough to speak of. On stripping the child to examine her chest, it was noticed that the superficial veins at the upper part of the breast-bone and at either side were unusually visible. The veins of the neck were not distended, nor was there any enlargement of the cervical glands. The percussion note on the front bone of the sternum was perhaps a little high-pitched, and when the child bent her head well backwards, a very loud continuous roaring sound was heard over the first two sternal bones, and extended to the articulation of the second right cartilage. The sound ceased when the chin was depressed again. There was no dulness in the intrascapular region behind.

It would be easy to multiply illustrations of this symptom, for disease of the bronchial glands is very common in children. I believe the hum in the vein to be capable of being produced in every case where the glands of the chest are enlarged, so long as these are movable. If they are fixed, and at some distance from the sternum, the experiment fails. Thus, in a boy aged three years, the subject of lymphadenoma, who died in the East London Children's Hospital under the care of Dr. Bruce, there was dulness at the upper part of the breast-bone, which was continued down in a pyramidal form as far as the heart's dulness. No venous hum, however, was produced by bending back the head. On examination of the body of this child, yellow flattened cheesy masses were found adherent to the inside of the sternum, and others much enlarged and immovable were seen filling up the interval between the bifurcations of the trachea. In this case the alteration in the position of the head did not set up pressure upon the vein, as the glands being fixed could not be carried forwards against the vessel.

The venous hum thus produced by bending back the head I believe to be the earliest sign of enlargement of the bronchial glands in a child, preceding dulness on percussion, an occurring long before the ordinary pressure signs on which the diagnosis of the lesion is usually made to depend.

George-street, Hanover-square, W.

THE TREATMENT OF DISEASES OF THE HIP-JOINT.

By H. C. ATTENBURROW, F.R.C.S.,
LATE SURGEON TO THE NOTTINGHAM HOSPITAL.

On January 5th, 1874, I was called to see a child named H——, aged eleven years. The left leg was two inches shorter than the right; there was no swelling, but flattening of the left hip. Pulse quick and thready; profuse perspirations; loss of appetite; constant vomiting; and great emaciation. The pain in the left hip and knee was so severe that she would not allow anyone to approach the bed for fear of their touching the clothes, and could not bear the least movement of the limb.

I told the mother I could give her child immediate relief from pain by laying open the hip-joint—an operation I had performed several times with complete success; at the same time, as I believed I was the only surgeon in the habit of adopting this mode of treatment, I should wish her to ascertain the truth of my statement, and referred her to the parents of two children upon whom I had operated under similar circumstances. If she desired me to attend the child she was to let me know.

Jan. 6th.—I received a message, stating that "she placed the child under my care; I must do what I thought best."

7th.—With the assistance of Dr. Vaudin, I made an incision about four inches long, on the upper and posterior edge of the trochanter, cut down into the joint, and freely divided the capsular ligament. The upper and outer edge of the acetabulum was in a state of caries; the head of the femur seemed sound. I passed a pledget of lint dipped in oil into the joint, filled up the wound with lint, and gave her an opiate.

8th.—The child has passed a quiet night; slept well; no perspiration; a little smarting pain in the wound, but can bear the limb moved. I had great difficulty in persuading her to allow me to touch it on account of the great pain she has hitherto suffered.

9th.—On removing the bandage the pledget of lint came away. The discharge was slight, but very offensive, that of necrosed bone. I ordered her tonics and nourishing diet. In a few days sleep returned, the vomiting and perspirations ceased, but the appetite was very delicate for some time. In a fortnight she was able to be removed without pain to the sofa.

I kept the wound open by introducing a piece of lint dipped in a solution of sulphate of copper and then dried.

In two months the offensive odour of the discharge had completely disappeared, and she was able to move about on crutches. I still kept the wound open.

Jan. 5th, 1875.—The child is now quite strong, healthy, and plump. The limb is about an inch shorter than the other; she can bear her weight on it, walks very well with crutches, wearing a high-heeled and toed boot.

I consider early incision into diseased hip-joints the treatment of common sense. When the bone is diseased a quantity of acrid matter is collected in the acetabulum, the head of the femur becomes dislocated, and the tension of the capsular ligament produces intense pain in the hip and knee. This is not occasioned by the pressure of the head of the femur in its new position, as the suffering vanishes when the joint is opened. I have always found that after opening a joint with caries of the bone the healing process commences in a fortnight or a month. I cannot understand the objection of many surgeons to laying open diseased joints; it is more requisite than in a common abscess. In the latter the matter soon finds an exit, but in joints the acrid fluid is pent up, and seldom points until the whole surface of the bone is diseased.

In the year 1849 I first tried this treatment in the Nottingham Hospital; it was so satisfactory that in 1850 I operated on two private patients with equal success. On account of ill-health, I sent in my resignation as surgeon to the hospital, came to Jersey, and did not practise for some time. I have operated eight times in Jersey, and in two cases, aged eleven and thirty-nine, have after the operation succeeded in reducing the dislocations, effecting a complete cure, the patients being able to walk as well as ever.

I have been present at a great many operations for excision of the joints, and I firmly believe that were incision of the joints performed at an early stage in the disease such operations would never be required. Were it for nothing else but the immediate relief of pain produced by incision, I should recommend its adoption.

Les Creux, St. Brelade's, Jersey.

BENEFICIAL USE OF JABORANDI IN CASES OF DIABETES INSIPIDUS OR POLYDIPSIA.

BY T. LAYCOCK, M.D.,

PROFESSOR OF THE PRACTICE OF PHYSIC AND OF CLINICAL MEDICINE, UNIVERSITY OF EDINBURGH.

(*Reported by* J. M. BROWN, M.B., *and* F. ALSOP, M.B.)

THE following case of polydipsia was the subject of a clinical lecture by Dr. Laycock during the last winter session, in which he pointed out that the disease in both forms of diabetes and in certain kinds of Bright's disease and dropsy is a *neurosis*, having its seat in that part of the encephalon which regulates the amount of water in the blood, and having, therefore, both anatomical and functional relations with the sudoriparous glands and the kidneys, and with the appetite for water and the sense of thirst. The pathology and clinical history of both kinds of diabetes were discussed, and the experiments of Claude Bernard and others, as to the production of polyuria, albuminuria, and glycosuria by injury of certain portions of the floor of the fourth ventricle, were alluded to as having a distinct relation to the study of those diseases clinically.

CASE 1. (Reported by J. M. Brown, M.B., class-assistant to Professor Laycock.)—Wm. K——, aged forty, a shoemaker, was admitted to the Edinburgh Royal Infirmary Dec. 24th, 1874. He complained of great thirst, a feeling of pain and heat from the lips to the stomach, profuse urination, and a tendency to pass water frequently; also of dimness of vision.

His previous health had been good until about five months prior to his admission. During these five months he had suffered much from thirst, which was most severe at night and in the morning. He had a hard chancre many years ago, but no other personal indications of syphilis subsequently. His wife had consecutively seven still-born children. As to his social history, he had drunk considerably of whisky, having a bout of drunkenness, lasting for several days, about every three weeks.

Condition on admission.—He is a slightly-built man, 5 ft. 4½ in. in height, and weighing 8 st. 4 lb. The integument is hard and dry; temperature 98°. He stated that he did not think he had perspired for five months. The circulatory and pulmonary systems gave normal results, with the exception of a little emphysema of the anterior margins of the lungs. Pulse 92; respiration 16. The tongue somewhat furred, but at the anterior part of the dorsum a small patch is seen, about the size of a threepenny piece, denuded of epithelium, and appearing raw and glistening. The fauces are slightly congested, but quite moist. The appetite is impaired; bowels are regular. Hepatic and splenic dulness normal. He has sometimes to micturate every half-hour. The urine is pale, almost colourless, faintly acid, sp. gr. 1005; chlorides; phosphates and urea only in small amount; traces of indican; no sugar or albumen, and no organised or crystalline deposits: in short, it exhibits only the character of a very dilute urine. The testicles are rather small. He states that he has occasional nocturnal emissions, and feels competent for sexual congress. He sleeps well, and is intelligent. Cutaneous sensibility unimpaired. On examining the right eye ophthalmoscopically, the optic nerve was found to be atrophied.

The quantity of urine passed daily during the first week after admission was as follows:—

From 3 P.M. Dec. 24th till 3 P.M. Dec. 25th, 420 oz.
„ „ 25th „ „ 26th, 500 oz.
„ „ 26th „ „ 27th, 300 oz.
„ „ 27th „ „ 28th, 400 oz.
From 3 P.M. Dec. 28th till 3 P.M. Dec. 29th, 400 oz.
„ „ 29th „ „ 30th, 330 oz.
„ „ 30th „ „ 31st, 400 oz.

The patient was ordered a good diet, with two pints of milk daily, and as much ice as he chose to take with his liquids. He also took ten minims of dilute sulphuric acid and ten minims of tincture of opium every four hours. This mixture was continued till Jan. 4th, when the amount of urine in twenty-four hours was 366 oz. No good having resulted, twenty grains of iodide of potassium and a quarter of a grain of extract of belladonna were ordered thrice daily. On Jan. 15th it was observed that there was a certain periodicity as to the quantities of urine passed daily, as the following statement shows:—

Jan. 11th to 12th, 228 oz.
„ 12th to 13th, 272 oz.
Jan. 13th to 14th, 200 oz.
„ 14th to 15th, 366 oz.

Five minims of liq. arsenicalis were given along with the iodide. The patient was desired to take as little fluid as possible. He became very fond of the iced milk and water, and was sometimes observed to drink it ravenously. A warm-water or hot-air bath was sometimes administered, and on one occasion the latter induced a slight cutaneous transpiration, limited, however, to the thoracic and axillary regions. This treatment was continued till Feb. 2nd, the quantity of urine daily passed varying from 256 to 356 oz., and the specific gravity from 1005 to 1007; chemical characters as before, except that no indican was discoverable.

During the preceding period he occasionally complained of pain in various parts of his abdomen, back, and under the nipples; these pains were generally relieved by mustard epithems, or friction, sometimes assisted by a carminative. The intestines were on those occasions often inflated, and splashing sounds could be produced by slight manipulation of the abdomen. On Feb. 2nd he was ordered three grains of freshly prepared extract of valerian in pill thrice daily; on Feb. 8th, two pills thrice daily; on Feb. 10th, three pills every four hours. On Feb. 11th he had taken fifteen pills, and felt sick and depressed. On the 14th he took no valerian pills, but from the 15th till the 26th he took six pills daily. The quantity of urine passed during the period the valerian was administered diminished pretty steadily from 308 oz., sp. gr. 1008, on Feb. 4th and 5th, to 240 oz., sp. gr. 1010, on Feb. 15th and 16th. From this date (the valerian being omitted) till Feb. 26th it steadily increased to 300 oz.

On Feb. 26th the patient was still complaining of great thirst, and the skin was dry. Jaborandi was then ordered in the form of infusion of the strength of one drachm of the leaves and twigs to six ounces of water; of this a dessertspoonful was taken every four hours. On Feb. 28th a tablespoonful of the infusion was given every three hours; on March 1st a tablespoonful every two hours; March 4th, two tablespoonfuls every hour. On March 5th the skin of the back, abdomen, and inner aspect of the thighs was found to be perspiring pretty freely. On the 6th (the jaborandi being continued as when last mentioned) the skin of the arms and of the left palm perspired.—15th: The quantity of urine has declined steadily from 300 oz. on Feb. 26th to 236 oz. on March 14th.—31st: The treatment with the jaborandi having been continued, the quantity of urine passed to-day was 180 oz. The patient has found his mouth uneasy several times, and the amount of the infusion to be taken (varying from one to two tablespoonfuls every hour) is left to his own sense of comfort or discomfort. His skin is moist, and he declares himself much easier and better in all respects, but still has "some of the old burning feeling in the throat and gullet."—April 2nd: The sense of discomfort in the mouth amounts to-day to pain in the teeth and some slight difficulty in opening the mouth. He is ordered to take the jaborandi less frequently.

The quantity of urine continued to diminish steadily till the middle of May, when it amounted to 120 oz. per diem. His mouth also had become moister. The patient was then, at his own request, discharged.

The measurement of the urine in this case was most carefully conducted by the patient and nurse, and latterly by the patient alone, as he became more interested in the progress of his own case. The measurement of the liquids taken was more difficult, and was at first erroneous for obvious reasons, so that the discrepancy between the amount taken and the amount passed was great; but as the thirst diminished, and the man became in earnest as to the measurement of the fluids taken and urine passed, there was seldom more than 20 oz. difference between the one and the other.

CASE 2. (Reported by Fabian Alsop, M.B., resident physician, University Clinical wards.)—William W——, aged thirty-five, a clerk, was admitted to the Royal Infirmary, Edinburgh, under the care of Dr. Laycock, May 29th, 1875. He complains of passing a large quantity of urine, and of a desire to pass it frequently. Also of great thirst, and that he feels inclined to drink a great quantity of water at a time. The water he drinks appears to him to have a sweet taste, especially when it is cold. Patient says that these symptoms commenced nine years ago, during an attack of what the doctor who attended him termed "rheumatic fever." He says that he drank as much water then as he does now. Twelve years ago he had a swelling in the groin after connexion with a woman who would have been likely to communicate infection to him; and five years ago had the venereal disease, for which he was admitted to the infirmary, and, whilst in hospital, had his left testicle removed, and was dismissed cured. Two years after this he was readmitted, and was treated (patient says) for pneumonia. Three months ago a small papule formed at the back of his right thigh, which was not attended to, and which ended in a small ulcer about six weeks ago, and has not yet healed. Ever since his testicle was removed patient has been subject to severe frontal headaches and a feeling of giddiness, which come on him occasionally. His father and mother both died, he states, of consumption; otherwise the family history is satisfactory. He has had a comfortable home and always been well clothed, but has been given to sexual excesses and frequently has been "the worse of drink."

Condition on admission.—Patient is somewhat emaciated, and below the average development; height 5 ft. 6 in.; weight 8 st. 7 lb. His muscles are small and rather flabby. He can lie easily in any position, and is not confined to bed. He has a somewhat anæmic aspect, but his expression is natural. Temperature on admission 97·6°. Skin very dry and rough. Does not perspire at all. No eruptions nor tumours on body. There is a small ulcer, about the size of a florin, on the posterior aspect of the right thigh, with a greyish surface, and which discharges a small quantity of fetid pus; otherwise his limbs are natural. Patient has to micturate frequently, having generally to rise three or four times during the night. Through the day he passes urine, without pain or difficulty, about every two hours, amounting in twenty-four hours to 158 oz.; of a very light yellow colour, much resembling the colour of hock; sp. gr. 1008, of acid reaction; contains albumen, which occupies about one-eighth of the test-tube when the urine is allowed to stand after boiling; chlorides are abundant in quantity, so also is the urea; no sugar present; no tube-casts to be discovered under the microscope. Patient's tongue is clean. He feels very thirsty, and in order to quench his thirst has to drink a large quantity of water at a time. Has a very pleasant feeling at the back of his throat while he is drinking water. His bowels are very irregular in action; some weeks being very constipated, at others loose. Viscera of of abdomen natural. Number of respirations 20 per minute. Has no cough nor breathlessness. Physical examination of lungs natural. Pulse 72 per minute; regular in force and rhythm; of fair strength; but slightly compressible. He does not suffer from any dyspnœa or palpitation. Physical examination of heart quite natural. Patient is very shortsighted. On ophthalmoscopic examination of the fundus of the eye, a large staphyloma posticum is observed on the *apparent* inner side of the optic disc; the vessels of the retina are also enlarged, and the choroid is found to be atrophied. By direct illumination the fundus is well seen; and when the observer moves his head in one direction, the retinal vessels appear to travel in the opposite direction. Patient is easily exhausted. Sleeps pretty well at night, and would rest better had he not to get up often to pass water. Occasionally he has frontal headache and attacks of giddiness.

Treatment.—The diet was as follows:—Breakfast: Porridge, milk, coffee, and bread. Dinner: Chop or steak, vegetables, broth, and bread. Tea and bread-and-butter in the evening, and milk at night.

June 2nd.—Ordered one tablespoonful of decoction of jaborandi thrice daily.

Progress of case.—The following is a daily table of the amount of urine passed and the amount of fluid taken.

Date.	Amount of Urine passed in 24 hrs.	Amount of Fluid drunk in 24 hrs	NOTES.
June 1st	158 oz.	186 oz.	
" 2nd	154 oz.*	156 oz.	Was up four times to pass urine. Bowels costive. Half an ounce of castor oil in the evening. Jaborandi commenced.
" 3rd	150 oz.	156 oz.	Bowels moved freely after the castor oil.
" 4th	120 oz.	146 oz.	Skin very dry; does not sweat at all. Dose of jaborandi increased to two tablespoonfuls. Bowels moved twice. Was up three times last night to pass urine.
" 5th	140 oz.	146 oz.	
" 6th	154 oz.	170 oz.	During night sweat a little about face and hands.
" 7th	148 oz.	186 oz.	Sweat more. Dose of jaborandi increased to four tablespoonfuls three times a day.
" 10th	100 oz.†	126 oz.	Sweat a great deal about face, but not on body.
" 18th	110 oz.	116 oz.	Sweat profusely all over his body.
" 25th	100 oz.	126 oz.	Saliva for last few days very much increased.
July 2nd	104 oz.	116 oz.	
" 8th	100 oz.	106 oz.	
" 10th	94 oz.	96 oz.	Sweat very profusely through the night. Saliva greatly increased.
" 19th	100 oz.	106 oz.	
" 22nd	98 oz.‡	100 oz.	Patient weighs exactly 9 st.

* Specific gravity 1008; albumen 1-8th; chlorides abundant; phosphatic.
† Specific gravity 1010; no sugar; albumen 1-6th.
‡ Acid; specific gravity 1010; albumen 1-10th.

These cases are interesting as showing the use of jaborandi in a disorder well known to be intractable. The action of the drug on the skin (probably through the nerve-centres) was well marked; the salivary glands were less influenced.

Edinburgh.

ON THE

TREATMENT OF HERNIA BY INVERSION.

BY J. H. THORNTON, M.B., B.A.,
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THIS mode of treatment, though mentioned in most surgical works, has never, so far as I know, been considered on its own merits, but merely as an aid to the taxis and the other measures usually employed in the reduction of hernia. My object in this paper is to draw attention to the efficacy of inversion alone, not only in reducible hernia, but also in many cases where the rupture has become strangulated, and to suggest that a fair trial should be given to a plan of treatment which possesses so many advantages and is attended by so little risk.

The treatment of hernia by inversion consists in placing the patient in such a position as to bring the force of gravity into play to reduce the rupture. This may easily be effected by raising the foot of the patient's bed, and keeping it supported it an angle of 45°. In this posture the intestines naturally gravitate towards the upper part of the abdominal cavity, and gradually draw in the ruptured portion. It is evident, from the nature of the case, that a force acting gradually and equally from within the abdomen must be far safer and more effectual than any pressure applied externally. The use of the taxis, however carefully applied, must almost always involve some bruising of the parts, which would have an injurious effect should the attempts at reduction be unsuccessful and an operation become necessary. Sometimes violent manual pressure is employed by the patient and his friends in repeated fruitless efforts to reduce the hernia, and in such cases very serious results are likely to ensue. Contusion of the tissues, extravasation of blood, congestion, inflammation, and even gangrene of the ruptured bowel may result from violent, protracted, and ill-applied manipulation. The various other measures sometimes resorted to, such as bleeding, the inhalation of chloroform, hot baths, purgatives, enemata, cold, &c., are all liable to the objections that they are uncertain in their operation, not suited to every case, and often attended with risk. The advantages of inversion over all these modes of treatment are, that it is generally effectual, absolutely safe, and universally applicable. It can be used by any person, at any time, and in any place; and should it prove unsuccessful in effecting reduction (which will rarely be the case unless adhesions have formed) the patient is in a more favourable condition for the performance of the necessary operation than he would be after the employment of the other methods. The following case illustrates the efficacy of this mode of treatment.

A man named Dhoree, aged forty-two, was admitted into the Charitable Dispensary at Arrah on Dec. 4th, 1873, with strangulated hernia (oblique inguinal, right side). The rupture had frequently appeared before, and he had been able to return it without difficulty. On this occasion, however, he was unable to do so; and his friends, who made repeated attempts to reduce the hernia, were equally unsuccessful. The result of their interference was that severe pain set in during the night, and, finding him getting worse, they brought him to the dispensary early in the morning. The assistant-surgeon saw him, and endeavoured to reduce the rupture by the taxis, with the assistance of chloroform; but his efforts were unsuccessful. I saw the patient at 9 A.M. about thirty hours after the appearance of the rupture. He was in great pain and distress, the bowels had not acted since the hernia appeared, there was much prostration, and hiccough and vomiting had already set in. I ordered the foot of his bed to be raised and supported at an angle of 45°, and I directed that he should be allowed to remain in that posture, and that no further attempts should be made to return the rupture. The result was that in about twenty minutes the hernia disappeared, reduction having taken place spontaneously. The patient speedily recovered. In this case the taxis, aided by chloroform, had failed, urgent symptoms had set in, and inversion was tried as a last resource, failing which an operation must have been performed to save the life of the patient. The success of the treatment by inversion under such circumstances is a satisfactory proof of its value, and shows that it might be advantageously employed in most cases of strangulated hernia, before resorting to an operation.

Arrah, Shahabad, Bengal.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. BARTHOLOMEW'S HOSPITAL.

CALCULUS IN A GIRL THREE YEARS OF AGE.

(Under the care of Mr. Holden.)

For the notes of the following interesting case we are indebted to Mr. James Shuter, house-surgeon.

The patient, a girl aged three years, was admitted on June 2nd. She was of fair complexion, well nourished, and a native of London. She was fed at the breast until eighteen months old, since which she has had very little milk, but some beer nearly every day.

The only points of importance observed previous to admission were that (1) during the past nine months she had been noticed to cry during micturition, and to put her hands between her legs to scratch or rub herself; and that (2) her urine had been occasionally thick.

On June 10th a consultation of the surgical staff was held, and a calculus was easily felt with a sound. Opinions were much divided as to what operation should be performed, but the majority were in favour of removal through the vagina. One recommended the suprapubic operation.

On June 18th Mr. Holden examined her under chloroform, and, passing a sound into the bladder, directly felt and heard the stone; it was also felt through the rectum, its size being found to be about half an inch long and its shape ovoid.

July 2nd.—Since admission the patient has passed urine about every half-hour, giving no other notice than always crying; this was often accompanied by much straining, and by the passage of a little motion, apparently on that account. She has frequently had a pricking pain come on suddenly between the legs and at the lower part of the abdomen when she did not pass any urine. The urine is sometimes rather thick with mucus. There has been no prolapsus nor record of blood in the urine since admission. The pain has always been relieved by hot baths.

10th.—Patient being under chloroform, Mr. Holden passed his finger into the vagina and a small pair of dressing forceps into the bladder. He then seized the stone, passed a director into the urethra above the forceps, and cut through the anterior upper two-thirds of the urethra, and then, dilating the posterior third, removed the calculus in four pieces, as it happened to break under the pressure of the forceps. Its weight proved to be 23 grs., its long diameter being ⅝ in., and its short diameter ½ in. In the evening she cried very much during the passage of urine, and had much pain at the seat of operation. There has been no sickness. She has been very restless since midnight. The parts are red and swollen.

11th.—7 A.M.: Has passed urine into the bath.—10.30 A.M.: Has passed three ounces of urine voluntarily, with but little manifestation of pain. The parts look quite healthy again. The temperature has once reached 100° and the pulse 120 since the operation, from which, indeed, she now seems to have fairly recovered.

12th.—Temperature 100·2°; has no incontinence of urine.

13th.—Temperature 99·4°; no incontinence of urine, but still cries a little when she passes urine.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

CASE ILLUSTRATING THE RELATION BETWIXT CERTAIN CASES OF MIGRAINE AND EPILEPSY.

(By Dr. Hughlings Jackson.)

Dr. Hughlings Jackson believes that cases of migraine, and certainly those in which there are ocular phenomena with one-sided sensation disorder are (that is, according to his definition of the word epilepsy) epilepsies, for he thinks that the symptoms depend on a local excessive cerebral discharge. However, he thinks that whilst the ocular phenomena and the unilateral sensation disorder are parts of the paroxysm, the headache and vomiting are post-paroxysmal symptoms. Moreover, he believes it to be most likely that the "discharging lesion" in this epilepsy is of some parts of the cortex of the posterior lobe, that it is of convolutions, or of parts of them, which are developed out of the optic thalamus. The reason for so thinking is, that these "sensory epilepsies" bear the same relation to hemianæsthesia with hemiopia from disease of the optic thalamus, as unilaterally beginning convulsions do to the ordinary kind of hemiplegia from destruction of the corpus striatum. Dr. Latham thinks that the paroxysm of migraine is owing to arterial contraction in the region of the posterior cerebral; Dr. Liveing, that there is in the paroxysm a "nerve storm" traversing the optic thalamus and other centres. Dr. Hughlings Jackson's view as to localisation will be supposed to be a compromise betwixt these two opinions. It may here be pointed out that this localisation of the "discharging lesion" in migraine accords with an old conclusion of Dr. Jackson—viz., that the anterior part of the cerebrum is the chiefly motor, and the posterior the chiefly sensory region. This speculation agrees with Ferrier's experiments. Dr. Jackson does not, however, suppose that the separation of motor and sensory regions is abrupt. The case which follows is mixed sensory and motory. Discharging lesions may no doubt be developed in any part of the cortex cerebri from front to back.

Whether the word epilepsy be used in the commonly accepted sense or in the novel sense, the case here reported shows the relationship of certain symptoms of migraine to epilepsy. The hemiopia is especially interesting.

Colour development is not an uncommon precursory symptom in cases of epileptiform or epileptic seizures. It is common in migraine. In this girl's case, if her memory serves her, the colours began on the side which does not correspond to the side convulsed; one reason for thinking her account erroneous is that the transitory hemiopia was leftsided (field), as was the convulsion at its onset.

M. B——, aged sixteen, consulted Dr. Hughlings Jackson in August, 1873, having had fits for six years. She walked at the age of sixteen months, and talked very early. It is said that she had spasmodic croup at the age of ten months. She was subject to attacks every winter until the age of thirteen. An attack would come on about ten o'clock at night, and last for two hours, when vomiting and relief came. What the real nature of this illness may have been is matter of doubt; the mother said the girl made a noise like croup, and imitated the noise of laryngismus stridulus very closely. At the age of three years it seems clear that she had a bad attack of jaundice; she was, her mother averred, delirious and insensible for two or three weeks. She had never had scarlet fever nor rheumatic fever; she had had measles, chicken-pox, and whooping-cough. No facts bearing on hereditary tendency to any kind of nervous affection were obtained.

She seemed to be in good health. She had begun to menstruate at the age of twelve and a half years, and for the last twelve months the catamenia had been regular. There was no heart disease; there was no ear affection, nor had there been any. She had threadworms.

It is interesting to note that there was a clear account of gradual development of her seizures. She had at first attacks of coloured vision only for some months before anything further. There is circumstantial evidence of this. Her mother thought the child was bilious, and waited until her holidays began to give her physic. Further evidence that these mere attacks of coloured vision were really rudimentary or incipient fits was that later on she occasionally had these attacks, sometimes followed by convulsions, sometimes not. As she says, "if the colours do not leave, the fit comes on." After having several attacks of coloured vision only, she would have a severe fit. The colour began suddenly. There were red and green. The red comes first and the green was underneath the red. The background was black and the colours moved fast. Her mother said the girl always *looked to the left* when the colour appeared. This is significant, because "when the colours do not go away," and when the full fit comes, the head turns to the *left*, the *left* hand shakes, the arm works; there is *left*-sided convulsion. Later there is convulsion of the right side, and she is unconscious; occasionally there is tongue-biting. But here is to be stated further evidence as to gradual development of the fits. For some years she did not lose consciousness; the strong presumption is that at that time the convulsion did not pass beyond the left side, the side first convulsed; moreover, in some seizures, when she was under Dr. Hughlings Jackson's care, she did not lose consciousness, even when the fit was so severe that the left arm was invaded.

She is certain that the colour began in the *right* side of her field of vision, and spread to the left. Moreover, some years before—no accurate date could be given—she had transitory hemiopia before the fits, but never immediately before. She might, for example, see "half a face" at breakfast-time, and have a fit in the evening, but then in the interval the "colours would keep coming and going." According to the mother, the child could see to the right when hemiopic—that is, the left was the blind field. On one occasion she, over a period of a few days, occasionally saw on the left side an object of about the shape and size of an octavo page, dotted all over with rounded dots closely set. This was, she said, "instead of the colours."

ROYAL INFIRMARY, EDINBURGH.

CASE OF EXTENSIVE BURNS OF LOWER EXTREMITIES; RECOVERY.

(Under the care of Mr. Joseph Bell.)

For the notes of the following case we are indebted to Mr. Holland J. Cotton, late house-surgeon.

James M——, aged thirty-four, was admitted Nov. 28th, 1874, suffering from very extensive burns on the legs, which he had sustained ten days previously (along with a fellow-workman, to whom the injuries rapidly proved fatal), by falling into boiling oil. The patient was very haggard, and like a man of fifty in appearance, complaining of no pain and seeming semi-comatose. Mr. Bell found the right leg burnt all round, from the instep to the middle of the thigh; the left burnt over the instep and ankle, and all round at the knee, with intermediate large patches where the cuticle was destroyed. Large fetid sloughs were still hanging to the limbs, and on clipping off these a vast raw surface appeared, in which the cutis vera seemed altogether destroyed. Both limbs were enveloped in lint, spread with zinc ointment, as sufficient boracic ointment, from its difficulty of preparation, was not forthcoming. A very unfavourable prognosis was given, but stimulants were ordered to be administered freely, and as much nourishment as possible. At night he was delirious, and at one time sprang out of bed and rushed into the corridor, where he fell down, his legs all this time bleeding profusely. The next day he seemed worse, and Mr. Bell, though much inclined to amputate the right leg at the upper third of the thigh, finally decided not to do so, thinking that he was not in a fit state for operation, and hoping that, if he did rally, the cutis might prove not to be so wholly destroyed as it appeared. The limbs were in a very peculiar condition, being covered with a layer of very fetid matter, but no healthy pus forming. He complained of little or no pain when they were dressed, which further seemed to indicate that the whole thickness of the cutis vera must be destroyed. The amount of stimulants and food was increased, whilst full doses of nepenthe at night were found to be the best to procure sleep. The next few days he remained in a most critical condition, bleeding occurring two or three times from the bowels, and delirium returning occasionally at night; but, on the whole, he seemed to be improving, his appetite being especially good. A week later he was out of danger, and the limbs began to look more hopeful, a healthy granulating surface having appeared, and a copious formation of laudable pus being established, whilst here and there islands of skin began to appear, more especially on the left leg.

The next three weeks were marked by rapid progress, the patient's appearance improving daily, looking at least ten years younger than on admission. His appetite was ravenous, and he seemed to be gaining flesh steadily. The left leg went on healing rapidly along the healthy edges, but the right still remained a vast suppurating surface, although the islands of cutis that had appeared increased daily in size. It still seemed as if sufficient skin could not be formed, and that extensive skin-grafting would have to be resorted to, but in a month or more the left leg had healed completely, and the right was skinning slowly over. No other dressing was used in this case but zinc ointment until about this time, when stimulating lotions had to be used, in order to check the granulations which became exuberant and weak, after which healing progressed so satisfactorily that skin-grafting was not resorted to. The patient found great difficulty in bending his knees or extending his feet from the extraordinary amount of contraction and cicatrisation which had occurred, but he became stout and strong (when allowed to take a little daily exercise), and was finally dismissed on April 1st with both his legs healed up, and able to walk very well with the help of a stick.

In the Punjab small-pox is again prevalent; nearly 600 deaths were registered in one week from that disease. Peshawur has suffered heavily, the inhabitants of the city having a strong prejudice against vaccination—a prejudice not shared in by the Mussulman population of other portions of the province. The total death-rate in one town lately reached the enormous figure of 70 per 1000 annually.

Reviews and Notices of Books.

Lectures on Diseases of the Respiratory Organs, Heart, and Kidneys. By ALFRED L. LOOMIS, M.D., Professor of Pathology and Practical Medicine in the University of New York. pp. 549. New York: W. Wood and Co. London: Sampson Low, Marston, and Searle. 1875.

THE publication of this work, as of so many others that have recently appeared in the United States, testifies to the growing importance and originality of the medical literature of that country. A few years ago the publishers of New York and Philadelphia supplied little else than reissues of English works, and translations (many of them highly creditable and valuable) of important French and German writings; while the number of truly indigenous productions was indeed small. Now, however, our Transatlantic brethren are showing, by their vigorous and frequent contributions to medical science, that they can claim worthy place among standard authors.

The present work does not, however, profess to be original. It consists of more than forty lectures of a course on Systematic Medicine, which, the author tells us in the preface, "are offered as they were phonographically reported" at the time of delivery. They thus form a valuable text-book of the important diseases of which they treat, and as such they must be regarded, rather than as original memoirs. Viewed, then, from this standpoint, the book takes a very high rank among educational treatises, while at the same time it abounds in much original matter, especially as regards practice; and it affords, on the whole, an admirable example of a clear and concise exposition of the present state of knowledge in this department of medicine.

It will be enough if we here confine ourselves to noticing some of the more salient features of the work, since it would be impossible for us, within proper limits, to follow the author through the wide range of affections that he here discusses. We may note at the outset that, of all drugs, Dr. Loomis seems to have most faith in quinine, chiefly on account of its antipyretic powers. But he gives it also on other grounds, since he considers it most efficacious in acute catarrhal laryngitis in large doses—namely, as much as twenty grains a day to a child three years of age. Indeed, he is, happily (for in this sceptical age such faith is sadly needed), a great believer in the efficacy of drugs, of which he does not stint the dose; and at times we find him going counter to time-honoured prejudices in regard to the freedom of their administration, as will be seen later on, but never, be it said, without fully justifying his course of action.

In a book which is in the main characterised by clearness of thought and diction, it is somewhat lamentable to find in one chapter considerable ambiguity. Thus, in the lecture on Acute Croupous Laryngitis, the author shows that he, at least, is no convert to the doctrine of the identity of croup and diphtheria, while yet his very description of the former makes it difficult for the reader to know where the line between these affections is to be drawn; a difficulty which is not removed when he turns to read what is written concerning their differential diagnosis. Thus, Dr. Loomis says that acute croupous laryngitis attacks chiefly delicate, weakly, ill-nourished children, rather than strong, healthy ones, and that it sometimes "complicates diphtheria." The first of these statements is directly contravened by many authorities in this country, while the second makes the complication more complicated, and adds to the confusion of the reader. But he further says that "very frequently membranous pharyngitis precedes and accompanies croupous laryngitis" (p. 17); and again that "the most important fact connected with its clinical history is that in a large proportion of cases, before the urgent symptoms come on, the membranous exudation can be seen on the tonsils. In nine cases out of ten, the membrane is first formed on the tonsils, or in their immediate vicinity; when seen, the diagnosis is established before the urgent symptoms are developed" (p. 19). Then, acknowledging that diphtheria involving the larynx may be mistaken for croup, he says the distinctions are based upon the epidemic or contagious history of diphtheria; the constitutional symptoms preceding the throat symptoms, the enlargement of the glands at the angle of the jaw, and the laryngeal symptoms in diphtheria not being urgent; finally adding that the pharynx presents diphtheritic appearances before any laryngeal symptoms are present—a statement almost stultified by the preceding description of the onset of croup. Verily, what with "croupous pharyngitis" and "diphtheritic laryngitis," it would seem that the clinical features of these two affections are as indistinguishable as their anatomical. But this is not the time or place to discuss this still burning question, which involves so many articles of faith in medicine, and we gladly pass from it to other portions of the volume before us.

The subjects of neurotic affections of the larynx, asthma, whooping-cough, emphysema, and bronchitis, are ably treated. Then follows an admirable account of Pneumonia, lobar and lobular, the morbid anatomy of which, as indeed of all the diseases discussed in the book, is fully detailed. The author makes the somewhat startling statement, that *idiopathic* pneumonia is rare, and endeavours to show that in the vast majority of cases there is some inherent tendency to pulmonary disorder, even where the attack is to be attributed to exposure to cold. His remarks on treatment are sound and judicious. Bleeding he deprecates, even in the most sthenic forms, as tending to retard convalescence and to increase the subsequent dangers of the disease; it should only be resorted to when there is engorgement of the heart and evidence of sudden pulmonary congestion and œdema. He also deprecates any routine treatment, and strongly upholds the administration of quinine in large doses as a means of shortening the febrile stage and hastening resolution.

His remarks upon the indications for the performance of paracentesis in pleurisy with effusion, and the details of the operation, are well worthy of note. He advocates early aspiration, and the cessation of the operation as soon as any feeling of discomfort is experienced by the patient, even though this may necessitate a second tapping in a few days' time; the like rules governing the operation in empyema, where he advises repeated tappings at frequent intervals. Free opening into the pleura in empyema is discountenanced unless the purulent accumulation be too great to admit of its removal by the aspirator, save at too frequent intervals, or unless it depend upon the pyæmic state.

Perhaps, however, the best chapters in the book are those devoted to Phthisis, which from its anatomical side is one of the most difficult subjects to treat in these days of advanced histological research. Although inclining to the belief that tubercle is simply of inflammatory nature, the author thinks all the varieties of phthisis may be fairly included under the three heads of catarrhal, fibrous, and tubercular, each of which may be mingled with the other. The chief form is the catarrhal, and its main distinctive feature is its origin in bronchitis; while from the side of morbid anatomy peribronchitis is the most constant feature of each of the groups. From a description of the morbid anatomy of these forms of phthisis he passes to discuss their etiology, which he divides into general and local. Under the head of general causes he classes heredity or acquired feebleness of constitution, anti-hygienic influences, and climate; under local, bronchitis, pneumonia and pleurisy, and mechanical irritants. One passage from the first of these heads is worth quoting:—

> "Let a healthy child, during its infancy and early childhood, be subjected to the influences of small, badly-ventilated apartments, improper diet, and all the other attendant anti-hygienic influences of the tenement-house population of great cities, and it will become an enfeebled child, so that if it reaches the years of maturity it has stamped upon it a vice of constitution which is ready upon local excitement to develop pulmonary phthisis. Among the lower classes, almost the entire population of this city is stamped with this influence, and whether hereditary tendency, in the common acceptation of that term, is or is not present in this class of persons, they are exceedingly liable to the development of phthisis."—p. 228.

The symptoms of phthisis are then treated *seriatim*, together with the physical signs, the differential diagnosis between the disease in its different forms and allied affections terminating its clinical history. Under the head of Treatment there is much judicious advice. Again quinine is held to be of the greatest value, especially when there is much fever, and given in full doses at the times of febrile exacerbation. Opium, as a means of allaying cough, should be deferred as long as possible, on account of the digestive derangement following its use; and for the vomiting of phthisis, small quantities of raw scraped beef, taken in a sandwich at frequent intervals for forty-eight hours, is held to be the best remedy. After dealing with hygienic treatment, he passes to the question of climate, dwelling upon the various resorts in the American continent specially suitable for the residence of consumptives.

We must pass over the next section of the book—that on Diseases of the Heart, with the remark that all cardiac affections are here dealt with, the chapters on valvular disease being especially worthy of note, and conclude this notice with one of the most novel features in the book—that of the treatment of Uræmia. Digitalis is advocated as a diuretic in renal disease, because of its not possessing any irritant action on the kidneys, and because of its increasing the power of the heart; as much as half an ounce of the infusion being given every three hours for twenty-four hours, or until a specific effect follows. Dr. Loomis then inquires how it may be possible to reopen the "avenues of elimination" which have been closed by the circulation of the uræmic poison in the blood. This, he thinks, is to be done by "diminishing reflex sensibility and subduing spasmodic muscular paroxysms." Chloroform inhalation has been tried, and in puerperal eclampsia with success; but there are objections to its use, since it leads to new blood changes, which are detrimental to the object in view. Such objections are not to be found in morphia, and (heterodox as it is) he states that he has followed the plan of hypodermic injections of morphia in uræmia with marked success for the last seven years.

His conclusions we give in his own words:—

> "1st. That morphine can be administered hypodermically to some if not to all patients with acute uræmia without endangering life.
>
> "2nd. That the almost uniform effect of morphine so administered is, first, to arrest muscular spasms by counteracting the effect of the uræmic poison on the nerve-centres; second, to establish profuse diaphoresis; third, to facilitate the action of cathartics and diuretics, especially the diuretic action of digitalis. . . . The rules which are to govern its administration are as yet not well defined. My own experience would teach me to give small doses at first, not to exceed ten minims. If convulsions threaten, and a small dose does not arrest the muscular spasms, it may be increased to twenty minims, and the hypodermics may be repeated as often as every two hours. It must be given in sufficient quantities to control convulsions; neither the contraction of the pupils nor the number of the respirations is a reliable guide to its administration." (p. 452.)

It is to be regretted that Dr. Loomis does not tell us what is the strength of the solution of morphia he employs. If it be that usually employed in this country (one grain in six minims), then ten minims would be nearly two grains of morphia, by no means a *small* dose. The treatment is heroic to a degree, especially as the ordinary signs of narcotism are to be disregarded. And yet he has not known a case in which death could be attributed to the narcotism produced by these measures. If Dr. Loomis be right, he will have a hard battle to fight before he makes many converts, for if any "prejudice" in therapeutics be deeply rooted it is this—that opium is contra-indicated in renal disease.

We have dwelt chiefly upon what was novel in this work, the style and character of which are deserving of all praise; and if we have left much of it untouched, it is not because there is not valuable enough matter in it, but rather that our readers may go and seek it for themselves in pages which will well repay perusal and careful study.

THE NATIONAL NURSING ASSOCIATION.

The Report of the Sub-Committee of Reference and Inquiry recently issued is without doubt the most complete and most categorical *résumé* of the entire subject that has as yet been given to the public. We have seldom perused a more able or more exhaustive treatise, and though, as we remarked before, the promoters of the Association "aim high," the class of helping hands when found and trained ought to be invaluable in this country as a direct means of restoring to health and alleviating suffering, and so averting much of the preventable misery that exists in our towns and cities.

More than nine months have been occupied in obtaining and collecting the materials for the Report, and it is proper in this place to record that the chairman, Mr. Rathbone, M.P., has liberally defrayed the entire expenses in connexion with its publication. A map is appended to the Report, which gives at a glance the ecclesiastical districts into which the metropolis is divided, and enables the reader to see the extent of district nursing done in them by both trained and untrained nurses. The poorest and most suffering districts, the name and address, the nature and professed character of the work by every nursing or nurse-training institution in the capital, are all given in detail, and in many instances the results of their experience. The clergy and medical officers of each and every district have been consulted, resulting in much information and many valuable suggestions. "The counsels of Miss Nightingale, the experience of Dr. Sibson and Dr. Sieveking, and the knowledge acquired by the secretary of the Nightingale Fund, have contributed mainly to systematise and direct the conclusions to be drawn from the array of statistical and personal testimony obtained by Mr. Guyton (the secretary), and the results of Miss Lees' close and careful visitation of hospitals and districts." After calling attention to the value of nursing, the want felt by all classes of better nurses, the necessity that nurses should be trained, the vast demand and the very limited supply, and the fallacy, practically speaking, of amateur nursing, the necessity of training schools is insisted upon in detail. In all the best training schools for nurses the subjects in which a nurse is expected to become skilful have been copied from the rules originally drawn up for the use of probationers in the Nightingale School attached to St. Thomas's Hospital. And here commences an assertion oft repeated in the report, to the effect that very few, if any, hospitals are so constructed and administered as to afford a good and wholesome field for the proper instruction and training of nurses. A great deal (and, as we think, too much) is recorded as to the present inefficient structural and administrative arrangements that obtain in the metropolitan hospitals, as to actual or implied immorality in some institutions resulting from a laxity in rules that govern the work and attendance of nurses and students, and as to the impossibility of training nurses properly under such circumstances. This by the way. "Hospital training means careful discipline and drill" as well as to "do dressings" and know how to employ surgical appliances. An efficient teaching staff, under the direction of a head competent both to teach and to control, is primarily required, and with a staff of women teachers and pupils this head must necessarily be *matron* of a hospital, independent, according to the opinion of Miss Nightingale, on the score of discipline of the medical officer or governor of the hospital. Twelve months is the time fixed by the Nightingale trustees and the promoters of the Liverpool Nursing Association as necessary to qualify a woman of average intelligence and fitness. The adoption of nursing as a profession by ladies is urged, because great need exists for a certain number of superior superintendents in dealing with district nurses among the poor. And this leads to the consideration that a higher and more thorough training than that required by hospital nurses may be necessary in private nursing even among the rich. A far greater amount of theoretical knowledge is required for out-door work, for in the carrying out of purely hospital duties, the nurse has always, as it were, at her elbow the house-physician or surgeon, means and appliances of all kinds, linen, water, and all other clinical necessaries in abundance; whereas at the best appointed private house some of these requisites are wanting. The evidence of many well-known hospital physicians and health officers is quoted to show the value of district nursing, and the great demand for it. The Liverpool Training-school and Home for Nurses, which has been at work for thirteen years, shows an enormous amount of useful labour accomplished, and the same may be said of a similar establishment at Derby, which is described as "in pure nursing the most successful in its results." It appears that the Bible-women nurses, bodies of whom are employed in the eastern districts of London, are insufficiently trained, being taught to regard their nursing duties as subordinate to spiritual objects. There is, too, in these cases no regular communication of any kind between the doctor and the nurse, the latter not taking charge of acute or infectious, but only of chronic cases. As to the actual nursing in London at the present time, it appears that in district work there are about one hundred nurses engaged (and this among a population of three millions and a half), one-third of whom can hardly be said to be trained at all. One-half of the entire number consist of the Bible-women nurses above referred to, who receive three months' instruction of a more or less perfunctory nature in a general, and one in a lying-in hospital. Of the various sisterhoods working on a comparatively small scale, none of the nurses are considered to have received a proper amount or style of training, though their devotion to duty is beyond all praise. In discussing the best mode of compassing the professional training of nurses, the report cites that two courses appear to be open to the Association. It might establish a training school of its own in connexion with some London hospital, obtaining, by arrangement with the hospital authorities, the general control of the nursing and assistance in the education of probationers. Or it might simply obtain leave to send so many pupils into a certain number of hospitals, under these existing arrangements foregoing all responsibility for the method, and losing much of the control over the results of the teaching, but securing a regular supply of nurses trained up to the standard at present attained in the several hospitals. From the view of the Committee the former plan would of course be preferred. Reasons (somewhat, as we think, exaggerated) are given why the present hospitals in the metropolis are unfit as training schools; and it would appear, moreover, that the Middlesex, the London, St. George's, University College, King's, Westminster, and St. Thomas's are at present fully occupied with the demand made upon them. Unity of control is most strongly insisted upon, as well as the principle that the head of the training school should be also matron of the hospital, with full and sole power over the engagement, dismissal, and discipline of nurses and probationers, the hospital authorities controlling the nursing through the matron, and holding her responsible for its efficiency.

It remains to be seen whether the Association will succeed in affiliating its proposed training establishment to one of our large metropolitan institutions, or whether (as we think probable, at all events at the outset) arrangements will be made with some of the hospitals, so that when a sufficiency of trained nurses is obtained, a model district Nurses' Home, under the charge of a trained superintendent, may be established.

There are no less than twelve valuable appendices to the Report, which we are compelled to reserve for a separate notice. The Association will have our hearty support in aiming "to establish a standard for district nurses and nursing which may be applied by the Association not to London only, but eventually to all England."

ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD, IRELAND.

This, the third Report of the Local Government Board, shows that the average daily number of persons receiving relief in workhouses in Ireland for 1874–75 amounted to 47,113, whilst 30,319 obtained out-door relief, being a slight increase in both forms over that of the preceding year. The dispensary tickets issued during the twelve months were 501,027, and the visiting tickets 186,138, making a total of 687,165; whilst 139,587 people were vaccinated, and certificates given in the case of 953 dangerous lunatics. Among the patients visited were 14,424 cases of fever, 7413 of scarlatina, and 961 of small-pox. This last disease has not yet been thoroughly stamped out, no less than 142 deaths from this malady having taken place in the workhouses alone. Inoculation still continues to a considerable extent, and vaccination has decreased, but the Board indulge the hope that the greatly improved machinery for the prevention of disease provided by the Public Health Act will have the effect of inducing the sanitary authorities to exert themselves zealously and perseveringly in the performance of their duties in this respect generally, and especially for the suppression of small-pox.

But four additional midwives have been appointed since last Report, and the Board draw attention to this matter, stating that where educated midwives have not been appointed, the wives of the poor peasantry at their confinement have recourse to the assistance of some neighbouring matron or woman calling herself a midwife, who seldom possesses sufficient knowledge of midwifery to be able to say when some obstruction to the birth, admitting of easy remedy by the accoucheur, has occurred, or when the case is of such a kind that the unaided efforts of nature cannot accomplish the delivery. In cases of the former description the patients are often exposed to needlessly prolonged and severe suffering, and in those of the latter, besides similar useless suffering, the lives of both mother and child are in extreme danger by the exhaustion of the patient before manifestly approaching death warns her friends to call in the aid of a doctor. The total disbursement of poor-rates for relief, medical relief, burial-grounds, registration of births, deaths, and marriages, sanitary measures, and expenses under Superannuation Acts, was £1,001,989, or 1*s.* 6*d.* in the pound.

Medical Congress of Andalusia.—This Congress will take place in Seville from the 7th to the 13th of November, 1875, and will last a week. The office-bearers have already been chosen, and a list of them is given in the *Anfiteatro Anatomico Espanol* of the 30th of June. The nature of the subjects is as follows:—First day: Opening meeting—Medicine. Second day: Surgery. Third day: Hygiene, Physiology. Fourth day: Insanity, Forensic Medicine. Fifth day: Opthalmology, Dermatology, and Syphilis. Sixth day: Therapeutics and Medical Hydrology. Seventh day: Anthropology and subjects chosen by the members.

THE LANCET.

LONDON: SATURDAY, AUGUST 14, 1875.

THE correspondence in our columns on the relative merits of chloroform and ether as general anæsthetics indicates the deep interest the profession takes in the subject at this moment. Our object has been, and will be, to give free scope to the expression of capable opinion and full scope to the communication of knowledge. We repeat again, what we have often stated, the expression of our belief that ether is the safer of the two anæsthetics. In this respect we differ in degree only from what was said in our last impression by Mr. POLLOCK, Mr. BRUDENELL CARTER, and Mr. WARRINGTON HAWARD. At the same time, we are forced to the conclusion that there are wanting many more facts and a prolonged inquiry before it would be safe for anyone to affirm that nine-tenths, nay, probably nineteen-twentieths, of the profession throughout the world are doing wrong in not dismissing chloroform altogether, and returning to the exclusive use of ether. Before such a conclusion can be correctly affirmed, it must be shown, first, that ether is *absolutely* safe; and, secondly, that it is so much safer than chloroform, and the other rapidly acting members of the chlorides of the methyl series, that the disadvantages under which it labours are amply compensated by the greater security it confers. Unless ether can stand these tests of its superiority, it will be a second time discarded, notwithstanding the advice and instruction of those who are at present so enthusiastic in its favour, should it even again assume its position as the anæsthetic of the day.

Measured by this rule, from the experience of it that now exists, it certainly does not hold the place that has been claimed for it. To say its administration is absolutely free from danger is to make a case in opposition to evidence. We have ourselves, in conducting relative experiments with ether, chloroform, methylene bichloride, and other anæsthetic vapours, seen animals die as suddenly under ether as under the other vapours. Moreover, it is vain to deny that the human subject has died during the administration of ether, and as a result of the administration. No one can read candidly the particulars of the death of a patient on September 11th at the Hôtel Dieu, Lyons, without being convinced that the death was from ether; if that case is to be disputed, every death from a chloride may be equally disputed, and we may affirm that death during an operation under an anæsthetic is always from the operation or always from the anæsthesia, and never from the anæsthetic. The death at Southampton in 1873 seems to us, so far as the report of the facts testifies, to have been equally clear in relation to its cause. The death at the Cancer Hospital was primarily a collapse from the inhalation of ether, and, although in that instance it is fair to argue that life would have been restored if there had not been an escape of blood into the trachea, the argument, after all, is but an excuse which, applied to chloroform, would not, in the present mood of the opponents of that agent, be so readily admitted. In the early days of etherisation it was, moreover, believed that some secondary dangers from ether were not to be slighted. Mr. ROBINSON, of Gower-street, on one occasion administered ether for the operation of amputation of a lower limb, and the patient, an elderly man, never recovered the narcotism, but remained semi-conscious and restless until his death some hours afterwards. Sir JOHN FORBES, in his famous article on the Discovery of Anæsthesia, expressed his conviction that the patient died of surgical shock, and, if we remember rightly, he quoted TRAVERS on the symptoms of shock in support of his assertion. But unfortunately, Mr. ROBINSON, the administrator of the ether, did not share in this opinion. We knew him well, and his view was that the patient never recovered from the narcotism, but that he died as if he had taken opium, or had received concussion of the brain. ROBINSON, indeed, who was the first administrator of ether in England, and who was most practised in the matter of its administration, was soon so alive to danger from it that he invented an oxygen apparatus for restoring those whose lives were in jeopardy from its inhalation.

There remains the second position to which we have referred—How much safer is ether than chloroform? This question, we venture to think, can only be answered when ether has had twenty-five years of trial in every respect equal to that which has been given to chloroform. Mr. CARTER speaks of the colossal experience by our American brethren of the use of ether; but our American brethren have also had a colossal experience of the use of chloroform, and it is remarkable how small has been their experience of death from that agent. During the great war of the rebellion the surgeons of the armies, North and South, used chloroform as the leading anæsthetic. How many deaths can be adduced as from the agent in that colossal experience? At the close of the war one small metal chloroform inhaler, with nostril tubes, was brought to this country, which inhaler had been used many thousand times without a death from its employment. In the Franco-German war chloroform was the agent used most as an anæsthetic; in the Crimean campaigns it was the agent of all the armies — French, English, Russian, Turkish, — and the deaths from it were so slight that they cannot be adduced now as argument against it. We do not say this to defend chloroform, but to prove how futile it is at this time to assume a comparison from the present experience of the relative safety of chloroform and ether. It is true that Dr. ANDREWS gives a mortality of 4 deaths in 92,815 from ether, or rather more than 1 in 23,000, as Mr. POLLOCK states. But these figures are by no means satisfactory: they represent little more than the whole mortality from ether from the whole administration of it, and they are therefore based on far too limited a scale to be trustworthy. In some instances chloroform has been administered for a great many thousand times in one place or by one person without a death, and if a few such examples only were put together, as low a mortality might be assigned in relation to it. But when such figures are multiplied and repeated over long tracts of years the results vary so greatly that the first series of facts in no way answer the question that has to be decided. We mean by this that if four persons die from ether out of one number of ninety-two thousand, that is no evidence that the same number only will die out of the next number of ninety-two thousand. Against the tables of Dr. ANDREWS there is also, as we conceive, this further error, that they exclude all deaths from ether that occurred during its administration, except it is stated that the death was owing to the action of the agent, while in the statistics relating to chloroform death occurring during the administration is in every case set down, if we do not mistake, as due to the administration. There is therefore a necessity for new research on deaths from anæsthetics of every kind in order to ascertain how much evil must be attributed in each case to the condition of the patient, the operation, and the anæsthetic.

We have said enough to indicate that a great deal has yet to be learned on the whole subject of anæsthesia, general and local. We have already in previous numbers of THE LANCET reported on the history of anæsthetic discovery; and we have arranged to present in future numbers a comprehensive report, experimental and practical, on the whole question. We leave the argument at present as it stands for such modification as labour and research may supply, reserving to ourselves the privilege of commenting, from time to time, on the progress, general and local, that comes to light from every independent and trustworthy source.

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INASMUCH as the ministerial whitebait dinner was eaten on Wednesday, and Palace-yard is now deserted, it is a duty owing to *our* constituents to place in review the doings and events of an expiring session of Parliament, so far as they interest or affect the readers of THE LANCET. All possible materials are at our elbow, for the annual gathering has occurred and the annual speeches have been made at the Mansion House, at which hospitable establishment the Prime Minister, with accustomed post-prandial felicity, congratulated his host and the assembled guests on the work that Parliament had achieved. Mr. DISRAELI told how he and his colleagues had redeemed their pledges to the country, and, as a skilled tactician, did the business marvellously well. But let us see what, in sober truth, has been done at Westminster during the past six months.

A Public Health Bill has been introduced by the President of the Local Government Board, which was avowedly one almost exclusively of consolidation. The only new clauses were those that will, as it is believed, enable the authorities in one district to take action as to nuisances that arise in a neighbouring sanitary area. The want of some such provision has been specially felt with respect to certain noxious factories on the banks of the Thames, but the provisions included in the Bill are obviously insufficient, unless an extension of the terms of the Alkali Act is also made. There can be no doubt that this last consolidating Act will do much to simplify sanitary work, render it fairly comprehensible to the executive in urban, rural, and port sanitary districts, and show at the same time how much further legislative action is required in order to render the existing statutes workable and efficient.

The Artisans' Dwellings Act is, doubtless, in a sanitary, social, as well as political sense, the measure *par excellence* of the session. The fact, long acknowledged, that many cities and boroughs in England are so built and so densely populated that the buildings contained therein "are unfit for human habitation, and fevers and diseases are constantly generated there, causing death and loss of health," is, in the preamble of the Bill, a recital of evil sufficient to claim a remedy. The Act, which became law about a fortnight ago, applies to the City of London and the metropolis, and to urban sanitary districts in England and Ireland containing a population of twenty-five thousand and upwards, the authorities for carrying out the provisions of the Act being the Commissioners of Sewers (for the City), the Metropolitan Board of Works, and the respective urban sanitary authorities. Powers are given to deal with unhealthy areas, the medical officers of health initiating the reforms by representation to the local authority. We noted in THE LANCET of last week that the Holborn District Board of Works and the Corporation of Liverpool have already commenced operations under the Act, the effect of which will be (if its provisions are judiciously exercised) to improve to a vast extent the sanitary condition of the metropolis and of all large towns throughout the kingdom. We may remark incidentally that, as by the 12th section of the Act the Metropolitan Board of Works are empowered for this special purpose to employ a medical officer, it would be well, at all events in the first instance, to choose this officer from Mr. SIMON's staff at the Medical Department of the Local Government Board.

It is a satisfaction to report that the College of Surgeons have, tardily enough, asked for and procured an "enabling" Act, which will give them powers to take decisive action under the Conjoint Scheme. We shall wait and watch for the result next session, because, as it appears to us, another obstacle that stopped the way to the "one portal" is now removed.

The Sale of Food and Drugs Bill has again been before Parliament, and, in accordance with the report of the Royal Commission, the Act of last year has been so mutilated that, as we may fairly say the last end has been worse than the first. It does not, however, seem to us that any special objections need be taken to nominating the authorities at Somerset House referees in all cases of antagonistic evidence, if the laboratory department is sufficiently well officered.

A Pharmacy Bill for Ireland has also passed both Houses, and will shortly become law.

The Select Committee appointed to report on the now notorious Hampstead Hospital question has decided that there is no reason why, in such a case, this particular district should claim the interference of Parliament.

The medical officers of the army are to be congratulated on the energetic way in which their grievances were put before the House by Dr. LUSH some two months ago. He remarked emphatically on the want of a healthy flow of promotion through the department, on the arbitrary manner in which officers were removed from their regiments, and on the general uncertain position that they hold in the service.

In the "massacre of the innocents" are included the Medical Act (cleverly staved off by Lord SANDON), the Rivers Pollution Bill, and Mr. CHARLEY'S Infanticide Bill,—all of special importance to the members of our profession and to those interested in the sanitary condition of the people. Two Bills referring to Vivisection were introduced by Lord HENNIKER and Mr. LYON PLAYFAIR respectively, but were withdrawn on the appointment of a Royal Commission on the subject, the report of which Commission has not yet appeared. We cannot affect to regret, on sanitary grounds, the collapse of the Merchant Shipping Bill, because all new provisions relating to the health of seamen were in it utterly and entirely ignored. Opportunities were afforded for improving the condition of our sailors by instituting a medical inspection before signing articles, and by various other minor provisions; but, as it would appear, Mr. PLIMSOLL'S pertinacity as to unseaworthy ships has blinded the Government and the public to the existence of unseaworthy sailors. A crude and ill-considered measure, called the Mercantile Marine Hospital Service Bill was introduced into the House by Captain BEDFORD PIM, but did not reach a second reading. The same member, however, obtained an important return relative to ship surgeons, which showed a list of more than 200 unregistered practitioners serving in the mercantile marine; 8 of whom were only twenty, and 6 nineteen years of age! So much for the sanitary supervision of the Board of Trade.

In conclusion, we cannot congratulate the Government on the termination of the session. *Sanitas sanitatum, omnia sanitas,* was a very good war cry; but we were bound to expect from a Ministry that adopted it as its motto a little more energy and practical workmanship in things relating to the health, and therefore the prosperity, of the people.

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WE have always maintained that one of the great uses of the British Medical Association is that it creates once a year an occasion and an audience, when and to which authoritative accounts can be given of the state of the different branches of the science of medicine, and mainly of medicine itself, as comprising a scientific investigation into all that constitutes disease and the treatment of disease. This duty in the present year was devolved with great propriety on Dr. J. WARBURTON BEGBIE. Many of the readers of his address will be disposed to think that he might have disregarded the question put by the late Sir WM. HAMILTON—Has the *practice* of medicine made a single step since HIPPOCRATES? It is true that this question was put by the illustrious professor so far back as 1832. But even then there was a certain look of ungraciousness about it. Vaccination had been discovered; chinchona and the alkaloids had been introduced into practice; and the marvellous significance of atmospheric impurities, especially in hospitals, had been indicated half a century before by Dr. CLARKE'S discovery of the remarkable effects of fresh air in abating the mortality of newly born children in the Dublin Lying-in Hospital—a discovery which is not sufficiently appreciated even in this age of hygienic medicine. LAENNEC had introduced auscultation—not, however, without candidly pointing out that he had found a passage in HIPPOCRATES which showed that he in a way used immediate auscultation. If Sir WM. HAMILTON had fully considered the significance of such discoveries as the above in the light of the unrivaled learning which he possessed, he might have framed his question in less ungracious-looking terms. Still, there was enough of antiquity about the chief parts of medical practice when Sir WILLIAM'S question was framed to make it not altogether unreasonable. The further point remains: Allowing that Sir WILLIAM'S question was not altogether unreasonable in 1832, was there any justification for Dr. BEGBIE seriously reviving it in 1875? Be this as it may, he had an easy task, and would have had a still easier one if he had not spent a large portion of his address in magnifying, not unjustly, the wisdom of HIPPOCRATES and the excellence of his practice. Most of us would have been well pleased if Dr. BEGBIE had given us more numerous illustrations of the great strides of modern medicine. But it was more magnanimous and more helpful to scientific modesty to keep before his hearers, as he did, the great merits and wonderful sagacity of HIPPOCRATES and of the men who in the various schools of Europe have kept the lamp of medicine burning during the darkness of intervening ages. Not only so. When we consider what has been done since 1832 in the way of improving the practice of medicine, we are struck with two points: first, that the curative agency or tendencies of nature are more clearly recognised; and, secondly, that where Medicine attempts to interfere, she does so with a preference for milder and less perturbative means than were in fashion up to the time of Sir WILLIAM'S question. And in both these respects there is a reversion to Hippocratic ideas. There is no part of Dr. BEGBIE'S praise of HIPPOCRATES which is more just than that in which he praises the Father of Medicine for his admirable rules for preparing fomentations for the relief of the pain of pleuritis. Of late years, fomentations and poultices have been deservedly preferred, in inflammations of the chest as in other inflammations, to blisters and irritating applications; and the due description of their merits has yet to be written.

But Dr. BEGBIE, though magnanimously enlarging on the old medicine, amply vindicates the title of modern medicine to respect. It is gratifying to know that philosophers, whatever their theoretical views of medicine, have a great practical respect for it, and readily betake themselves to those who practise it. We see no proof of abatement in any class of society in its faith in medicine coinciding with its greater ability to criticise it—not merely medicine in the abstract, but in medicines themselves. What wonderful words are those of LIVINGSTONE in which he describes his servants forsaking him and taking away his few goods and chattels, including his stock of flour—"*but the medicine chest was the sorest loss of all!* I feel as if I had now received the sentence of death like poor Bishop M'KENZIE." Medicine can bear the reproaches of philosophers when the value of its mere instruments is thus attested by a man contending with the deadly influences of Africa. Dr. BEGBIE vindicates modern medicine, not only for the means it employs, but for those it has abandoned. He rightly, though withal modestly, lauds its scientific basis in anatomy and physiology; its particular discoveries, especially that of anæsthetics; that of the uses of particular drugs, as of bromide of potassium in epilepsy, of iodide of potassium in aneurism, of cod-liver oil in phthisis, of the value of cold as a remedy in hyperpyrexia, of the similar power of quinine, of the use of turpentine in hydatids of the lung, &c.

How just is Dr. BEGBIE's praise of ALISON, who in his own philosophic way indicated the two lines of inquiry by following which Medicine, in his opinion, was to be improved—as it has been improved,—first, by the discovery of specifics; secondly, by investigation into the causes of disease. Since Sir WILLIAM HAMILTON's question was put we have received the light of Dr. BRIGHT's researches into the relation of certain palpable symptoms of debility and dropsy to disease of deep internal organs, which have done more perhaps than any other to enlarge our views of the nature of organic disease. Valuable results have been effected in the way of investigating the causes of disease, and the ways in which they are propagated, such as typhoid, phthisis, &c. This may be despised as mere progressive pathology; but it is on a knowledge of this kind that a correcter, if a more modest, system of medicine is to be based. The distinctions of continued fever might have been considered to be only pathological had the great pathological distinctions not stimulated observers to a complete differentiation, including a difference in etiology, and even in their treatment. We leave Dr. BEGBIE's address with the assurance that the practice of medicine in 1832 had made a great step since HIPPOCRATES, and has taken very long strides since 1832. Though, alas! our ignorance is still great and our power very limited, life is on the whole longer and disease shorter, less painful and less uncontrolled, and life would be longer still and disease less frequent if men and States respected the accomplished discoveries of medicine more than they do.

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WHOEVER has a competent acquaintance with the requirements of public health administration will welcome the Right Hon. LYON PLAYFAIR's address at the opening of the Public Medicine Section of the British Medical Association in Edinburgh. Especially they will welcome his statement that what he then said respecting the vicious administration of the Public Health Laws by the Local Government Board he is prepared and proposes to sustain in his place in Parliament. Probably he is the one man alone competent to deal properly with this question in the House of Commons, and it is matter for congratulation that he has at length found time to give serious attention to the existing state of things in the administration of the Sanitary Laws. How it has come to pass that neither he nor any other member of the Legislature has before protested against that frustration of the essential objects of the sanitary legislation of 1871 and 1872 it would perhaps be idle to inquire. What considerations of ministerial or departmental etiquette or of party or of politics may have induced members of Parliament to remain silent while the whole question of public health administration was being made subsidiary to the aggrandisement of a particular section of a particular public department might be a subject of curious if not very useful speculation. But the fact will remain for the historian of the social history of the time to consider, that the Legislature having, after much delay and with no little trouble, provided for local sanitary administration on a sound technical basis—for the substitution of trained knowledge in local sanitary proceedings for the "rule of thumb" which had previously for the most part held good,—the Government Board entrusted with the supervision of the laws thus providing deliberately and of aforethought frustrated their purpose. This Board eliminated wholly from its own administration of the laws all previous technical knowledge of the subject to which they related, and it taught by precept and example (as it still teaches) that, except as to the strictly legal routine fulfilment of a specific requirement of the law, local sanitary authorities should do the same. As Mr. PLAYFAIR remarked, it placed the medical officer of health on the same footing in relation to the sanitary authority as the Poor-law medical officer stands to the Poor-law authority, removing from him at once his essential functions of preventive officer. Whatever doubt may have remained upon the minds of persons regarding so almost inconceivable a state of things must now have been effectually removed by the lately published reports of the general inspectors of the Local Government Board; and it is to be surmised that the publication of these reports first showed Mr. PLAYFAIR clearly the scandalous perversion of the essential objects of the sanitary legislation of 1871 and 1872 which had been effected by the Local Government Board. In these reports, from beginning to end, the object or aim of the Sanitary Laws is dealt with simply as the removal of nuisances, and the inspector of nuisances is regarded as the particular officer whose duty it is to prevent disease. The medical officer of health has no place in the scheme of prevention. He is dealt with solely as a resource in case the preventive efforts of the inspector of nuisances should fail—a person to be called in, like the doctor in ordinary life, to remedy disease, if the sanitary authority, on the one hand, or the central inspector, on the other, should hold it advisable. The action of this officer is to be strictly limited by the conceptions of disease-prevention held by the sanitary authority, the central inspector, and the inspector of nuisances. He is to be reserved as a rectifier of sanitary administrative blunders, as expressed in preventable sickness, just as the technical staff of the central administration is reserved for this purpose. The measure of success of local sanitary administration is the removal of nuisances, not the abatement of disease; and the extinction of nuisances is a mere matter of common observation. Mr. PLAYFAIR said that the Local Government Board had misunderstood its function by cramming common sense into boards already saturated with it, and withholding scientific sense which they cannot be expected to possess. Is Mr. PLAYFAIR justified in insulting, even though unintentionally, "common sense" in this fashion? It is impossible to maintain the species of lay inspection of sanitary administration instituted by the Local Government Board without discrediting the scientific elements of sanitary administration throughout; and the Board and its inspectors have not hesitated to do this. The result has been a species of apotheosis of "common observation," as typified by the inspector of nuisances in the new sanitary administration of the country. The compulsory appointment of medical officers of health, except as the means of inaugurating an administration founded upon the knowledge of the sickness and deaths of a locality, would not only be meaningless, but unjustifiable. The Local Government Board has not hesitated to deprive the appointment, in practice, of its proper meaning, by instructing sanitary authorities, through its inspectors, that the appointment is largely useless—*except when epidemic disease is present.* This has long been patent; but no member of the Legislature has as yet spoken of it in his place in the House, and until now none has shown an adequate conception of its importance in his extra-parliamentary utterances. It is hardly to be hoped that the Legislature can contend successfully against a thoroughly organised and powerful department like that of the Poor-law (otherwise Local Government) Board, with its administrative interests at stake. That Board has done this mischief in sanitary administration too thoroughly, thanks to the indifference of Parliament, to be remedied without long work. It has so successfully prejudiced rural sanitary administration against medical officers of health—in other words, against trained technical knowledge in its deliberations,—that the present generation will hardly unlearn the injurious teaching. Mr. PLAYFAIR touched the core of the subject when he insisted that central and local sanitary administration should be based upon audits of death and disease. He justly observed "that unless the medical officers of health are trusted by the local authorities as their immediate sanitary advisers, and are encouraged to use the knowledge of sickness and death, gathered in the locality, for the prevention of disease, local government will continue to be looked upon as an unpleasant machinery for augmenting rates, and not as one for economising the life and resources of communities."

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THE circumstances which were revealed at an inquest held last week in Islington are of considerable interest to the public and to the profession. The inquiry was into the cause of the death of an old Indian general, who, it was alleged, had been wrongfully detained as a lunatic. The causes of his death were sufficiently clear to satisfy the jury that it was due to natural causes. The evidence of his mental state was not sufficiently clear to satisfy his executor, and it is possible that more will yet be heard of this part of the case. The medical relations of lunacy are very important, and the bearings of this case on those relations are of more than usual significance. The deceased was seventy-five years of age, and had lived for six years in lodgings at Islington, temperate and in good health till March, when he became ill with congestion of the lungs, and was attended until the 3rd of June by Dr. SILLIFANT, in whose opinion he was sane up to that date. In the opinion of his two sons he was not sane, and by their instrumentality Dr. SILLIFANT was dismissed and the patient placed under the care of Dr. BROXHOLM, who found him, he says, dirty, taking large quantities of alcohol, talking disconnectedly, and, in his opinion, insane. The nurses were changed, the landlady denied access to him, and, after consultation with Drs. WILKS, TUKE, and MAUDSLEY, certificates were signed by Dr. BROXHOLM and Dr. TUKE, and he was committed to the charge of a male nurse, JOHN WHEELER, who had been placed in the house. The order committing him to the charge of WHEELER, signed by one of the sons of the deceased, contained the manifest inaccuracy of intimating that the house in which he was to be kept was that of the attendant, when it was, in fact, that in which he had been living for six years. It would appear also that the patient remained under the care of Dr. BROXHOLM, who had signed one of the certificates of lunacy. On the mental state of the deceased much contradictory opinion was expressed. It cannot be imagined that Dr. TUKE or Dr. BROXHOLM would have signed the certificate unless distinct and sufficient symptoms of insanity had been obvious to them; but the report of the inquest does not give details on the point full enough to enable an opinion to be formed. In the judgment of the executor, Mr. LOWE, of Parliament-street, who knew him well and saw him frequently, the General was throughout perfectly sane; and Dr. LANGSTON, who accompanied Baron CLEASBY to see him the day before his death, was of the same opinion, as, it would appear, was also Dr. WILKS on the 26th of July.

The details of the case illustrate very forcibly the need for extreme caution in dealing with those supposed to be insane. Their management, the circumstances in which they are maintained, should be above the suspicion of injustice or of injury. However common may be the practice of ordering a lunatic into the entire charge and control of an attendant, we cannot but think that it is one most undesirable, and to be avoided whenever possible. It should be always foremost in the mind of those who have to order or sanction the arrangements for the care of the insane that the object of restraint is their recovery, no less, but more, than relief to their friends; and the means employed should always be those most calculated to further restoration to health of mind as well as of body.

Annotations.

"Ne quid nimis."

OVARIAN AND UTERINE PATHOLOGY.

THE address of Dr. Matthews Duncan at Edinburgh, as President of the Obstetric Section of the British Medical Association, magnifies the importance of the ovaries and their diseases as factors in producing the ailments of women. The greater ease with which lesions and malpositions of the uterus can be detected has, he seems to think, led to an erroneous estimate of their frequency and importance as compared with ovarian lesions. His remarks on the common and superficial lesions of the cervix and on the stereotyped treatment of them we reproduce in their entirety, as well as his observations on the pathology of the inner surface and body of the uterus:—

"The application of physical methods to the investigation of the diseases of the genital organs brought to light, first, the most superficial or most easily observed of uterine lesions—the ulceration, as it was called, of the cervix; and it was inevitable that to this great importance should be attached, an importance far beyond what it really possesses. This importance has now, for at least a decade, been rapidly declining; and while it is admitted that the lesion is very significant, and forms an element of the most common

> disease of women, it is now well known that it has been not only exaggerated in importance, but misinterpreted as to its relation to the discharge; and that the treatment, by applying lunar caustic through the speculum to the visible ulceration, once so very widely used, is only rarely a good or successful method. Great improvements have recently been made in the theory and treatment of diseases of the neck of the womb; but we can only say that great and admirable attempts have been made to improve in a similar manner the theory and treatment of the analogous diseases of the body of the organ. Endometritis, even, is very inadequately described; and the attainment of this is, or should be, our first step to knowledge of disease of the uterine body. The influence of displacements and their relation to uterine congestion are not settled matters, after all the voluminous writing which has been zealously devoted to them."

The above remarks show clearly that Dr. Duncan does not mean to advocate the neglect of the uterus, while he asks for more attention to the ovaries. It is not a little interesting to general practitioners to remember in this connexion that an eminent English gynæcologist only last week in our columns spoke with refreshing positiveness of the dependence of severe hysteria on flexions of the uterus. Dr. Graily Hewitt said, "My own observation has led me to the conclusion that marked flexion of the uterus exists in all cases of severe repeated hysterical attacks." These attacks might be thought to have an ovarian rather than a uterine seat, if indeed it has any special seat in the sexual system. The probability is that either ovarian or uterine irritation, or any other irritation or shock, acting on the nervous centres of patients with a certain morbidness or irritability of the nervous constitution, suffices to set up hysterical phenomena. But we are digressing.

Dr. Duncan goes into the question of the connexion between sexual activity and the integrity of the ovaries, and recognises the dethronement of the ovaries from the supreme position in all departments of sexual activity. The persistence of sexual feelings after the complete removal of the ovaries is the principal fact quoted by him, inclining him to believe that the sexual function has its head-quarters in a certain portion of the lumbar spine, rather than in the ovaries. Still, Dr. Duncan is of opinion that the dethronement of the ovaries is not yet complete, and that there is still much truth in the ordinary views of practitioners as to their being the *fons et origo* of all the sexual functions. All practitioners are not of this opinion, and our readers will remember the letter in which, last year, Mr. William Henry Kesteven claimed for his father priority in contesting the commonly accepted view of the ovular theory of menstruation. Dr. Duncan discusses the question of ovariotomy; the subject of ovaritis, acute and chronic; hæmatocele; the present state of our knowledge of the anatomy and physiology of the ovary. Careful bimanual examination is lauded as the chief means of physical diagnosis, especially for the detection of ovaritis, uncomplicated with adhesions. He regards our improved knowledge of ovaritis as one of the greatest steps of progress in modern gynæcology. His view of the importance of the diagnosis of it may be gathered from the following words:—

> "This diagnosis is a matter of very great moment to the practitioner, not only on its own account, for that is a matter of course, but also on account of the value of its discovery as a contraindication—to which Nélaton is said to have attached importance—of various other gynæcological operations. There are in few kinds of cases more frequent occasions for correction of treatment than those that occur under this category. How often is a pessary intolerable because an ovaritis has been neglected! How often is a uterine catarrh inveterate, or a displacement supposed to be painful, or a metritis supposed to be peculiar, when there is an explanation in the neglect of an ovaritis!"

SMALL-POX AND CERTIFICATES OF CAUSE OF DEATH.

The opposition to compulsory vaccination, as an infringement of the liberty of the subject, is one of the most depressing signs of a certain phase of so-called liberalism, which is unfortunately finding great favour just now among a large section of the working classes. The claim of Alderman Tatham at a recent anti-vaccination meeting in Leeds, that "every man should have the control of his own body and of the bodies of his children in a matter of this kind," is however, so illogical, and would be dangerous in so many ways to the progress of civilisation, that there is little chance of such a doctrine ultimately prevailing. Although statistics carry little weight with anti-vaccinators, this should not prevent a strong effort being made to render figures relating to small-pox and vaccination as complete as possible. At present they are lamentably incomplete and unsatisfactory. Except in hospitals, the medical certificates of the cause of death in nine out of ten omit, in fatal cases of small-pox, to state whether the deceased had been vaccinated or not. Dr. Goldie, in his annual report upon the sanitary condition of Leeds in 1874, states that 121 cases of small-pox were admitted into the Small-pox Hospital of that town during the year. No death occurred among 55 who had been efficiently vaccinated; there were 4 deaths among 30 imperfectly vaccinated; 9 among 24 unvaccinated; and 3 among 12 regarding whose vaccination there was no evidence. At the anti-vaccination meeting above referred to, Councillor Kenworthy declared his disbelief of all statistics relating to this question, and did not hesitate to say that he knew them to be "cooked." It is to be hoped, however, that medical practitioners in future will do their best to increase our knowledge on this important subject, by inserting on their certificates of the cause of death information as to the vaccination of persons who die of small-pox. The want of this co-operation on the part of the medical profession destroys the value of the statistics relating to small-pox published by the Registrar-General.

BLOOD-CORPUSCLES.

In a brief historical sketch of the mammalian red blood-corpuscles, Dr. Norris, of Birmingham, observes that these minute bodies were first seen in the year 1658 by Swammerdaux, though his observations were not published till a century later. In 1661 Malpighi published his discovery of the blood-corpuscles of the hedgehog. He erroneously regarded them as globules of fat. Leeuwenhoek, in 1673, detected them in human blood, and from this time the study of these bodies commenced in earnest. Hewson, in 1770, showed that in the normal state they were not globules, but flat bodies. Dr. Young, in 1813, inferred that they were biconcave discs, and this was demonstrated by Dr. Hodgkin and Mr. Liston in 1827. The researches of many observers, amongst whom Gulliver and Wharton Jones are conspicuous, have proved that the red corpuscles are destitute of a nucleus, that they have a diameter of about $\frac{1}{3200}$ of an inch, and a thickness of about $\frac{1}{12000}$ of an inch. The running together of the discs into rouleaux was first observed by Hewson, and first depicted by Della Torre about three years subsequently. In 1862 the nature of this phenomenon was investigated by Dr. Norris, who pointed out a form of aggregation of the corpuscles which had been overlooked by previous observers, and which he designated the tesselate mode of aggregation, and at the same time demonstrated experimentally that aggregation in both cases was dependent upon a peculiar operation of the force of cohesion. In regard to their physical constitution, whilst they were formerly regarded as vesicles, they are now considered to be tiny lumps of a uniformly viscous matter, with at most only a pellicular covering. Their mode of origin is obscure, but is generally attributed to transformation of the white corpuscle. Dr. Norris, however, holds that, like the formless elements of the blood, these morphological elements are produced *de novo* from the food and fluids of the body; and in support of his view states, as the result of his observations, that the colouring principles associated with plants and animals, such as hematin or cruorin, chlorophyll or carmine, possess the power, under suitable conditions, of combining with protein and other substances, and to produce instantaneously, by a process of precipitation, equable-sized organic globules, which are permanent in the surrounding aqueous fluids. These morphological elements are therefore the immediate result of the mere admixture of suitable formless fluids. Hence it would appear that if in any part of the economy hæmatin and globulin come together in the presence of a third suitable organic liquid, hæmoglobin corpuscles must inevitably be produced in numbers proportionate to the amount of hæmoglobin present. This Dr. Norris believes probably occurs in the lymphatic glands, but there is no reason why it should be exclusively confined to this region.

In accordance with this view Dr. Norris remarks we have no longer to search for transition forms (which have been looked for in vain), but only for the chemical substances, the organs which elaborate them, and the regions in which they combine. This view refers the formation of the blood as a whole almost entirely to the elements of the food.

THE CISTERNS IN LONDON HOUSES.

THE London season has now closed, and a walk through the deserted squares and streets will show how universal the exodus is that takes place at this period of the year. The large houses are no longer full of tenants, but are left in charge of one or two domestics, or professional "minders." A change on so large a scale must make an important impression on the sanitary condition of the city, for not only is less sewage poured into the drains, but also less water to flush them is used. It is difficult to say if the diminution in the quantity of sewage is proportionate to the diminished return of water to the sewers, but it would be an interesting point to ascertain. We wish now, however, to draw attention to the condition of the cisterns in empty houses during the dull months. These cisterns are generally constructed to contain sufficient water to meet the requirements of the house when full, allowing so many gallons per head for the estimated number of residents. During the season the cisterns can barely meet the demands made upon them, and consequently the water is thoroughly changed every day, or at the most every two days. When the family is from home the cisterns are seldom emptied, a small quantity only is withdrawn every day, generally from one cistern—the most accessible—the others being left unused. Consequently in these the water becomes stale, and even in the favoured cistern the quantity of fresh water admitted daily is too small, in proportion to the stale water left unused, to be either agreeable or wholesome. The family returns to town after many months' absence, and the water in these cisterns is, in many instances, used by them when it must be in a very bad condition from long storage. We would advise householders to give injunctions to their servants or those left in charge, to draw off the water in all cisterns in the house at least once a week during their absence, and before returning to have the cisterns themselves thoroughly cleaned out. By doing this they will ensure a wholesome and fresh supply of water for themselves, and the water poured into the house-drains in considerable quantities by these weekly flushings will keep them clean and sweet, and carry off any impurities or sewer-gas that may collect in them. They will also benefit their neighbours by returning to the main sewers a quantity of water for flushing at a time when it is much required.

MUIR v. RIDGWAY AND ANOTHER.

AMONGST the cases set down for trial in the Home Circuit during the present Assizes, was an action for libel, brought by Sir William Muir, the Director-General of the Army Medical Department, against Messrs. Ridgway, the proprietors of the *Broad Arrow*. The case came on before the Lord Chief Baron and a special jury at Croydon, on the 9th inst.

Mr. Hawkins, Q.C., who appeared for the plaintiff, said that Sir William Muir had been compelled to bring this action in consequence of some charges that were made against him, which he considered seriously reflected upon his character, in a newspaper called the *Broad Arrow*, of which the defendants were the proprietors. The defendants, however, had done what the managers of all the respectable journals were always ready to do when they discovered that a wrong had been done—had admitted that they were not justified in publishing the article in question, and that there was no foundation for the charges that had been made against the plaintiff. Sir William Muir had no other object in view in bringing the action than to vindicate his character, and he was perfectly satisfied with the explanation of the defendants, and arrangements having been made for indemnifying Sir William Muir against all the expenses that he had been put to in the matter, he would consent to a juror being withdrawn.

Mr. Harrison, on behalf of the defendants, said that the letter complained of had been inserted by inadvertence, but it really did not contain, according to their view of it, any charges against the plaintiff. He, however, was ready to disclaim any intention on the part of his clients to make such charges against the plaintiff, and to withdraw any imputations that were supposed to be cast upon the plaintiff by the article in question.

A juror was then withdrawn, and the Lord Chief Baron, addressing the jury, said that this was a most satisfactory termination of the case. All imputations, if there were any in the paper, which had not been read to them, were withdrawn, and the very high character that Sir William Muir always has sustained will remain unimpeached by any doubt or imputation that may at all have been cast upon him by anything that has appeared in the publication.

THE BRITISH MEDICAL ASSOCIATION AND DIPSOMANIA.

THE Treatment of Habitual Drunkards formed the subject of two papers in the Public Medicine Section of the British Medical Association meeting in Edinburgh, on Thursday week. The point of Dr. Peddie's paper was the identity of the State relations of the suicide and of the dipsomaniac; and the essentially morbid mental condition of the latter, which justifies and needs restraint. Dr. G. F. Boddington, the author of the second paper "On the Control and Restraint of Habitual Drunkards," urged strongly the magnitude of the evil and the need for legislation. Mr. Playfair testified to the weight of the evidence, which was brought before the Parliamentary Committee, as to the efficacy of the proposed measure. A resolution was carried, on the motion of Prof. Christison and Dr. Husband of York, "That excessive intemperance is in many cases a symptom of a special form of insanity, which requires special treatment, with a view, first, to the recovery of those affected, and, secondly, to the protection and advantage of them and of society; that in the present state of the law such treatment is not attainable; and that it is desirable that legal provision should be made to render it attainable." At the general meeting of the Association on the following day, the motion was referred to the Committee on Habitual Drunkards appointed by the Council. Dr. Ritchie, of Edinburgh, however, suggested that the relationship to insanity, pointed out in the resolution, would mislead the general public, and moved a resolution which recognised more clearly the need for State control of all cases, "whether the result of vice or the manifestation of a special form of insanity." The resolution, however, met with no support, probably because the subject was merely to be referred to the Committee. Dr. Ritchie undoubtedly touched a point which will have to be most carefully considered in every resolution or authoritative suggestion which is put forward on the subject, if the present movement is to have any chance of success. While the essential relationship between insanity and dipsomania is carefully asserted as one of the most important grounds on which legislation is justified, the practical distinction between the two classes of cases must be maintained with the greatest care. Once let the idea get abroad among the public that "the doctors want to shut up all drunkards in lunatic asylums," and an opposition will be raised which will be fatal. We have no doubt that the Committee of Council will give every consideration to the point of Dr. Ritchie's proposed resolution, as it indeed deserves.

THE WATER-SUPPLY AT HASTINGS.

HASTINGS was one of the first of our watering-places to undertake the task of improving its drainage, by constructing a large main sewer, which carried the town drainage to a point a considerable distance to the eastward from the town. The completed scheme has not yet been in operation a sufficient time to make much impression on the death-rate, yet it is satisfactory to notice that the deaths from zymotic diseases have fallen considerably during the last four years, the rate for the four years ending 1874 being 1·8 per 1000, as compared with 3·0 for the decennial period ending 1870. Whilst congratulating the authorities on the improvement of the town drainage, and the advantages they may now expect to accrue from it, we must call their attention to the defective nature of the water-supply—defective certainly in quantity, and frequently, we fear, in quality. Complaints have reached us on both scores, and this spring it came under our own immediate notice. We think in many cases the impurity of the water was caused by the filthy condition of the cisterns in the lodging-houses. But, looking at the sources of the present water-supply, we also feel assured that, in dry seasons especially, the water may acquire considerable organic impurities before its distribution. The question of an increased water-supply has been before the sanitary authority for many months, and they have received many able reports on the subject. It is not our province to dictate which of the proposed schemes is the best, but it is our duty to urge the town authorities speedily to adopt some scheme which will not only secure for the town an ample and pure supply sufficient for its present requirements, but also to make provision for the increasing population. In any case the supply ought to be made constant. Independent of the dangers of the intermittent system, which have been frequently illustrated in our columns, an intermittent supply requires the use of house cisterns for domestic storage. In our own homes we can see that these are regularly cleaned out. In lodging-houses, however, the owners are often too busy or harassed to think of such particulars, even if they regard them as necessary, and we believe many of the complaints that so frequently arise at the different seaside resorts on the score of bad water are attributable to this cause. Visitors whose attention is drawn to any defect in the quality of the water supplied them should inquire into this point, and put themselves in communication with the medical officer of health of the town. If the impurity is due to a foul cistern, it can be easily remedied; if from an originally contaminated water-supply, such complaints will strengthen the medical officer's hands in his endeavours to secure for the town water of better quality. In all cases it should be remembered that a deficient water-supply calls for increased storage, and it is well known that many waters deteriorate and acquire organic impurities during the period they remain in reservoirs and cisterns.

THE TOXIC EFFECTS OF PUTREFIED BLOOD.

SOME very interesting observations on the toxic effects of putrefying blood have been recently communicated to the Académie des Sciences by M. V. Feltz. Their object was to ascertain how far the toxic property could be influenced by various conditions. He first determined the effects on a healthy dog. The injection of one to three cubic centimetres caused all the symptoms of intense septicæmia, pyrexia, vomiting, hæmorrhages, and death, in from three to eight days, with pulmonary infarctions and evidence of fatty degeneration in both blood and liver. Exposure to the air for periods of 24 to 96 hours made no difference in the toxic properties of the blood; exposure to compressed air for 24 to 144 hours likewise had no influence. The microscopic characters of the blood remained unchanged, but the vibrios it contained were a little less active. The toxic effects were the same. Exposure to oxygen had a different result, according to the time of exposure. Contact with oxygen for from 6 to 72 hours did not lessen the poisonous qualities; animals injected died as in the other cases. Those injected with blood which had been exposed to oxygen for 96 to 216 hours recovered after five or six days' illness. The exposure rendered the bacteria &c. inactive. The result was the same with blood through which a continuous current of oxygen was passed. A very similar effect was produced by exposure of the blood to a vacuum for many hours. Some animals which were injected recovered, others died, but the difference was less clearly related to the duration of the exposure. A second series of experiments was to determine the influence of time on the poisonous material. When the putrefied blood was kept so long that no living bodies could be discovered in it by microscopical examination, the same toxic effects were produced by its injection, but were less intense. Some animals recovered, and those which died lived a longer time—ten or twelve days. The post-mortem appearances were the same. Their blood, examined immediately after death, contained active bacteria, vibrios, &c. Putrefied blood was then dried by slow exposure to the air, powdered, mixed with distilled water, and injected. The effects were not, as in the other cases, immediately manifest. After four to six days of incubation, the animals became ill; two died on the tenth and sixteenth days, others recovered. The lesions were the same: the blood contained active bacteria and vibrios. M. Feltz concludes that, as exposure to a vacuum and desiccation did not remove the toxic agent, it cannot be a gas; that activity on the part of the minute moving particles within it is not necessary for its septic effect, and that the development of bacteria &c. in the blood of the animals injected points to the germs of those bacteria as being the probable efficient means of the production of the poisonous effects.

COMPLETION OF THE METROPOLITAN MAIN DRAINAGE.

A labour of sixteen years, and the expenditure of more than four millions sterling, has brought to a successful completion the gigantic undertaking known as the metropolitan main drainage system, which was commenced in 1859. The whole of the sewage of more than four millions of people, living on an area of over 117 square miles, is now diverted from the Thames near London, and discharged at Barking and Crossness, fourteen miles below London-bridge, into the river at high water, in order that the ebbing tide may carry it out to sea. Until the opening of the western pumping station at Pimlico on the 5th inst. the sewage of an area of nearly fifteen square miles of West London, including Chelsea, Fulham, Brompton, Kensington, Shepherd's-bush, Wormwood-scrubs, Notting-hill, and Hammersmith, was discharged into the Thames at Cremorne. The last portion of the metropolitan sewage has now been diverted from this part of the Thames, is lifted to a height of eighteen feet, and then finds its way into the low level sewer, which carries it to the Abbey Mills pumping-station. So recently as 1815 a penalty was incurred by discharging house drainage into the sewers, which were only intended for surface drainage. Up to that date the cesspool system reigned supreme in London. The nuisance of this system, however, became so intolerable that in 1847 a law was passed making cesspools illegal, and requiring all householders to do what was a penal offence before 1815—that is, to drain into the sewers. In the meantime, however, the Thames was rapidly becoming a gigantic open sewer, and three warnings in the shape of cholera epidemics in 1832, 1849, and 1854, combined with the powerful incentive to action in the matter produced by the effluvium of the Thames upon the legislators in the Houses of Parliament, led to the inauguration of the metropolitan main drainage system in 1859. The system is now complete, but the sixteen years during which it has been in progress have passed without the solution of the problem how to utilise this vast amount of sewage now cast into the sea. This still remains to be solved.

DISCOVERY OF THE MEDICINAL PROPERTIES OF NITRITE OF AMYL.

It was natural for Dr. Warburton Begbie, in his address delivered in Edinburgh, to give all the honour he could to the Medical School of that city. But he passed altogether the bounds of historical accuracy and contemporary justice when he gave to Dr. Lauder Brunton the credit of having, by original research, added the nitrite of amyl to the armoury of practical medicine. The first notice of the effects of the nitrite in producing breathlessness and flushing of the face was by Professor Guthrie; the first systematic, physiological, and therapeutical researches with the nitrite were by Dr. Benjamin W. Richardson. In his report on Nitrite of Amyl made to the British Association for the Advancement of Science at the Newcastle meeting in 1863, Dr. Richardson originally introduced nitrite of amyl into medicine, and in his next and very full report to the Association at the Bath meeting, and in following years he detailed and defined still more carefully, not only the physiological action of the nitrite, but its true position as a therapeutic agent. It was, he showed, as an antispasmodic and as the most potent known relaxant of vascular tension that it took its place in medicine. It would control even strychnine tetanus, and it was to the relief of acute spasmodic and tetanoid affections that it should be applied. Dr. Lauder Brunton, Dr. Haddon, the late Dr. Anstie, Mr. Foster of Huntingdon, and Dr. Farquharson, deserve every credit for being earliest in the field in taking advantage of the knowledge thus supplied, the first-named gentleman having employed the suggested remedy in angina pectoris, the second in cholera, the third in asthma, the fourth in traumatic tetanus, with success, and the fifth in a case of intestinal spasm. But previous to the observations of any of these gentlemen the action, the application, and even the mode of application of nitrite of amyl as a remedy were with much labour discovered, collected, and given to the medical and scientific world by Dr. Richardson.

GROUNDLESS CHARGE AGAINST A SURGEON.

It is bad enough to have a case of rupture of the uterus, which we are all liable to have, but it is a terrible addition to one's misfortunes to have the accident treated as a crime. This was the hard case of Mr. William John Haram Wood, of Boston, who was charged at the recent Lincoln Assizes with feloniously killing and slaying Mary Elizabeth Wright. The circumstances of the case will be remembered by our readers. Mrs. Wright had flooding, which necessitated delivery by turning, which she seemed to bear very well. Mr. Wood left shortly after delivery. Collapse set in, and the patient died in two or three hours, before Mr. Wood could be fetched. Before leaving he did not apply a binder, and he left no very specific instructions about the administration of stimulants. On his arrival after the death of the patient, Mr. Wood was surprised to hear of the event. A post-mortem examination revealed the existence of rupture of the uterus. On the strength of these facts the above serious charge was brought against Mr. Wood. The case for the prosecution broke down completely, so completely that, after hearing the evidence of Dr. Lowe, Mr. Bristowe, Q.C., the leading counsel for the prosecution, said that he was unable to proceed with the case further, as it was perfectly clear from the evidence of Dr. Lowe that the skill or care of no medical man could have saved the deceased. The judge fully concurred with the learned counsel. He advised the jury to return a verdict of "Not guilty." But he added it was very proper that the death of the deceased should have been inquired into, and he hoped the medical gentlemen attending such cases would wait a little longer after the delivery. The jury immediately returned a verdict of "Not guilty." The judge's advice as to waiting a little longer with cases in which anything unusual has occurred is very reasonable, but we cannot agree with the learned judge that there was any propriety in the trial. The result confirms us in the opinion we expressed in our first notice of the case, that the magistrates should have dismissed it. A medical man's grief at such occurrences is great enough without his life being embittered by unreasonable charges of neglect. Mr. Wood may, however, take to himself this consolation, that the case against him had to be abandoned by the prosecution.

DROWNING IN THE BATHING AND BOATING SEASON.

The Registrar-General, in his last Weekly Return, calls attention to the recent considerable increase of deaths from accidental drowning in the metropolis. During the fourteen days ending the 7th inst. it appears that twenty-nine deaths resulted from drowning, which exceeded by more than 25 per cent. the corrected average number from the same cause in the corresponding period of the last ten years. Each summer season there is an increase in the fatal cases of drowning. In 1874 they averaged 12 per week in London during the months of July and August, whereas in the other forty-four weeks of the year they did not average more than 5 per week. The description of the cause of death in the death register is often too indefinite for the purpose of deciding whether the drowning results from bathing, boating, or other cause. With regard to the fifteen deaths from drowning registered in London during the first seven days of this month, it may be stated that bathing was the assigned cause in only two cases, while in several the information furnished by the coroner for the death register is insufficient to decide the circumstances under which the drowning took place. It appears probable that some of the cases described as "found drowned" are suicides, but unless so described, these deaths are referred to accident. The fifteen deaths from drowning above mentioned included eight in the Thames, four in canals, and two in the Lea.

CEREBRAL HÆMORRHAGE WITH HEMI-ANÆSTHESIA.

THE occurrence of hemianæsthesia in lesions of the cerebral hemisphere has thrown much light upon the localisation of brain function. From the post-mortem researches of Türck, and the experiments undertaken by Veysierre, it has now been pretty well established that anæsthesia of one half of the body is most marked when the lesion invades the white matter just outside the optic thalamus, where the cerebral peduncle passes into the radiating crown of Reil—the part called by M. Charcot and others the "internal capsule"—and the neighbouring white substance of the posterior lobe. A case recently related by M. Raymond at the Société Anatomique fully bears this out. It concerned a woman eighty-nine years of age, who was under the care of M. Charcot at the Salpêtrière Hospital, who was attacked with apoplexy. There was profound coma, partial right hemiplegia, and complete right hemianæsthesia (no kind of stimulus applied to the skin leading to any response). On the left side both motor power and sensibility were perfectly retained. There was no appreciable difference in temperature between the two sides. Death occurred on the day after the seizure; and there was found a recent clot in the left hemisphere, taking a linear direction from the anterior extremity of the nucleus caudatus to about four centimetres from the posterior part of the occipital lobe. It involved the whole of the island of Reil, as well as part of the lenticular nucleus of the corpus striatum. The caudate nucleus and optic thalamus were free. M. Charcot remarked on the riband-like form taken by the clot, as being determined by the direction of the bundles of nerve-fibres between the lenticular nucleus and the "external capsule."

PRIVILEGED PEST-CENTRES.

IN their new-born anxiety to clear away the centres and foci of epidemic disease, we trust the authorities will not allow their attention to be diverted from those privileged hotbeds and nurseries of contagious and infectious maladies that exist in the closest proximity to some of our best and otherwise healthy residential property. It is a curious circumstance that nearly all the most salubrious localities in great cities, and particularly in the metropolis, are polluted by the presence of some wretched nest of filth and morbific poison, which enjoys the protection and thrives under the fostering care of the neighbourhood on which it preys. In some cases the plague-spot is a row of miserable hovels owned by some enterprising landlord, who lets out his tenements and allows them to be sublet in a fashion and under conditions fatal to public safety. It would not be difficult to point out instances of the nature to which we allude so flagrant as to constitute a scandal, and still wondrously overlooked. Another variety of the evil is yet more surprising in its character. Besides pest-centres maintained for love of lucre by unscrupulous proprietors, there are preserves which owe their toleration to the fact that they form the "sphere" of philanthropic enterprise. Just as Lazarus might have been patronised as an improving set-off to the grandeur, and an appropriate "object" for the benevolence of Dives, so these clusters of pestilent houses, these miserable courts, are kept by the undiscriminating charity of kindly people, who regard them as pet objects of liberality and practical goodness. It may seem a startling assertion, but it is nevertheless true, that such places exist, and have existed under the conditions we indicate, for a considerable length of time, in spite of the most earnest endeavours to get rid of them. No sooner is the deplorable character of one of these kept rookeries exposed than up starts the official representative of some philanthropic society or mission with a remonstrance pointing out how much matters have been mended within so many years, and a detailed laudation of the "good work" going on in the district which it is proposed to demolish. If our great cities are to be thoroughly cleansed, and *all* the causes and centres of disease are to be removed, public spirit will need to enter the lists against this mawkish philanthropy, just as in putting down mendicancy it is necessary to oppose almsgiving. It is not desirable, perhaps, to specify instances of the abuse we condemn; local authorities will have no difficulty in discovering them for themselves. But it is urgently requisite that such cases should be sought out while the new impulse of improvement is at its height, and we call attention to the risk of overlooking them in the hope that the evil may be rectified.

OUR SILENT HIGHWAY.

THE insanitary condition of the Thames from Richmond to Gravesend continues to be frequently pointed out. It would not be difficult to enumerate *seriatim* the nuisances that exist on the river and the surrounding banks. As to Richmond and other places above the main-drainage system that still discharge their sewage into the stream, the Conservators are responsible for compelling the authorities to divert such nuisances. As to foul cargoes, the sanitary authority is responsible, and has within the last week issued two official notices on the subject. As to factories along the river-side, it is believed that (chiefly owing to the exertions of the South-eastern and other Sanitary Associations), certain clauses have been introduced into the Public Health Bill which will enable local authorities to deal with these objectionable establishments. And as to the metropolitan main-drainage outfalls at Barking and Crossness, the Board of Works is responsible, and before long a great fight will occur between that Board and the Conservancy, resulting, as we prophesy, either in the utilisation of the sewage or the extension of the outfalls on both sides of the river. The Conservancy and the sanitary authority have always worked harmoniously, and much of the good already done by the latter has been owing to the able assistance received from the former.

THE HISTORY OF THE PLAGUE.

AN important note has been communicated to the French Académie des Sciences on the Chronology and Geography of the Plague in the Caucasus, Armenia, and Anatolia during the first half of the nineteenth century, by M. J. D. Tholozan, physician to the Shah of Persia. The information has been obtained from official records preserved in Trebizonde and Tiflis, &c. It appears that in the beginning of this century the plague lasted in the Caucasian provinces for more than eighteen years. It made its first appearance in the capital, almost in the centre of the country, and thence spread in all directions. Its most rapid and persistent movement was towards the north, whence the centre of Russia was seriously threatened in 1806—1816. About the Caspian its extension was slower and its stay briefer. To the south it made no movement, but it passed to the west into Turkey on several occasions. The account of the disease in Armenia and Anatolia presents a series of attacks in rapid succession, the longest period of immunity, for instance, at Trebizonde, being the sixteen years between 1814 and 1830. M. Tholozan's researches fill up a blank which previously existed in the history of the disease.

TABETIC ARTHRITIS.

M. CHARCOT has, more than once, called the attention of the profession to the joint lesions which occur in locomotor ataxy, and in showing recently to the Société de Biologie a collection of bones presenting these changes, he gave a summary of their special characters. These are clinical as well as anatomical. The affection appears commonly during the period of "lightning pains" before the inco-ordination of movement. First, there is grating in the joint; then a collection of liquid in it, with hard œdema of the limb; after a time the joint undergoes a species of dislocation. It is always chronic, is not usually attended with pain, and does not shorten life. The anatomical character is a progressive disappearance of the articular extremities without any bony prominences. The bones appear as if they had been ground down. The affection would seem to be less rare than is commonly supposed, since M. Charcot has seen fifty cases.

CHARITY VOTING REFORM.

THE last Report of the Charity Voting Reform Association, dated August 1st, shows, as regards the Royal Medical Benevolent College, that of 2357 subscribers who have recorded an opinion on the subject of voting, 2098 are in favour of its abolition, and 259 desire to retain the present condition of things; so that there is a majority of eight to one in favour of the memorial sent to the Council of the College some weeks ago, and to which we have already referred. Under these circumstances, it appears to be the bounden duty of the governing body of the Medical Benevolent College to discharge their responsibilities in this matter without delay, and, acting upon the expressed wishes of a large majority of the subscribers, to set a conspicuous example in the cause of charity voting reform.

H.M.S. *Shearwater* has just returned to the Medway from the East Coast of Africa, having been out on a surveying expedition in all parts of the world since July, 1871, when she was commanded by Captain Nares, the officer now commanding the Arctic expedition. We are informed that when off the coast of Zanzibar in the spring of the current year, a large proportion of the officers and crew were attacked with some form of remittent fever. We may anticipate some early particulars of these cases through the Medical Director-General of the Navy. Medical and sanitary particulars should be recorded minutely and published speedily for the benefit of those studying, and interested in, the etiology of disease as it occurs afloat.

AN outbreak of puerperal fever has occurred in the lying-in ward of the Caistor Workhouse. The guardians appear to be aware of the gravity of such an event, and have issued orders forbidding the admission of pregnant women to the institution until further notice. At first blame was thrown on the medical officer at the workhouse, but he has since been completely exonerated by the Local Government Board.

WHEN the epidemic of measles which has scourged Fiji first appeared, considerable blame was attached, even in official quarters, to the medical officer of the *Dido* for his laxity in permitting the King and his suite to land on the island without giving the population any sort of warning. In due time the ship-surgeon was requested to give an explanation of his conduct, when he appears to have completely cleared himself of a charge which, if proven, would certainly betray culpable carelessness in one occupying a responsible position. He apprised the Colonial Secretary and other officials that the men on board were suffering from measles, and pointed out the danger of communicating the disease, should they be landed. As the report of the inquiry into the affair ordered by the Admiralty must soon reach this country, it is better to reserve any further observations until then.

THE death of Mr. John Churchill is an event that deserves more than a brief notice. He may be said to have been the first great medical publisher in this country. During a long life, marked alike by enterprise and integrity, Mr. Churchill won the esteem of a numerous and influential section of the profession. For some years, while in business in Princes-street, Leicester-square, he published THE LANCET. Last week we incorrectly stated his age to have been seventy-three. He was a year older than this. Mr. Churchill's benevolence was well known, and he has bequeathed, in addition to other legacies of varying amounts, £500 to the Royal Medical Benevolent College, Epsom, and a similar sum to the Medical Benevolent Fund.

A PARLIAMENTARY PAPER has just been issued which gives, *in extenso*, a report furnished to the Home Secretary with reference to the conduct of Dr. F. R. Bernard, assistant-surgeon at Portland Convict Prison. A deceased convict named Larmont had made various charges of neglect against Dr. Bernard, but the Commissioners appointed to inquire into the case (Mr. W. J. Stopford, Director, and Dr. Briscoe, Inspector, of Convict Prisons, and Dr. Guy) came to the unanimous conclusion that Dr. Bernard "was not wanting in skill, attention, or substantial kindness to the deceased, or to the sick prisoners generally," but that in the performance of his duties he displayed a want of tact and temper.

THE Duke of Northumberland has given notice for next session of a motion for an address to the Queen praying for the appointment of a Royal Commission "to inquire into the working and management of works and manufactories smelting, burning, or converting ores and minerals, by which sulphurous acid, sulphuretted hydrogen, and ammoniacal or other gases are given off; to ascertain the effects produced thereby on the health of animal and vegetable life; and to report upon the best means to be adopted for the prevention of injury thereto arising from the exhalation of such acids and gases, and upon the legislative measures, if any, required for this purpose."

IN the House of Commons on Wednesday evening, Dr. O'Leary complained that the Public Health (Ireland) Act had proved inoperative, and he called upon the Government to take steps to have it amended. The Solicitor-General for Ireland, in reply, stated that the Act (which had been in operation only two months), as far as he was aware, was working exceedingly well, and was doing a vast amount of good. He thought it was too soon to form any definite opinion on the subject generally. Mr. Ward then said the remuneration paid to medical men was totally inadequate to the duties they performed, and would prevent the Act from being effectually carried out.

Dr. George Bland, in his second annual report of the sanitary condition of Macclesfield, has to point out many evils requiring vigorous action on the part of the health authorities. There are in the town 5199 houses which are unprovided with a proper system of drainage, the sewage from which is often allowed to flow on the surface of the ground. The out-door closets are, as a rule, defective in construction and insufficient in number. There appears to have been a considerable waste of infant life in Macclesfield during the year 1874. Among enthetic diseases we observe that five deaths are registered under the head of syphilis.

Recent letters from Syria state that cholera is now fearfully prevalent in Damascus, the mortality being very great. As many as 400 fresh cases a day have been reported. Sudden deaths frequently occur in the streets. There are no medical men, no medicines, and no bedding or clothing. Numerous cases of the disease are also recorded in Antioch. The district schools under British supervision have been closed, and the children dispersed. No special sanitary measures seem to have been adopted, the lethargic authorities contenting themselves with burning the clothes and effects of deceased persons.

One of the oldest medical officers of the army, Mr. Henry Franklin, C.B., Inspector-General of Hospitals, died on the 2nd inst. at Folkestone, in his eighty-ninth year. He entered the service as hospital assistant in August, 1808, and served in the Peninsula, in the American war, and in India from April, 1842, to June, 1850, and was present at the battles of Chilianwallah and Goojerat.

The Islington Vestry, after having pushed their opposition to the utmost, at their last meeting consented to pay the registrars for their valuable weekly returns, thus putting them in the same position as the country registrars have occupied, by Act of Parliament, for some years. The advocacy of our correspondent, Mr. Butterfield, has at last received its due reward.

Dr. Chas. Henry Leet, who from the commencement of the Medical Act has represented Apothecaries' Hall, Dublin, on the Medical Council, has just been re-elected to serve for the period of twelve months.

Dr. Wm. Stephenson, F.R.C.S. Edinburgh, has been appointed to the chair of Midwifery and Diseases of Women and Children in the University of Aberdeen, vacant by the death of Dr. Inglis.

The *Times of India* reports that Dr. Shortt has just successfully treated, by means of liquor potassæ and brandy, two persons who were bitten by cobras at Madras.

THE COLLEGE OF SURGEONS.

At the meeting of the Council on Monday, after the ordinary proceedings, the President referred to the Enabling Act, copies of which had been distributed to the members; and the thanks of the Council were given to Lord Selborne, Sir John Lubbock, and Dr. Lush, for carrying the Bill through the Houses of Parliament.

The President and Vice-Presidents were then requested "to take such steps as they may think proper for renewing negotiations with the other English medical authorities with a view to the formation of a Conjoint Examining Board for England, and report thereon to the Council." The question was raised as to the position of the last proposed scheme. Some of the members of the Council alleged that it was virtually defunct; others took an opposite view; but the general feeling was that there is very little, if any, vitality remaining in the scheme.

Letters were received from Mr. Hancock, Mr. Le Gros Clark, and Mr. Savory, resigning their seats as examiners. Mr. Hancock does not, we believe, seek re-election, but the President said that he had reason to think that the services of Mr. Clark and Mr. Savory on the Board would be retained.

The Council adjourned until October 13th and 14th; on the first of these days for the election of examiners, and the last for ordinary proceedings.

Mr. Hancock's motion, of which he gave notice at the former meeting, was not brought forward.

THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The business of Friday, the 6th inst., and the fourth day of the meeting of the Association, was commenced at ten o'clock by the delivery of the Address in Physiology by Professor Rutherford, in the lecture-hall of the Museum of Science and Art. The address, an abstract of which we publish, was listened to with great attention by a large audience for about an hour. But as eleven o'clock approached many began to leave the hall in order to be present at the demonstration by Professor Lister in the Physiological Class-room in the university, of his method of investigation into the nature of putrefaction and other fermentative changes. Although the room was nearly filled at eleven o'clock, and crammed by a quarter-past eleven, Mr. Lister did not commence his demonstration till nearly half-past. The gist of his discourse was that putrefaction and fermentative changes were due to the presence of living organisms, and not to chemical processes. Mr. Lister maintained that if the dust and septic matter floating in ordinary air be excluded from putrescible fluids, such as milk or wine, no putrefaction or fermentative changes would occur, even though the purified air were freely admitted. In support of this allegation several appeals were made to actual experiments, which, as far as they went, seemed to confirm Mr. Lister's views.

If any evolutionists were present at this demonstration, they must indeed have been sceptical if they did not at once embrace the germ theory expounded by Mr. Lister. Even if the experiments were not convincing, the filthy condition of the atmosphere in the room ought to have removed any lingering doubt. It is no exaggeration to say that after between three and four hundred persons had been crammed into this ill-ventilated room for above two hours, the air positively stank. Most of those present must have been wellnigh poisoned.

So long did Mr. Lister continue his demonstration that there was not time left for the transaction of the other business in the Physiology Section, and several persons who had come to read papers went away evidently disappointed.

At half-past one in the afternoon the last, or, to speak more correctly, the complimentary general meeting was held in the Chemistry Class-room. The Report on Parliamentary Bills was handed in by Dr. Falconer, of Bath, and a resolution to the effect that the Association desired to afford effectual assistance in aid of the views expressed in the Public Health section regarding habitual drunkards was moved by Dr. A. P. Stewart, of London. A resolution was then read respecting the Scotch Poor-law medical relief; and a committee was appointed to inquire into and report upon the various anæsthetic agents used in surgical practice. Then came the usual votes of thanks, which we need not particularise here, and the proceedings terminated.

In the afternoon of the same day upwards of 3000 ladies and gentlemen attended a garden party in the Royal Botanic Gardens, given by Sir Alexander Grant and the Senatus Academicus of the University. Although the weather had been unfavourable during the earlier part of the day, it cleared up and the sun shone forth just before the hour of reception. The company on their arrival were received by Sir Alexander Grant and Lady Grant, and Professor Balfour and Mrs. Balfour. No efforts had been spared to render the gardens, hothouses, and museum but especially the latter, attractive and instructive. The excellent band of the Dragoon Guards performed upon the beautiful lawn between the rock garden and the herbarium, and the pipers of the Edinburgh Rifle Volunteers piped at intervals while marching on the gravel walk surrounding the house.

The meeting formally concluded on Saturday, when a large number of those who had been for three or four days attending meetings and listening to addresses and the reading of papers in close and crowded rooms, took advantage of one or other of the excursions to breathe again pure air. Some took steamboat to Bass Rock, some went to Melrose and Abbotsford, some to Hawthornden and Rosslyn, some to the Trossachs, while some were conducted by Mr. Cook through the beautiful districts in the west of Scotland, on their way to Staffa and Iona.

THE HEALTH OF SHEFFIELD IN 1874.

There is a considerable monotony about health report literature which is perhaps scarcely avoidable. Indeed, in some respects a still closer uniformity, especially in the tables of these reports, would add greatly to their value. It is, however, satisfactory to find a medical officer of health's report in which the figures are treated in a manner which is at the same time novel and valuable in throwing light upon some of the more important and least investigated branches of mortality statistics. Dr. Griffiths' report on the sanitary condition of the borough of Sheffield during the year 1874 is one which we can cordially commend to the notice, not only of medical officers of health, but also of all those who are interested in the important subject of the waste of life in our large towns. It is impossible in a short notice of this report to do more than refer to one or two of the many aspects under which the sanitary condition of Sheffield in 1874 is considered by Dr. Griffiths. The rate of increase of population in Sheffield during the decade 1861–70 was a high one, and assuming that this rate has been maintained since 1871, the number of inhabitants in the middle of the year 1874 was estimated by the Registrar-General at 261,029. The estimated increase of population in the borough during the year 1874 was 6764. The excess of births over deaths was, however, but 3849, and it follows that nearly 3000 persons must have been added to the population of the borough during the year by the balance of immigration over emigration. The area of the borough is so large that the population in 1874 did not average more than 13 persons to an acre; this, however, affords no clue to the real density of the population in the town itself. The birth-rate was equal to 42, and the death-rate to 27 per 1000 during 1874; each of these rates considerably exceeded the average for the year in the eighteen large towns. Dr. Griffiths does not attempt to account for the high death-rate by the high birth-rate, but has taken advantage of recent discussions on the subject to point out that the age distribution of the population in the borough is such that, sanitary conditions being equal, would produce, at the English Life-table rates, a mortality of 21·6 per 1000, or 2·9 below the rate in a stationary or life-table population, and 1·1 per 1000 lower than in a population the age distribution of which corresponds with that of England and Wales in 1871. The English Life-table is used in this report for calculating a standard death-rate for Sheffield, by which to measure the actual recorded death-rate at all ages, and at five groups of ages, and for each of the sexes. The value of this for tracing the source of the excessive mortality in towns is undoubted, and Dr. Griffiths has turned it to good account in dealing with the death-rate in Sheffield. The death-rate among males in Sheffield during 1874 exceeded the standard rate by 31 per cent., whereas the excess in the female rate was only 20 per cent. Between forty-five and sixty-five years of age the excess in the male death-rate was 37 per cent., whereas among women it did not exceed 12 per cent. The deleterious effects of town residence evidently operate more powerfully among men than women. This fact opens up an interesting subject for investigation and discussion. The death-rate in Sheffield shows the same depression between the ages of fifteen and thirty-five which is incidental to nearly all town populations, and it has recently been the subject of a paper read before the Statistical Society of London. The tables contain much valuable information as to the rates of mortality from different causes, not only in each of the five groups of ages, but in each of the nine registration subdistricts of the borough. Space forbids us to allude to the use which has been made of these tables in the report. An interesting comparison is also drawn between the effect of the remarkably cold period in the latter part of 1874 upon the rate of mortality in Sheffield and London. This comparison is somewhat disturbed at the early ages by the fatality of scarlet fever in Sheffield; but in each group of ages over twenty years the excessive death-rate due to this severely cold weather was lower in Sheffield than in London.

The statistics of vaccination for Sheffield are far from satisfactory, as they appear to show that more than 2500 children under one year of age remained unvaccinated at the end of the year, after allowance for those infants who died previously to the usual age for vaccination. It is important that health officers should keep themselves informed as to the proportion of the population of their districts which is unvaccinated, and that they should, for that purpose, exert their influence to secure an improved form of vaccination statistics. English statistics of vaccination are very inferior to those published by the Registrar-General of Scotland.

Dr. Griffiths states that the cause of death was uncertified in 572, or more than 5 per cent. of the deaths registered in Sheffield during 1874. It is certain that in a considerable number of these 572 cases there was no medical attendance whatever, but it is more than probable that the deceased in a still larger proportion had been attended by unqualified medical attendants, which would account for the cause of death being returned as "not certified." Now that the names of the certifying medical attendants are entered in the Register, much useful service may be rendered by health officers in checking unqualified medical practice. Valuable information and suggestions are contained in the report upon the sanitary condition of canal barges, the dwellings of the working classes, slaughter-houses, &c., which we can only afford space to mention. The want of mortuaries and of hospital accommodation for infectious diseases is also urged. We have read few reports of health officers which for soundness of their statistics and the amount of practical information they contain are superior to Dr. Griffiths' report for 1874 on Sheffield.

Correspondence.

"Audi alteram partem."

CHLOROFORM OR ETHER.

To the Editor of The Lancet.

Sir,—The relative *ultimate* safety of chloroform and ether is a very important question, and one that I have not seen noticed by any of the correspondents of the several medical journals.

My attention was drawn to this point last March, by Mr. Jessop, of Leeds, who informed me that he had almost abandoned ether as an anæsthetic in consequence of having lost several patients from bronchitis about the fifth day after operation; the bronchitis being induced, he believed, by the irritant action of the ether.

That patients more frequently die on the table under chloroform than under ether inhalation appears unquestionable; but if it be proved that ether occasionally produces fatal bronchitis, it behoves us to attempt to discover the cases in which this condition is likely to follow. I have not seen any death that I could directly trace to ether, though my experience inclines me to the opinion that the after-effects of ether are more persistent than those of chloroform or methylene, relish for food often being absent for several days. Since April, 1870, I have administered anæsthetics to 1144 patients: methylene in about 150 cases, ether in some 50, and chloroform in the remainder. I have never lost a patient. One ether case was in great peril; and about one in fifty of the chloroform cases exhibited dangerous symptoms.

It is an extremely difficult, and, I believe, almost impossible, matter for one to give chloroform in an interesting operation without taking an occasional look at the operation, and I fear that dangerous symptoms in fatal cases are, as a rule, not observed sufficiently early for treatment to be of avail. On Thursday last I gave chloroform to a healthy country girl of fourteen for the removal of a fatty tumour beneath the extensor muscles of the forearm. She had inhaled half a drachm, and was commencing the next when her face became dusky, her pupils dilated, pulse feeble, respiration shallow. I gently lowered the head, drew the chin away from the sternum, turned her slowly over on to the left side, and pressed firmly with my hand beneath the heart, and in a very short time her face regained its natural colour and her circulation and respiration their normal action. I resumed chloroform, but in a few minutes the dangerous symptoms returned, and the same measures were successfully resorted to. Chloroform was again given, and the perilous condition returned, and this time the respiration completely stopped. The measures for resuscitation were again successful. The operation was now almost completed, and I had no further anxiety about my patient, but gave a few whiffs of ether whilst the sutures were applied.

I have notes of several similar cases which I have treated by the above simple and ready method. Facial pallor or duskiness is usually the earliest symptom of danger, and on observing this I gently lower the head. If a good effect is not immediate, or if the respiration is failing, I raise the chin, and turn the patient over on to the left side. Galvanism I have never employed, and unless an assistant is at hand to use it whilst the above measures are being carried out, I think the battery is best out of the operating theatre. I fear many lives have been sacrificed from the *few minutes or moments* which must elapse before this instrument can be applied.

I am, Sir, your obedient servant,

Leicester, August 7th, 1875. FRANK H. HODGES.

DR. O'NEILL AND MR. F. J. CLARKE.

To the Editor of THE LANCET.

SIR,—I hope you will grant me the privilege of repelling a charge brought against my private character by Mr. F. J. Clarke in your impression of the 7th instant. The writer of the letter, with a well-feigned show of injured innocence, and with a kind of special pleading, endeavours to show that I, a medical man, have no right to interfere with his practices simply because he owes me a three years' bill for medical attendance, the payment of which he is seeking to evade. Mr. Clarke, as might have been expected, is wroth with me for having procured the analysis of his so-called "blood mixture," and, of course, looks out for motives, which he imagines he has found in my medical bills. At the time of his writing to THE LANCET he was perfectly well aware of my expressed intention to proceed against him for the non-payment of my fees, and that all the necessary information was in the hands of my solicitor, to whom he had easy access. When the indebtedness to me was first incurred there was expressed thankfulness and promises to pay when in a position to do so. Next came forgetfulness, and finally denial. I am extremely sorry that I should have to rebut a personal attack of this kind in THE LANCET, but it gives me an opportunity of thanking the Editor of this journal for the kindness and courtesy accorded to me, and also to thank my many professional friends, many of whom are personally unknown to me, for their approbation and sympathy. I may say, in conclusion, that the motives attempted to be fastened on me had nothing to do with my procuring the analysis. Since the so-called Blood Mixture came into anything like notoriety, which is only during the last few years, I felt that something should be done, but my thoughts never assumed a definite shape until lately.

I am, Sir, your obedient servant,

Lincoln, Aug. 9th, 1875. WILLIAM O'NEILL, M.D.

THE COLLEGE OF PHYSICIANS AND THE CLINICAL STUDY OF INSANITY.

To the Editor of THE LANCET.

SIR,—With reference to the petition to the Colleges of the Lecturers on Insanity, I enclose, with his permission, a copy of a portion of a letter which I recently received from the Registrar of the London College of Physicians, for which I hope you will kindly make room, as the knowledge of the step the College of Physicians has taken may induce other examining bodies to follow suit.

I am, Sir, your faithful servant,
R. H. B. WICKHAM,
Hon. Secretary to the Lecturers on Insanity.
Borough Asylum, Coxlodge, Newcastle-upon-Tyne, Aug. 10th, 1875.

[COPY.]

On the 19th July the following resolution was adopted at the Royal College of Physicians of London:—"That the Registrar prepare and submit a regulation to the College, 'That students who wish to qualify for the examination for the membership or licence of the College may substitute, if they so desire, a three months' course of clinical instruction in the wards of a lunatic asylum for the same period of attendance in the medical wards of a general hospital.'"

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the last meeting of the Council the following Member was admitted a Fellow of the College:—

Poppleton Joe, L.S.A., Bradford, Yorks; diploma of membership dated Oct. 1838.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent 1st M.B. examination:—

ENTIRE EXAMINATION.

FIRST DIVISION.—Fredk. Lucas Benham, John Topham Gadsby, George Courtenay Henderson, and Richard Shalders Miller, University College; James John Macwhirter Dunbar and Francis Goodchild, St. George's Hospital; Thomas Ernest Hayward, Richard Lyddon, and Walter Pye, St. Bartholomew's Hospital; John Francis Nicholson, St. Thomas's Hospital; Arthur Bancks Prowse, Liverpool School of Medicine and St. Mary's Hospital; Harold Gilbertson Taylor and Fredk. Willcocks, King's College.

SECOND DIVISION.—James Blamey, James Wm. Bond, Henry Septimus Bott, Judson Sykes Bury, Claude Clarke Claremont, William Gristock, James Hudson, Christian Bernard Hunter, Alfred James, Boyd Burnett Joll, David Lloyd, John Mortimer, William Rumney Nicholson, Arthur Quarry Silcock, and Charles John Watson, University College; Charles Henry Cattle, Leeds School; William Edward Collins, St. George's Hospital; Henry Davy, Peter Horrocks, Montagu Lubbock, Edm. Howard Paddison, and Leader Henry Stevenson, Guy's Hospital; John Gilliott Garbutt, M.A., St. Mary's Hospital: William Pope Mears, London Hospital; Arthur Robert Wyatt Sedgefield, King's College; Wm. Frederick Shain and Joseph Wiglesworth, Liverpool School; J. Raglan Thomas and Hubert Foveaux Weiss, St. Bartholomew's Hospital; Arthur Thos. Wilkinson, B.A., B.Sc., Owens College.

EXCLUDING PHYSIOLOGY.

FIRST DIVISION.—Howard Griffiths Lowe, Queen's College, Birmingham; Samuel Thomson Plumbe, St. Bartholomew's Hospital.

SECOND DIVISION.—Charles Edward Beevor and William Henry Blake, University College; Alfred Edgar Drysdale, University College and Liverpool Infirmary; Waldemar Joseph Roeckel, St. Bartholomew's Hospital; Herbert Urmson Smith, St. Thomas's Hospital.

PHYSIOLOGY ONLY.

FIRST DIVISION.—Francis Richardson Cross, King's College.

SECOND DIVISION.—Samuel Ferguson Bigger, Liverpool Royal Infirmary; Henry Laurence Champneys and Alfred Finch, Guy's Hospital; John Benjamin Hellier, Leeds School of Medicine; Thomas Bower Smith, University College.

ARMY MEDICAL SERVICE.—The following is a list of candidates who were successful at both the London and Netley examinations recently held, having passed through a course of instruction at the Army Medical School, Netley:

	Marks.		Marks.
Charlesworth, H.	4261	Mapleton, E. A.	3976
Dorman, J. C.	4100	Kelsall, E. W.	3560
Le Mottée, G. H.	4014	O'Sullivan, D.	3435
Chester, W. L.	4006	Sharpe, C. E.	2933

NAVAL MEDICAL SERVICE.—The following candidates were successful at both the London and Netley examinations, recently held, having passed through a course of instruction at the Army Medical School, Netley:—

	Marks.		Marks.
Marsh, H. E.	4077	Lynch, A. B.	3148
Strickland, H. G. T.	3796	Dudley, J.	2843
Patterson, A.	3608	Sherlock, J. J.	2420
Ronan, M.	3393	Bookey, D. B.	2381
McAdam, J. A.	3285		

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Aug. 5th:—

Dudgeon, John Matthew, Dalbeattie, Kirkcudbrightshire.
Edwardes, Edward Joshua, Llansantffraid, Montgomeryshire.
Highton, Thomas, St. Thomas's Hospital.

The following gentlemen passed the Primary Professional Examination on the same day:—

M. H. L. Allen and Charles F. Goode, St. Mary's Hospital; Owen Bowen, J. L. Jaquet, Westminster Hospital; Edward D. Moorehouse, Owens College; Robt. R. Harper and L. W. L. Joseph, St. Thomas's Hospital; Arthur Bennett, London Hospital; William Johnstone, University College; Percy K. Cree and William Walker, Middlesex Hospital; Charles Stephens, Liverpool Medical School; Thomas H. Gillam and F. A. Hallsworth, St. Bartholomew's Hospital.

The Court of Examiners elected by the Master, Wardens, and Court of Assistants of the Society of Apothecaries for the ensuing year were duly sworn in on Aug. 5th—viz., Robt. Norton, M.D.; Thos. Peregrine, M.D.; George Corfe, M.D.; James Parratt, M.D.; Robert Hunter Semple, M.D.; Charles Taylor, M.D.; Thos. Rivington Wheeler, F.R.C.S.E.; John Randall, M.D.; John Sherwood Stocker, M.D.; John Charles Thorowgood, M.D.; Robert Fowler, M.D.; and William Bathurst Woodman, M.D. Secretary and Registrar, Richard Hopkins Robertson, M.D.

Dr. R. J. Banning and Dr. Benjamin Barkus have been placed on the Commission of the Peace for Gateshead-on-Tyne.

Vaccination Grants.—Mr. George J. Perry (not "Berry," as previously announced), of Melksham, has been awarded £12 2*s.* for efficient vaccination; also Dr. H. J. Buck, Newport, Essex, £9 7*s.* (third time).

It is reported that yellow fever has broken out in Florida. The Navy yard at Pensacola is to be closed in consequence of the outbreak, and all unacclimatised officers and men are to proceed north until the danger is over.

The Quarterly Court of the Governors of the Brompton Hospital for Consumption was held last week in the Board-room of the institution. It was stated that the vacancies in the list of assistant-physicians had been filled up by the election of Drs. Green and Bruce, while Mr. R. Rendle, F.R.C.S., had been appointed resident medical officer.

Bequests, &c., to Medical Charities.—Mrs. Eliza Fallon, of Cabra, Co. Tipperary, bequeathed £3000 each to the St. Vincent Hospital, the Mater Misericordiæ Hospital, and the Hospital for Incurables, all at Dublin. The Birmingham and Midland Counties Orthopædic Hospital has received £250 under the will of the Rev. C. Ingleby. The quarterly report of the Hospital for Consumption, Brompton, acknowledges the receipt of legacies of £250 under the will of Miss Julia Gasquet, and £200 under that of Miss Sarah Clements.

Medical Appointments.

Anderson, R. M'G., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Senior Medical Officer to the West Derby Union Workhouse, Walton, vice Hughes, resigned.

Bates, C. P., M.R.C.S.E., has been appointed Medical Officer of Health for the Ramsey Sub-district of the Huntingdon Rural Sanitary District.

Canton, A. T., L.D.S., has been appointed an Assistant Dental Surgeon to the National Dental Hospital.

Clark, L., L.D.S., has been appointed an Assistant Dental Surgeon to the National Dental Hospital.

Coles, O., L.D.S., has been appointed Dental Surgeon to the National Dental Hospital, vice Steele, resigned.

Copeman, E., M.D., F.R.C.P.L., F.R.C.S.E., has been appointed Medical Officer of Health for the St. Faith Rural Sanitary District: Fees; acreage 47,974; population 10,901.

Cottle, W., B.A., F.R.C.S.E., L.R.C.P.L., has been appointed Assistant-Surgeon to the Hospital for Diseases of the Skin, vice Tay, appointed Surgeon.

Crabb, J., M.B., C.M., has been appointed Resident Surgeon to the Royal Hospital for Sick Children, Edinburgh.

Davis, W., M.R.C.S.E., has been appointed a Medical Officer to the Railway Carriage Company, Oldbury.

Duke, D., M.R.C.S.E., has been appointed a Surgeon to the Royal South London Dispensary, vice Constable, resigned.

Evans, A. P., M.R.C.S.E., has been appointed a Medical Officer to the Railway Carriage Company, Oldbury.

Gange, F. A., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Faversham Union, and Medical Officer of Health for the No. 2 Sub-district of the Faversham Rural Sanitary District, vice Spyers, deceased.

Godlee, R. J., M.B., C.M., M.R.C.S.E., has been appointed Demonstrator of Anatomy at the Charing-cross Hospital Medical School.

Jolly, R., M.D., F.R.C.S.Ed., has been appointed Co-professor of Anatomy at Queen's College, Birmingham.

Lattey, A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Southminster District of the Maldon Union, Essex, vice Wigg, resigned.

Maccall, T., M.B., C.M., L.M., has been appointed Medical Officer to the Stockton and Darlington Railway Company, Crook District, vice Armour, resigned.

Murray, W., M.B., M.R.C.S.E., has been appointed a Medical Officer to the Pembroke Dispensary and Infirmary, vice Reid, resigned.

Newton, L., M.R.C.S.E., has been appointed Medical Officer of Health for the Alconbury and Sawtry Sub-districts of the Huntingdon Rural Sanitary District: £40 and £34 per annum.

O'Callaghan, K. M., L.F.P. & S. Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the Aldeburgh District of the Plomesgate Union, Suffolk, vice Robbins, resigned.

Oldman, J., M.R.C.S.E., has been appointed Medical Officer of Health for the Huntingdon Sub-district of the Huntingdon Rural Sanitary District: £34 per annum.

Pemberton, T., L.R.C.P.Ed., L.M., L.R.C.S.E., has been appointed a Medical Officer to the Railway Carriage Company, Oldbury.

Raye, J. J. A., L.K.Q.C.P.I., has been appointed Medical Officer to the Lincoln United Friendly Societies' Dispensary, vice Goodall, resigned.

Rigby, J. M., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Eckington Amalgamated Medical Aid Association.

Rogers, G. O., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for No. 1 District of the Newport Pagnell Union, vice Hailey.

Rogers, H. C., M.R.C.S.E., has been appointed Medical Officer for No. 10 District and the Workhouse of the Newport Pagnell Union, vice Hailey.

Shann, Mr. F., has been appointed a Resident Clinical Assistant at the Hospital for Consumption and Diseases of the Chest, Brompton, vice Parry, whose appointment has expired.

Snell, G., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Resident Medical Officer to the Kensington Dispensary, vice F. C. P. Howes, M.D., resigned.

Spooner, F. H., M.R.C.S.E., L.R.C.P.L., has been appointed Resident Midwifery Assistant to St. Bartholomew's Hospital, vice Champneys, resigned.

Stocker, J., L.D.S., has been appointed an Assistant Dental Surgeon to the National Dental Hospital, vice Gingell, resigned.

Thomas, R. R. G., M.D., L R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer and Public Vaccinator for the Tiverton West District of the Tiverton Union, vice Reddrop, resigned.

White, C. E., L.D.S., has been appointed an Assistant Dental Surgeon to the National Dental Hospital.

Williams, N., B.A., M.R.C.S.E., has been appointed House-Surgeon to the Carnarvonshire and Anglesey Infirmary and Dispensary, Bangor, vice Davies, deceased.

Wilson, Mr. A., has been appointed Lecturer on Natural History in the Edinburgh Extra-mural Medical School.

Births, Marriages, and Deaths.

BIRTHS.

Brietzcke.—On the 26th ult., at Ryde, the wife of Henry Brietzcke, F.R.C.S.E., of a daughter.

Carleton.—On the 3rd inst., at Delvin, Co. Westmeath, the wife of Wm. Carleton, M.B., of a daughter.

Carver.—On the 31st ult., at Cambridge, the wife of E. Carver, F.R.C.S.E., of a daughter.

Madigan.—On the 1st inst., at Drumcollogher, Co. Limerick, the wife of J. F. Madigan, L.R.C.P.Ed., of a son.

Nason.—On the 7th inst., at Cambridge-terrace, Kingstown, the wife of J. W. W. Nason, M.D., of a daughter.

Ollerhead.—On the 9th inst., at Blenheim-terrace, Minehead, the wife of Thomas J. Ollerhead, L.R.C.P.Ed., L.R.C.S.Ed., of a daughter.

MARRIAGES.

Downes—Hill.—On the 29th ult., at St. Luke's Church, Paddington, Edmund Downes, late Lieutenant in the Royal Artillery, and Missionary of the C.M.S. in the Punjab, to Mary Boughton, only daughter of the late Wm. Hill, Esq., of Bishop Wearmouth, Durham.

Sims—Fuller.—On the 5th inst., at St. Thomas's, Portman-square, Francis Manley Sims, F.R.C.S., of Half-moon-street, Piccadilly, to Alice Belgrave, second daughter of the late Henry William Fuller, M.D., Senior Physician to St. George's Hospital.

Stocker—Goodman.—On the 4th inst., at St. Paul's, Camden-square, N.W., Alonzo Henry Stocker, M.D., of Peckham House, Peckham, S.E., to Ada Mary, of The Terrace, Camden-square, N.W., elder daughter of the late Thomas Goodman, Esq.

DEATHS.

Bell.—On the 9th of June, at Copiabo, Chili, Robt. Carlyle Bell, M.D., aged 59.

Byrne.—On the 11th of June, at York-street, Cheetham, Manchester, P. Byrne, L.K.Q.C.P.I., aged 36.

Hynes.—On the 16th ult., Denis J. Hynes, L.K.Q.C.P.I., of Kinvara, Co. Galway.

Kerr.—On the 5th inst. (accidentally drowned at Millport), Arthur David Kerr, M.B., C.M., of Aberdeen.

O'Connell.—On the 3rd inst., at Glasthule, Kingstown, John O'Connell, L.M., aged 82.

Smith.—On the 28th ult., at Colombo, Ceylon (from the effects of a fall from his horse), Geo. A. C. Vernon Smith, M.R.C.S.E., aged 25.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

The Influence of the Use of Wind Instruments on Chest Affections.

Dr. Burq, a French physician, who some time ago noticed the immunity from cholera, in the epidemic of 1849, experienced by people working in copper, and who accordingly proposed that metal as a remedy in the disease, has published a little book in which he endeavours to controvert, by reference to his own observations and personal experience, the notion commonly entertained that the use of wind instruments is injurious to individuals characterised by pectoral weakness. Dr. Burq remarks:—"Many philanthropists, on seeing our young military musicians wield enormous wind instruments, have sorrowed over the few years the poor fellows would have to live. Well, they are mistaken. All the men whose business it is to try the wind instruments made at the various factories before sending them off for sale are, without exception, free from pulmonary affections. I have known many who on entering upon this calling were very delicate, and who, nevertheless, though their duty obliged them to blow for hours together, enjoyed perfect health after a certain time. I am myself an instance of this. My mother died of consumption, eight children of hers fell victims to the same disease, and only three of us survive—and we all three play wind instruments. The day is not far distant, perhaps, when physicians will have recourse to our dreaded art in order to conquer pulmonary diseases."

Mr. R. H. A. Hunter.—We regret we cannot assist our correspondent in the matter.

Two Unusual Cases in General Practice.

To the Editor of The Lancet.

Sir,—The following cases have come under my notice in the practice of my friend Dr. F. W. Elliott, for whom, and during whose temporary absence, I am acting.

Case 1.—B——, a coachman in the employ of a gentleman residing in this neighbourhood, was watering his horses in the stable on Sunday morning last, when, as he states, he became suddenly and completely insensible. Upon coming to, he found that he had bitten his tongue, and caused it to bleed somewhat freely. He complained of stiffness and pain in his right shoulder on raising it. On examination I discovered fracture of the acromion process of the right scapula, but no other injury. It must, in my opinion, have been caused by the direct sudden impact of a horse's heel in kicking out from behind, and that, moreover, the suddenness of the attack caused him to bite his tongue.

Case 2.—S. M——, a female patient, first consulted me on the 20th inst. for an abscess which involved and encircled the umbilicus, and from which there had for some time past issued a thin, unhealthy, purulent discharge. As she was greatly out of health, I directed ferruginous tonics combined with quinine to be taken, and ordered linseed poultices to be kept constantly applied to the umbilicus. She called on me on the 22nd and 24th inst., by which time she seemed to have improved in health. Yesterday morning she called again, and produced for my inspection two large, nearly white gall-stones, which had, just previous to her coming to see me on this occasion, been discharged from the abscess. From the almost complete absence of inflammation now, I should be inclined to the opinion that no more gall-stones were to come away at present, although it is possible that at some future period more might be discharged. She about three months ago suffered severe pain in the right side, attended with violent sickness. It appears to me that these gall-stones, somewhat larger than ordinary, had, in endeavouring to pass the duct into the intestine, become impacted; had set up inflammation, and perforation resulted; that adhesions had formed between the duct and the abdominal wall; and that thereby, by gravitation and the formation of a sinus, they had descended to the umbilicus, and been in this way discharged.

As these two cases are rather exceptional, and might be interesting to some of your readers, I beg to offer this as my excuse for troubling you.

Your obedient servant,
Edward C. Anderson, Caius Coll. Cambs.
Knight's Hill, Lower Norwood, July 27th, 1875.

Salus Populi, (Ryde.)—In Dr. Layet's "Hygiène des Professions et des Industries" (Paris, Baillière), the author, before writing his book, examined with a physician's eyes the *employés* in the various industrial establishments when at work. The first section describes all the ailments peculiar to each industry, and the sanitary conditions, particularly that of ventilation, which are violated. The second section treats of the professions and their insanitary conditions—a very interesting study. The book, not quite a sealed one even for non-professional readers, will enhance the popular appreciation of State medicine.

The communication of *Dr. Clapham*, "On Nitrite of Amyl in Sea-sickness," shall appear next week.

D. A.—We are not aware of the existence of any legal definition of the word.

Californian Poison Oak.

To the Editor of The Lancet.

Sir,—In reply to "F. E. T.," who wrote respecting the above in your journal of July 3rd, I may say that the tree referred to is the *Rhus venenata*, which is capable by contact with the human skin of producing an erysipelatous eruption, with febrile disturbance. A tincture of the plant, in *very minute* doses, is often of service in erysipelas. The best known antidote is the tincture of *Ledum palustrum*. Others of the rhus family, such as *Rhus toxicodendron* and *Rhus radicans*, are credited with producing poisonous symptoms; but *Rhus venenata* is the most poisonous of all.

Yours &c.,
August 11th, 1875. A Reader of The Lancet.

Scarlet Fever in Wandsworth.

The Committee of the Wandsworth Board of Works, in a report presented last week, stated that they had carefully considered the reports of the medical officers of health for Battersea on the subject of the prevalence of scarlet fever in the neighbourhoods of Battersea-rise and New Wandsworth, and also the letters from Mr. Page and the Local Government Board on the same subject, and with the view of providing, as far as practicable, an immediate remedy for a complaint which they had reason to believe had been partly caused by the escape of gases from the sewers into houses in the higher portion of the parish of Battersea, owing to the sewers in the lower parts of such parish having been filled by the late heavy rains, they had instructed the Battersea surveyor immediately to construct ventilating shafts at the heads of the sewers in the following twenty-two roads—viz., Bellevue, Benerley, Brussels, Brodrick, Oberstein, Park, Varden's, Chivalry, Shelgate, Mallinson, Salcott, Cairns, Abyssinia, Auckland, Middleton, Chatham, Althorp, Nottingham, Louvaine, and Cologne Roads, and St. John's-hill and Bolingbroke-groves, and also to construct ventilating shafts at an average distance of about 100 yards apart to the sewers along the same roads.

Mr. C. Jeaffreson, (Newcastle.)—The paper was received in due time. We will endeavour to comply with our correspondent's request.

Dr. Carr, (Blackheath.)—Thanks.

The New Fever Department of the Sussex County Hospital.

To the Editor of The Lancet.

Sir,—I hasten to assure my friend Dr. Kebbell that his letter to The Lancet did not give me the least offence; on the contrary, I was very much obliged to him for affording me an opportunity of placing the real facts of the case before yourself and your readers. Whilst he confined his remarks to the local press, my official position precluded me from noticing them through the same channel; but when he addressed The Lancet with the declared intention of inducing that journal to alter its published opinion, then I felt it incumbent upon me to answer his letter, and place my opinions on record, and submit my arguments to a tribunal so capable of understanding the real issues in question.

I am glad that Dr. Kebbell so far repudiates the unfair tactics of his party in earnestly disavowing that he had anything to do with the widely circulated rumour (indirectly so complimentary to me) of my having inspired The Lancet.

Although Dr. Kebbell did not in so many words accuse me of misrepresentation, his letter certainly implied it, inasmuch as *the representation* which gave rise to the whole discussion was made by me in my official capacity.

Dr. Kebbell appears to be *angry* at my making use of his name so freely. My apology must be the activity he displayed, together with other members of his party, in canvassing the sanitary authority, and his many letters on the subject, to which he proudly and confidently appended that name, all of which led me to suppose that he was put forward by his colleagues and supporters as the ablest exponent of their views. Those were my reasons for writing the reply which has so *surprised* (and I should say also rather astonished) my excellent and learned friend, who shows much discretion in not wishing to continue the discussion.

I remain, Sir, your obedient servant,
R. P. B. Taaffe, M.D. Lond.,
August 7th, 1875. Medical Officer of Health for Brighton.

Mr. Gibb, of Airdrie, complains that, after an interval of two or three days, on visiting one of his cases of fracture of the neck of the thigh, put up as usual with a long splint, he found not only the splint removed, but the patient too. What concerned him still more was to find that his credit in connexion with the diagnosis and treatment of the case had also considerably disappeared. Two medical neighbours had been called in, removed the splint, and pronounced the case not one of fracture of the thigh, but of dislocation of the hip. They advised the patient's removal to the Glasgow Infirmary. Here Mr. Gibb's diagnosis was tested by examining the patient under chloroform, and it was fully confirmed. We are not prepared to say that no circumstances could justify such treatment of a case of alleged fracture under the care of a medical neighbour, but they would be circumstances of a very rare character. Mr. Gibb in this case has his satisfaction, and is not likely to find his diagnosis questioned again by the same parties.

Dr. J. T. Walker.—The advertisement is a very notorious one. Information as to the advertiser is still a desideratum.

The Death under Chloroform at Quarry Bank.

To the Editor of The Lancet.

Sir,—I have this evening read Mr. Ker's account of the post-mortem examination of the body of Matilda Wyatt, and need only say that, although the condition of the heart's cavities indicated syncope, yet the bloody froth exuding from the mouth and nostrils, and the intense violet tint of the face, as well as the condition of the lungs, pointed towards death by suffocation. Mr. Bradley (who assisted at the autopsy) and Dr. Walker agreed with me in the interpretation of the facts of the case. The abscess of the lungs was anything but a small one, and the statement that the abdomen contained three pints of pus is perfectly Munchausen in character. In the hurry of cross-examination I overstated the amount, which was, in reality, not more than three ounces diffused about. It is quite incorrect to say that I ever withdrew my statement that she was a bad subject for the administration of chloroform. The salient points of the case were those so ably commented upon in The Lancet. I am, Sir, yours obediently,
Brierley Hill, August 11th, 1875. George Ashmead.

P.S.—I only received the order from the coroner about four p.m. to make the post-mortem. I told the policeman I could not fix the time to half an hour, but would be as near to half-past six as I possibly could.

The Cultivation of Æsthetics in Schools.

Mr. W. Jolly, one of Her Majesty's inspectors of schools, calls attention, in his general report this year, to an important matter in connexion with the training of children. There is, he says, a passive education of taste carried on by the surroundings of a child in school—by the arrangements of the room, the decorations, the bearing of the teacher; all of which have an insensible effect on the future life and tone of character of the pupil. Hence the importance of making schoolrooms sweet and tasteful places. Mr. Jolly remarks that beautiful works of art can now be obtained at small cost through the aid offered by the Science and Art Department, and expresses the hope that, by means of such ornamentation and by a general air of refinement, schoolrooms may be made centres of bright and wholesome influences which shall perceptibly contribute to the elevation and happiness of the people.

Lex's communication shall receive attention next week.

The Cutaneous Eruption which sometimes follows Vaccination.

To the Editor of THE LANCET.

SIR,—Among the objections which are urged by the less educated classes against vaccination, there is one which is more ominous than others, and has some show of reason in it. I refer to the occurrence of a cutaneous eruption which follows so soon after the operation as to be attributed in some way to its effects upon the system in young children. At first we might be disposed to regard these cases as coincidences, and attempt to discourage belief in such an idea. There is an explanation, however, which it is probable has already been offered, to account for such cases, without contradiction to the belief that there is some connexion between vaccination and the cutaneous disorder which follows it.

From the observation that such a local inflammation as is produced by the application of caustic potash or similar substance in the treatment of nævus may give rise to certain general cutaneous changes, we are induced to ask the question whether the cutaneous lymphatic system in children may become affected in consequence of local suppuration, and, if so, in what manner this is to be explained? There is no difference apparently between the common form of diffuse dermatitis in children, as it occurs upon the head, neck, face, and other parts, whether following vaccination or not. It would certainly appear, however, that local inflammatory action or irritation of the skin is very liable to give rise to those various degrees of general alteration in the cutaneous tissue which we attempt to distinguish as eczema, impetigo, &c., though practically we may regard them as depending on inflammatory processes of different degrees of activity. The knowledge of these facts is very probably made use of by those acquainted with them to diminish the objection which an erroneous view of them would induce in regard to vaccination. It is possible that some of your readers may not yet have directed their attention to them, and may apply them practically in other ways, as, for instance, in deciding upon the propriety of performing vaccination in certain constitutional conditions, besides that of explaining the real connexion between the cutaneous eruption and the operation of vaccination.

I am, Sir, faithfully yours,

July, 1875. R. J. LEE.

A.M. Edin.—Vol. I. of the "Allgemeine Zeitschrift für Epidemiologie," edited by Küchenmeister. Its publisher is Enke, Erlangen. Its contents embrace a theoretical and a practical section, and, as far as it has gone, typhus constitutes the chief subject. The origin, and, above all, the differentiating features of this disease are minutely and clearly given. Cholera, too, comes in for a good deal of the same exhaustive handling—see particularly the paragraphs devoted to "Water as a Conveyer of the Cholera-poison."

Mr. H. E. Trestrail.—We regret our correspondent's letter is not quite suitable for our pages.

A Country Surgeon must attach his name to his letter if inserted.

Malposition of Urethral Orifice in a Female.

To the Editor of THE LANCET.

SIR,—A case has recently presented itself in my practice, which I opine will be of some interest to the students of gynæcology. I can find no notice of similar malformation in any of the obstetric treatises at my command, and I can imagine that the state of the parts hereafter described would considerably *puzzle* a practitioner endeavouring to pass a catheter, especially during labour.

E. M——, the wife of an engine-driver, sent for me, complaining of great bearing-down pain "as if something were come down between her legs." She had been married several years, had twice miscarried, and but for some derangement of the digestive organs had enjoyed good health. I proposed a vaginal examination, as I expected to find prolapse of the womb. I found the uterus *in situ*; but on the upper part of the vagina, about an inch from and within its external orifice, I felt what appeared to be the rough, everted edge of an ulcer. Puzzled at what appeared to be an unusual position for an ulcer even of specific origin, I subsequently examined with the speculum, when I discovered that what I at first imagined was an ulcer was an opening into the urethra; but on trying to pass a catheter I found that there was no orifice to the urethra in the usual situation, and this was the only opening to the meatus urinarius. The patient has perfect power of retaining her urine, and was utterly unconscious of being the subject of a malformation. She expressed herself as suffering pain at the time of connexion.

For the reason stated above I think it is a case which should be placed on record, and I shall be glad to learn through your columns if any similar cases have been met with.—I remain, Sir, yours &c.,

Rugby, August, 1875. JOHN INGLEBY MACKENZIE, M.B. Cantab.

J. R. C., (Edinburgh.)—According to the Report of the Science and Art Department of the Committee of Council of Education, the total number of persons who received direct instruction as students, or by means of lectures, in connexion with the Department in 1874 was 411,228, being an increase, as compared with the number in the previous year, of 54,728, or about 15 per cent.

Dr. John Gill.—The matter shall receive attention.

Remuneration of Lecturers: A Strike.

THE Director of the Edinburgh Museum of Science and Art, in his annual report just issued, says:—"I regret to say that the lectures to artisans have had to be suspended during the current session, owing to the unwillingness of the lecturers to continue their valuable services with such inadequate remuneration. The sums received by the six lecturers in 1873-4 average £9 2*s.*, which broadly gives only £1 10*s.* a lecture. If this sum could be subsidised to such an extent as to give a fee of £3 the lecture, the difficulty would be removed, and an admirable source of valuable instruction would be kept open to an earnest class of students, who, although not very numerous, are sufficiently so, I believe, to render their continued scientific training as valuable to the nation at large as to themselves individually."

Mr. Rivideau.—The matter has not been forgotten.

Congenital Absence of Bladder.

To the Editor of THE LANCET.

SIR,—The following is a description of a case of congenital absence of the bladder, which came under my care in the wards of St. John's Hospital in this city.

The patient is a boy of seventeen years of age. His general development is normal. In the position of the mons veneris is a red, fungous-looking patch of mucous membrane, resembling the mass which protrudes into the vagina through a large vesico-vaginal fistula. This patch is a trifle larger than a Spanish silver dollar. Near its inferior margin are the openings of the ureters, through which the urine is constantly dribbling away. At its inferior border is a transverse sulcus, about half an inch deep, at the bottom of which is a papillary protuberance, resembling the veru montanum, and at its summit two capillary openings, which are probably the openings of the ejaculatory ducts. The penis extends forward from the bottom of this sulcus. The skin of the uppor surface of the penis and the superior wall of the urethra are wanting. The floor of the urethra, forming the dorsal covering of the penis, and partaking of the characteristics of both skin and mucous membrane, extends to the extremity of the glans, and ends in a longitudinal depression in the situation of the meatus. At this point is a small fossa, corresponding to one of the follicles often found near the meatus. The prepuce hangs as a dewlap from the frænum. The symphysis pubis is wanting, its place being supplied by a ligamentous band, stretching from a point corresponding with the pubic spine on either side, across the hiatus. This band may be regarded anatomically as the reunion of the triangular ligament with the investing periosteum of the anterior and posterior surfaces of the pubic bones. No trace of a prostate could be detected. On either side of the mucous patch above alluded to is a hairy pad, following the course of its respective inguinal canal. These pads represent the two halves of the mons veneris. The right testicle is of normal size; the left considerably larger.

A cavity to hold the urine could readily be made by inverting a flap from the abdominal wall; but the absence of a sphincter would make the receptacle useless. All attempt at operative procedure was therefore abandoned.

Respectfully yours,

GEORGE E. VOST,

Beirût, July 27th, 1875. Surgeon to St. John's Hospital, &c.

T. E. K., (Bromsgrove.)—One of the most intelligent treatises on Cholera, in which the main theories broached within the last twenty-five years are succinctly stated and criticised, is Dr. Schauenberg's (Würzburg, 1874). The author is a firm believer in the "influence of a specific cholera germ on the more or less predisposed surface of the alimentary canal."

The Indian Medical Service.

To the Editor of THE LANCET.

SIR,—I was much pleased to see the letter on the above service in your issue of the 15th May, and would wish to bear testimony to all that the writer has said.

There can be little doubt but that the circular dated May, 1873, of the India Office distinctly says that a surgeon under five years' service, and having passed the examination in Hindustani, known as the "lower standard," will receive pay whilst in medical charge of a native regiment at the rate of 450 r. a month. But how many surgeons are there who, having qualified in the language, yet receive no such pay? As an example of such cases, take the following:—A., with eighteen years' service, goes home on furlough; B., with twelve months' service, holds medical charge of the regiment, but is said only to be "officiating." A.'s regimental pay is 800 r. a month; his unattached pay, 677 r., and the difference (123 r.) between these sums is divided between A. and B.! B., instead of receiving 450 r. for charge of the regiment, actually only receives his unattached pay, 286 r. per mensem, and half the 123 r., or 347 r. per mensem altogether. You are liable to hold such appointments for the first four years of your service, unless you are fortunate enough to have some interest to help you on. No mention of "officiating" appointments is made in the India Office circular, and it detracts materially from the rate of pay laid down to find yourself drawing 100 r. less than you expected.

I imagine there are many surgeons who would have hesitated before they entered the service had they known of the existence of such appointments; for it is at the outset of a surgeon's career that a liberal rate of pay is especially acceptable. Such an arrangement naturally benefits the senior men, so no word of complaint is heard from them. We, juniors, will be very content if we can only rid the service of "officiating" appointments.

I am, Sir, yours obediently,

Oudh, June 22nd, 1875. A SUFFERER.

Payment of Medical Officers as Witnesses.

To the Editor of THE LANCET.

SIR,—A short time ago I attended at a certain Assizes to give professional evidence (only) in a criminal case, and had only been paid my travelling expenses. I have been told that, being a military officer, I am not entitled to fees for professional evidence in civil matters; and being deplorably ignorant of all matters connected with the law, I trust that you or some of your readers will enlighten me on the subject, and, if I am deprived of my just rights, inform me what steps I must take to recover the amount.

I remain, Sir, yours truly,

August, 1875. A. M. D.

Speculation Baited.

H. Fly Smith, M.B. Oxon., kindly sends us the circular of Fritz Sevin, inviting him to speculate in the next draw of the Imperial Austrian Guaranteed State Loan; in other words, to send a cheque of £5 for the chance of getting a prize of £20,000! Mr. Smith directs especial attention to the taking way in which the agent begins his circular, thus:—"Sir: A gentleman in your neighbourhood, a client of mine of long standing, has given me your name and address as a likely party to speculate on a small scale." It requires some strength of mind to resist offers so cleverly and, withal, personally presented.

Mr. W. McDonald, (Maryhill.)—We are sorry we cannot comply with our correspondent's request.

L.R.C.P. Edin.—The question is settled, and does not admit of discussion.

Unqualified Medical Practitioners.

To the Editor of The Lancet.

Sir,—Your correspondent in The Lancet of July 24th, writing on the above subject, says that registrars of deaths should be supplied with a list of the registered medical practitioners of their respective districts, and that this should devolve on the Medical Council. Now, Sir, I fear your correspondent takes a very generous view of the Council. I registered myself last year, for which I had to pay the sum of £5. On the receipt handed to me, I saw printed that I was entitled to a copy of the Medical Register for the ensuing year gratis. The ensuing year has come, and has more than half passed, but no copy have I received. Now, Sir, when I don't get what I have paid for, and am promised, it is scarcely to be expected that registrars of deaths would be supplied with the Medical Register.

In answering a question some little time ago, you said the registration fees went towards the expenses of the Medical Council. The Medical Council, I presume, is supposed to look after the interests of legally qualified practitioners. I question whether that duty is performed, considering the number of men who are allowed to practise without a qualification.

I am, Sir, your obedient servant,

July 26th, 1875. Cedric Hurford, M.D. & M.B.

Erratum.—In Dr. Carter's article on the "Physical Cause of Presystolic Murmurs," which appeared in our last impression, page 204, col. 1, line 19 from bottom, for "forcible opening," read "forcible emptying."

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Prof. Rutherford, Edinburgh; Dr. Graily Hewitt, Paris; Dr. Althaus, London; Mr. Wilson, London; Dr. Hime, Sheffield; Mr. Perry, Melksham; Mr. Fairweather; Mr. Wilson, Edinburgh; Dr. Kitchener, Derby; Dr. Struthers, Aberdeen; Dr. O'Neill, Lincoln; Dr. Carr, Blackheath; Mr. Whitney, London; Mr. Hockley, London; Mr. Butterfield, London; Mr. Humphrey, London; Dr. Cannell, Calcutta; Mr. Angus, Newcastle-on-Tyne; Dr. Faber, London; Mr. Hunter, London; Mr. Sherlock, London; Mr. Henry, Lewisham; Dr. Eustace Smith, London; Mr. Lawson Tait, Birmingham; Mr. Carter, Birmingham; Dr. Ker, Brierley Hill; Mr. M'Kenna, London; Mr. Mackenzie, Rugby; Mr. Wickham, Newcastle; Mr. Johnston, London; Dr. Shaw, Bristol; Dr. Finch, Fisherton; Mr. Almond, London; Messrs. J. & A. Churchill, London; Mr. Forbes, Glasgow; Mr. Hartock, London; Mr. B. W. Smith, Bermondsey; Mr. Jeaffreson, Newcastle; Mr. Hodges, Leicester; Dr. Taaffe, Brighton; Dr. Fly Smith, London; Dr. Spooner, London; Mr. Salt, Birmingham; Mr. Mayne, Burton; Mr. Bailey, Worksop; Mr. Crabb, Edinburgh; Dr. Lemald, Maryhill; Dr. Gill, London; Mr. Geo. Ashmead, Brierley Hill; Mr. Attenburrow, Jersey; Mr. Clay, Windsor; Mr. Morton, Leeds; Mr. J. Brown, Walton; Mr. G. E. Vost, Beirût; Mr. Sarjeant, London; Dr. Walker, Anerley; Mr. Moore, London; Dr. Buck, Newport; Mr. G. Snell, Kensington; J. G. D.; Enquirer; A Reader of The Lancet; M.D., Halifax; A. M. D.; D. A., London; The Director-General of the Army Medical Department; L.R.C.P. Ed.; Primus in Indis; Lex; R. T.; A Country Surgeon; E. O.; A Constant Reader; Honorary Secretary; M.D. Cheam; Philologist; Morphia; The Writer of the Union Pamphlet; Radnorshire; G. N.; Every Man to his Own Trade; Lancer, India; M.R.C.S. and L.S.A.; A Subscriber; L.M.; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Mr. Johnston, Bristol; Mr. Brown, Tredegar; Mr. Cotton, Chichester; Dr. Thornley, Leicester; Mr. Ray, Loch Prillich; Messrs. Richardson & Co., Leicester; Mr. Bush, London; Mr. J. J. Johnstone, Alton; Mr. Williams, Olney; Dr. Fraser, Kilsyth; Mr. Brown, Brighton; Mr. Ollerhead, Minehead; Mr. Rutter, London; Mr. S. Whitfield, Birmingham; Dr. Bond, Thane; Mr. Miller, Brixton; Dr. Henry Bennet, Weybridge; Mr. Jackson, Delhi; Dr. Davies, Wrexham; Mr. Todd, Selby; Mr. Hunt, Hull; Mr. Sharp, London; Mr. Macpherson, London; Mr. Wallace; Mr. J. B. Dickinson, Stalybridge; Mr. Morris, Swansea; Mr. Butler, London; F. B.; Alpha; M.D., Wakefield; E. F. T., London; J. N.; B. L. G., London; A. T.; R.; A. B., Lintz Green; M. S., London; C. B. D., London; Medicus, Gateshead; Waverley; M.R.C.S., London; A., Birmingham; F. E. X.; C. A., Edinburgh; Surgeon, Birmingham; A. Z., Calne; C. Q. X.; Medicus; The Secretary, Cheltenham Hospital.

Local Government Chronicle, Welshman, Newcastle Chronicle, Liverpool Post, Hastings and St. Leonard's Chronicle, Banbury Guardian, Chelmsford Chronicle, European Review, Western Morning News, Isle of Man Times, Manchester Guardian, Staffordshire Daily Sentinel, Huddersfield Chronicle, Cork Constitution, Leeds Mercury, East London Observer, Metropolitan, and *Surrey Advertiser* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Aug. 12th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Aug. 6	30·06	W.	53	57	106	76	50	...	Foggy
" 7	29·90	N.E.	60	62	105	78	56	...	Overcast
" 8	29·99	N.E.	61	64	99	76	61	...	Overcast
" 9	30·09	W.	62	65	102	78	61	...	Overcast
" 10	29·77	S.W.	64	68	99	75	63	0·16	Cloudy
" 11	29·89	S.	60	63	115	78	60	...	Overcast
" 12	29·85	W.	62	65	90	70	62	0·11	Overcast

Medical Diary for the ensuing Week.

Monday, Aug. 16.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Tuesday, Aug. 17.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Wednesday, Aug. 18.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1½ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Thursday, Aug. 19.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, Aug. 20.

St. George's Hospital.—Ophthalmic Operations, 1½ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Saturday, Aug. 21.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

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Hunterian Lectures
ON
SYPHILIS,
AND ON
SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

By HENRY LEE, F.R.C.S.,

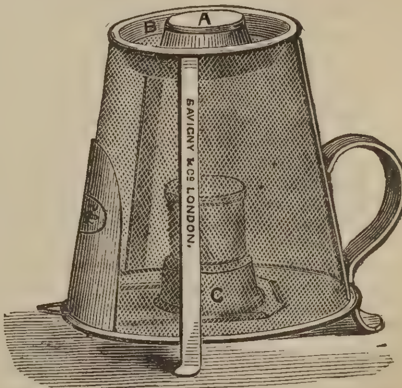
PROFESSOR OF SURGERY AND PATHOLOGY TO THE COLLEGE.

TREATMENT OF SYPHILIS.

Since Mr. Pearson and Sir B. Brodie's time another plan of administering mercury has been very extensively adopted here, on the continent, in India, and especially in America. Mr. Langston Parker's most valuable and energetic labours on the subject of mercurial fumigation suggested to me the ideas which I have endeavoured in some measure to work out; and as I find that the plan which I have advocated, although it has now come into very general use, is quite as imperfectly carried out in general practice as the administration of mercury in any other way, I am anxious to give a short but clear account of it. Abernethy long ago used calomel fumigation for the cure of syphilis, and, probably on account of the irritation which it produced when inhaled in excess, he appears to have abandoned its use. When calomel is volatilised, a certain amount of free hydrochloric acid is given off, as may be indicated by placing a piece of moist litmus paper in the fumes. In like manner the bisulphuret of mercury yields sulphurous acid, which is very much more irritating to the lungs. The so-called grey oxide of mercury often contains a proportion of calomel, and itself is liable to be decomposed in sublimation. Sometimes crude mercury is produced, sometimes the binoxide, so that its effects cannot be relied upon. These are the preparations of mercury which have been most extensively used for mercurial fumigation, and of these the calomel is much less liable to decomposition and produces much less irritation than the others. Experimentally, I found that the admixture of a small quantity of the vapour of water in a very great degree prevented the irritating effects of the sublimed calomel; and this is effected, as I suppose, by the admixture of the vapour of the water with the vapour of the hydrochloric acid. The irritating qualities of the vapour of calomel may be still further diminished by its being resublimed two or three times before it is used. In this action, as I conceive, any free hydrochloric acid is driven off. These seem very simple processes, but it is extraordinary the number of experiments that were tried, and the number of years that have elapsed since Abernethy's time, before they were practically applied. They have, however, converted that which was before an uncertain remedy, often attended with considerable inconvenience, into a mode of treatment at once safe and definite in its action, and one which may be regulated with the greatest nicety. Any remedy, as Sir B. Brodie has observed, that is powerful enough to do much good, may also do harm if misapplied; and I am anxious to guard against some of the sources of error which are very common at the present time in the use of the calomel vapour bath.

I would not for a moment have it inferred that I take for granted that the plan which I have advocated for mercurial fumigation will ultimately turn out to be the best possible. It is, however, but fair and reasonable that those who wish to try it should do so according to the plan recommended, before they pronounce an opinion as to its efficacy. In the first place, it is the calomel bath which I have recommended in the treatment of syphilis, and not a vapour bath. The water used is only for the purpose of softening and diluting any irritating vapour that may arise when the calomel is sublimed, and for this purpose half an ounce or an ounce is quite sufficient. I find that it is very common for a considerable quantity of water to be used; as this boils a certain amount of heat necessarily becomes latent, and as the vapour recondenses on the skin this latent heat is again given out. The result is often a profuse perspiration. A double evil results from this—the perspiration washes the calomel off the skin, where it should remain; and it, to a certain extent, debilitates the patient. Now many patients suffering from syphilis are already much reduced with regard to their physical powers, and will not bear any remedies of a depressing nature. A daily vapour bath becomes a tax upon the constitutions of such patients, which is a very serious addition to the causes of debility under which they already labour.

In the evidence before the commission to which I have referred, Mr. Cutler states that at St. George's Hospital he had tried the plan of treating syphilis by mercurial vapour baths, and found that patients were "knocked over" as soon by that mode of treatment as by the administration of mercury in other ways. It is not, however, stated what preparation of mercury was used. When I became surgeon to St. George's Hospital I took some pains to ascertain how the baths were given, and it was much the same in all cases. The patient was made to perspire profusely, and was afterwards rubbed dry. He was directed to put his head occasionally into the box in which he was placed, so as to breathe the fumes of the remedy. In the different institutions in London and elsewhere where medicated baths are given, this plan was, and is still, very generally adopted. With regard to it three points are to be noted:—1. The mercurial powder deposited on the skin, which, if it is to do any good at all, must there produce its effect, is immediately wiped off, and in so far its action is prevented. 2. The patient breathes the vapour in a concentrated form, and sometimes this produces inconvenient symptoms. 3. The perspiration not only weakens the patient, but itself is a means of removing the medicine from the surface of the skin. Each of these points is of importance, and applies to mercurial fumigations of all kinds. A patient in St. George's Hospital had a secondary syphilitic ulceration, which threatened to destroy one side of his nose. He was ordered a calomel vapour bath daily. He was thin and emaciated, and complained of increasing weakness during his treatment. I found that he was using a water vapour bath, as well as a calomel bath, and to this I attributed in some degree his increasing debility. He was directed to use his bath with very little water. A change for the better was immediately perceived, and the ulceration was very soon permanently healed. The fact of the debilitating effects of a daily steam bath I have now witnessed in a great number of instances, far too numerous to require any further particular illustration; and, in order that as few mistakes as possible may in future be made in this respect, I have had an apparatus constructed by Mr. Blaise which will hold an ounce of water only.



The inhalation of the vapour of mercurial preparations also requires attention. For want of this all the preparations which have at different times been used have in turn lost their reputation.

Dry mercurial preparations, as I have convinced myself by a number of experiments, irritate the lungs, and cannot be continued with impunity. In an institution in London with which I am not unacquainted, it was long the practice to give the mercurial baths in a room without a fire. The patient was undressed and covered by a Mackintosh cloak, and not unfrequently had a kind of shivering fit before he began his bath. The skin under such circumstances would certainly not be left in a good state for the action of the remedy.

I knew a case in which a patient was ordered a calomel bath for the whole body. The quantity to be used was half a drachm, and the ordinary calomel was used. By mistake he only inhaled the vapour, instead of having a bath for the whole body. A considerable degree of irritation of the lungs followed, with general disturbance of the constitution. I saw this patient at the expiration of four years, and he then, as I believe with more or less justice, attributed a chronic affection of his lungs to the mistake which had been made. It is true that the patient was of a strumous habit, and had before been treated with cod-liver oil, but it is equally true, in my opinion, that the irritation artificially produced tended to localise and develop his disease. In another case, in which a large quantity of the vapour of ordinary dry calomel was ordered to be inhaled, in the same thoughtless and mischievous way the patient's constitution was very much interfered with, and the skin of the face remained livid for some hours afterwards.

The third point which has been noticed—namely, that of wiping the mercurial powder off the skin immediately after it has been applied, is so much a matter of common sense, that in itself it requires no illustration. But, it may be asked, what proof is there that mercury is absorbed in this way? The answer to this is, that with regard to mercury, as with other medicines, we judge by the effects produced. There is probably no medicine which, when once taken into a patient's system, can be reproduced in the same state as that in which it was administered; there are few that can be reproduced in any state of combination. When mercury is given by the mouth or by inunction, it would be very difficult to prove its existence afterwards in the blood, but that it does affect the living actions of the blood we know by the results that are obtained. It is the same with regard to calomel applied to the surface of the skin, although its effects differ very materially in different individuals. A medical man of my acquaintance had brought his skin, by the constant use of baths of various kinds, into very fine condition. He found that he could never take a calomel bath two days together without the effects being visible on the gums. In trying this experiment he was as careful as possible not to inhale any of the vapour. There was nothing peculiar in this gentleman's constitution, as far as could be ascertained, with regard to mercury taken internally.

As an extreme example in the opposite direction, I may mention the case of a patient who came to me one morning, and said, "I have been going on as you directed." I replied that I was very sorry, but that I did not recollect him. "Oh! I don't wonder at that," he said, "it is two years and a half since I saw you." It turned out that he had been taking the calomel bath every night, sometimes for two and sometimes for three months at a time, and altogether he had taken about 900 baths. He was looking the picture of health, had nothing to complain of, and had long ago lost all the symptoms for which he originally came.

The plan which I have usually adopted then is as follows: A lamp, in which the methylated spirits of wine is burned, is put into a case, made principally of wire-gauze, on the principle of the Davy safety-lamp. The top of the case is fitted with a central, movable, small circular plate, surrounded by a trough, which should contain one ounce of water only. The water should be boiling when first put in, or should be allowed to remain over the lighted lamp until it begins to boil. Thirty grains of resublimed calomel are then spread out on the central small circular plate. This should be quite dry. The patient then sits, without his clothes, on a small stool or chair, and the lamp is placed between his legs. A cloak made of moleskin or some thick material is then made to cover the whole apparatus, and is tied round the patient's neck. It is important that the cloak should go quite down to the ground all the way round. As the water boils a certain quantity of steam is enclosed within the cloak, and a little later the vapour of the calomel as it rises passes through the steam and becomes mixed with it. The water first disappears, and the calomel is sublimed in from ten to fifteen minutes. The patient then gets into bed with the cloak on, so as to make it his night-dress. In this way the calomel is necessarily kept on the surface of the skin. The cloak used is furnished with a cane hoop, so as to be kept away from the skin during the action of the bath, and this hoop may be removed as soon as the bath is over, and replaced again before the bath is used the next night. The cloak has a slit in front, which the patient is generally directed to open for about an inch, so as to allow some of the vapour to escape. This rises in front of his mouth and nose, and he is directed to inhale it for a minute, at the expiration of each five during the continuance of the bath, so as to breathe the vapour for about three minutes altogether. The patient during this time keeps his head up, so that the moistened calomel vapour passes for about six inches through the common air before it is inhaled. This inhalation is not always necessary, but it furnishes a means of regulating with the greatest nicety the action of the mercury, as indicated by its effects upon the gums. I have never found mercury administered in this way produce salivation where patients had not also taken it in some other form. The action is upon the surface of the body, and the internal parts are comparatively unaffected. No diarrhœa is produced except from some accidental cause. The stomach and intestines are not irritated, and are free for the use of food or medicine. The perspiration produced amounts only to a slight moisture on the skin, and when this is the case the patient very rarely experiences any debilitating effects from the continued use of the bath. During this treatment I generally recommend patients to abstain from taking vegetable acids; and for this purpose, as a rule, they are told not to eat raw vegetables or raw fruits—such as salads, cucumbers, celery, apples, pears, and oranges. As the object is to have the calomel in contact with the skin, the patient washes only as much as may be necessary. Boerhaave long ago made the observation, that if patients went about their usual occupations, and followed their usual pleasures, he could not cure them; and Pearson, as has been stated, found that, under any plan of treatment, if the patients were much exposed to cold air, the effect of his remedies was materially interfered with. This will be the case with regard to any plan of treatment by which there is a fair prospect of really curing the disease. I know how often it has been asserted that the disease is not cured; but a long experience now enables me to say very positively, as I have before remarked, that numbers of patients, after having gone through a proper course of treatment, pass five, ten, fifteen, or twenty years without any fresh manifestations. They believe themselves to be cured, and whatever impression may be left upon their constitutions, no inconvenience subsequently arises either to themselves or their families. In this sense, then, syphilis may be cured, as well as any other recurrent fever to which the human body is liable.

But to effect this, as I have intimated, with any degree of certainty, the action of the medicine should not be interfered with by a diet that is likely to produce diarrhœa, or by exposure to fresh air or cold water. Fresh air has long been known as the antidote to mercurial action; and dabbling in water, either hot or cold, not only washes the calomel off the skin, but its evaporation chills the surface of the body, and, certainly, according to my experience, prevents the full action of the bath as I have described it.

If a patient wants a wash, he may have two or three times a week a warm bath, and remain under the water as long as he pleases. There is then no evaporation from his skin, and he should dry himself as quickly as may be when his warm bath is finished. These are matters of minute detail, but upon their observance or otherwise the success of the treatment of many a case will depend. During the first period of treatment I generally recommend a patient not to be in the open air more than an hour a day, and to select the best part of the day for the purpose, but I seldom object to his going about any ordinary in-door occupation. When the mercurial action is once established, and towards the end of the course, a greater degree of liberty may be allowed. The effect produced is usually a slight feeling in the gums, some increase of saliva, and a kind of metallic taste in the mouth. The gums sometimes become red and swollen, and some pain is experienced in biting a hard crust. All the beneficial effects of mercurial treatment may be obtained by the amount of action indicated by these symptoms, and I seldom, if ever, produce more. The time required for a mercurial course is a question of much interest and importance. This will necessarily vary, according to the nature of the case. We have before seen that the manifestations of syphilis vary very much at its different periods, and that the disease is modified in a very important degree when it recurs. Under these varying conditions the mercurial treatment must be varied also, but there is no phase of syphilitic disease, in my opinion, to which it is not applicable.

By the use of the calomel vapour bath, as I have described it, the evils resulting from the internal use of mercury, and the inconveniences attending inunction, may both be avoided. The remedy may be continued every night, as long as necessary, without danger of depressing the powers of the patient's constitution, without salivation, and without disturbance of the digestive organs. The remedy is applied directly to the parts where the disease, in its primary or secondary forms, usually manifests itself. The slight action maintained on the skin prevents any great determination of blood to other parts, and is in itself beneficial. The plan involves a certain amount of trouble, and the same care with regard to exposure to air and moisture as other modes of treatment do, but it has not their injurious consequences. The whole surface of the skin of the body, and generally the mucous membrane of the nose and mouth, are used for the action of the remedy, and consequently there is no irritation of any one particular part. The action of the skin also in some measure prevents any undue effects of the remedy on the gums, as may also be observed in the administration of the Plummer's pill. This remedy very rarely produces much effect upon the mouth, as the antimony which it contains determines its action rather to the surface of the body.

In the forms of the disease affecting the skin, and characterised by the adhesive inflammation, whether primary or secondary, patients will bear well any form of mercurial treatment, at least for a time. If we have syphilis alone to deal with, at whatever period after infection, the disease is one, and the treatment the same. If the patient is of a strumous constitution; if he has previously been debilitated by prolonged, irregular, or injudicious courses of mercury; if he has suffered from ague, or some other form of fever; or if he has had disease of the liver, spleen, or some other internal organ, then mercury, whether in what have been called the primary or secondary forms of syphilis, must be administered with caution.

Mr. Pearson found that rather a shorter course of mercury was required for primary syphilis than for secondary. I have found, on the other hand, that a longer course is required for primary than for secondary disease. It is probable that, as the diagnosis between real syphilis and local forms of the venereal disease was not made with the same accuracy in Mr. Pearson's time as at present, some cases that were not really syphilitic were included among those which were treated with mercury. These would for the most part get well rapidly, and would reduce the average time during which the treatment was continued. It would, however, be a great mistake to suppose, although no accurate account was then published with regard to affections which would, and those which would not, be followed by constitutional disease, that therefore the older surgeons had not the practical tact of at least distinguishing some of these.

The late Mr. Walker recognised what he called the gonorrhœal sore, and which, to my eye, and as far as my memory serves me, corresponded to what I have described as the local suppurating sore. It is true that many surgeons subsequently, and even in the present day, profess not to be able to distinguish an infecting from a non-infecting sore. Thus, Mr. Cutler, in the evidence before the commission previously referred to, says:—"My opinion is that no one can tell from the appearance of the sore, without the history of it, whether it is infectious or not; that is to say, take what is defined to be the Hunterian chancre, my belief is that in the case of any sore on the penis, if you irritate it, you may convert it into a sore having all the appearances of the confirmed Hunterian chancre; and so strongly do I feel upon that, that at the present time I never determine, in considering the treatment, to administer mercury until I have heard clearly the history of the case."

Now, in spite of the difficulty which formerly existed, and still exists, with some surgeons, of distinguishing an infecting from a non-infecting sore, I am firmly of opinion that the older surgeons did not give mercury in the indiscriminate way that has been supposed; but still that they did give it in some cases where it was not necessary, and that the average period during which it should be continued for primary syphilis was therefore made to appear much shorter than at present. Another point, which was not formerly accurately considered, has tended to the same result: there is seldom a distinction drawn in the writings of the older surgeons between a disease treated for the first time and one which had recurred in a modified form. The latter would be very much more easily dealt with, and require a much shorter period of treatment.

For primary syphilis occurring in a patient for the first time, uninfluenced by the existence of previous disease in himself, or by hereditary influences of the same kind, I seldom now discontinue the treatment under three months, and I generally explain to the patient, to begin with, that unless he is prepared to follow such a course, he had better wait until the secondary symptoms appear, and then undergo his treatment. It is often difficult to persuade a patient who has a slight induration, accompanied by the existence of amygdaloid glands, that his affection is of a nature to require such a course. He will probably ask some friend before he consents, and not unfrequently it has happened in my experience that he has been told that it is "nothing," and has waited until he has become practically convinced of the truth of the diagnosis. This occurred in the celebrated case of the late Mr. Wyndham, which I need not mind alluding to, as the facts were published over and over again in the daily papers. I told him that he not only had the disease, but that he might communicate it. He replied, "Well! I am told it is not so." I did my best to persuade him, but in vain, and, as was soon after given in evidence, he infected his wife. When a patient consents to undergo a proper course of treatment, I generally make him take a calomel bath in the way I have described every night.

Some slight evidence of mercurial action generally appears on the gums within the first week, and this is steadily maintained, either by the calomel bath alone or by the addition of some other medicine. After this action has been kept up for seven or eight weeks the patient is allowed more liberty, but the mercurial action is never allowed entirely to subside, and no break in the treatment is permitted. If the action of the mercury once entirely goes off, it is exceedingly difficult to establish it again in a satisfactory manner. Should this be attempted by increasing the quantity of mercury, the action reproduced will probably not be of the same satisfactory kind. The gums, instead of becoming slightly spongy and soft, will perhaps ulcerate, and there will be some general disturbance of the patient's system. In the treatment of a primary affection, all induration at the site of the original disease should disappear, and, if possible, the amygdaloid condition of the glands. This last, however, is an effect which it is sometimes exceedingly difficult to produce, and some enlargement of the inguinal glands will occasionally remain, in spite of any treatment, for some years, but often without any other manifestation of the disease.

In all secondary forms of skin disease characterised by the adhesive form of inflammation, the same mode of treatment may be pursued, in combination perhaps with some other medicines, of which I shall have to speak.

When a patient's constitution has been weakened from any cause, especially from a continuance of the disease, the eruptions on the skin will change their character. Different forms of eruption may be observed in the same patient at different times. An eruption which is at first papular, and which terminates then by desquamation, at a later stage will be papular or tubercular, and each papule or tubercle will present a white spot of lymph on its apex, which becomes converted into pus. A great many modifications may now occur. In some cases the papules or tubercles, either separate or in groups, remain in a chronic indolent stage, presenting little change from day to day; in others, the action on the skin and elsewhere passes rapidly into suppuration, ulceration, or even mortification. These different results have been distinguished by different names, which are convenient for the purpose of description, but which, in my opinion, would lead to error if made use of so as to imply that these different accidental results constituted so many different diseases. But, nevertheless, each phase, in the development of a syphilitic disease, may require a modification of treatment.

A FACT BEARING ON THE ETIOLOGY OF CHOLERA.

By HENRY BLANC, M.D., M.R.C.P.,
SURGEON-MAJOR HER MAJESTY'S INDIAN ARMY; SUPERINTENDENT YERROWDA CENTRAL GAOL.

THE Yerrowda Central Gaol is situated in the Deccan, some 1865 feet above the level of the sea, and distant some four miles N.N.W. of the town and camp of Poona. The slightly undulated plateau on which the gaol is built consists mainly of trap rock; the country around is bare, a few mimosæ and euphorbiacæ alone cast their scanty shade over the bleak and exposed locality. It is naturally well drained, the nearest village is a mile distant, and from the central tower of the gaol the Moola river can be seen winding right and left about a mile on each side, and marking with its blue line the limits of the peninsula on which the gaol has been erected.

Some large wells and tanks (former quarries) exist in the vicinity of the gaol, but they are used only for agricultural and building purposes. Quite recently water was brought to the gaol by iron pipes from a lake near Poona; before that the drinking water for the prisoners was obtained from the Moola river before its southerly curve—i.e., before it became polluted by the towns of Kirkee and Poona, around which it flows.

The heat during our last hot season was excessive and unusual, at the same time the diurnal range was considerable. During the month of May, in the shade, the maximum varied between 100° and 106° Fahr., and in the sun from 115° to 126°. The nights and mornings were relatively cool, the minimum in the shade being 72° to 75°. The weather was remarkably dry, the rainfall during March, April, and May being 1 inch and 72 cents., and the number of days on which rain fell during three months only three.

The season did not, however, prove unhealthy, and the admissions into hospital fell below the average; cases of febricula due to exposure to the sun, and slight surgical cases, formed the large majority of admissions, and diarrhœa did not prevail above the average of former years at that season.

At 2 A.M. on the morning of the 27th of May a case of cholera, the patient being in a state of collapse, was taken to the gaol hospital; and by noon on the following day twenty cases had been admitted. These cases came from both circles then occupied, and from nine different barracks, and to all appearance this sudden outbreak was general; but a searching inquiry soon made it evident that the epidemic was as yet limited to a certain number of prisoners who had lately been employed in making a new road from the gaol towards the Moola river, there to join the Poona road; and the first impression of a general outbreak was due to these men being quartered in different circles and distributed among the several barracks.

I do not intend mentioning here the steps taken to arrest the progress of the disease, as I wish to limit myself to the cause of this outbreak; it will be sufficient to state that they were vigorous and carefully carried out, and attended with such success that only two cases occurred from among prisoners who did not belong to the gang of men mentioned above.

The following table will show the principal features of the outbreak of cholera we are considering:—

Date.	Number of cases.	Number of deaths.	Number of recoveries.	How employed.	
				Road gang.	Otherwise employed.
May 27th	7	5	2	7	—
„ 28th	13	2	11	13	—
„ 29th	2	1	1	1	1
„ 30th	1	—	1	1	—
June 1st	1	—	1	—	1
Total... ...	24	8	16	22	2

A few words on the two cases that occurred inside the gaol before examining the interesting and important question of the appearance of cholera among the road gang.

The first case of cholera that occurred among prisoners "otherwise employed" was on the 29th of May. This man was sleeping on the night of the 26th–27th near one of the cases that occurred on that night. The suddenness of the outbreak took everyone by surprise, and much time was required before the cholera cases could be removed. It is not improbable that this man may have been infected by the choleraic discharges, as the patient not only vomited in his vicinity, but passed before him each time he had to resort to the night privy. The second of these cases occurred in a prisoner who had been attending on cholera patients. Contrary to orders, this man took his meals inside the cholera ward, and drank of water that had been standing there. In his case direct infection cannot be doubted.

These two secondary cases disposed of, I will now describe the conditions under which cholera made its appearance among the prisoners who had been working on a certain road during the previous days.

The subjoined tables show the occupation of the prisoners on the days preceding the outbreak:—

A.—*Prisoners engaged in intra-mural labour.*

Date.	Excused from labour.	Gaol servants.	Factory.	Miscellaneous.	Total.
May 24th	59	172	301	16	548
„ 25th	53	172	304	12	541
„ 26th	57	174	310	13	554

B.—*Prisoners engaged in extra-mural labour or in out-door labour in Gaol enclosure.*

Date.	Gaol servants	Public Work Department.	Gaol repairs.	Garden.	Thatching roofs.	Road gang.	Total.
May 24th	161	370	10	42	87	61	731
„ 25th	161	373	10	42	18	134	738
„ 26th	163	376	10	42	18	116	725

These 1279 prisoners, as a body of men, can in many respects be considered as a unit; they have the same diet, the same clothing, dwell in the same locality, are exposed to the same meteorological influences, &c.; they differ, and that slightly, but in one respect, according to the labour in which they are engaged.

From the tables given above it will be perceived that of the total number of prisoners about 554 worked under cover. But cholera broke out among those who had been working in the sun, and as this cause might be deemed to have had some influence on the development of the disease, this group of 554 men will be eliminated, and the inquiry limited to the second group of 724 men, who were all of them equally exposed.

Some of the men belonging to our second group were engaged on masonry; some in dragging heavy water-carts along a bad road, and supplying the jail with water; others were engaged in ploughing, or in garden work, or conveyed the night-soil outside the gaol, &c.; and some in watering and rolling a new road. None of these occupations are one more than the other "cholera-producing," and when we find that among this group of men only a certain number contract the disease, we must seek for an explanation beyond telluric influences, cholera waves, absence of ozone, &c.

Now if the men among whom cholera appeared were on no single point differently placed from the other, with but one remarkable exception, this fact must necessarily carry great weight with us, and assist us in solving the arduous question of the etiology of cholera. All the prisoners, whether engaged in intra- or extra-mural labour, were supplied with water taken from the Moola river before it reaches Poona; "the only exception occurred among the prisoners engaged in road work, who drank water taken from the bed of the Moola river below the dam."

It will be observed by a reference to the table of employment that the road gang was considerably increased on the 25th and 26th May; the road had already been metalled, and the extra hands were required to water and roll the road, so that it might not be damaged by the daily expected heavy rains. It should be here stated that a certain number of barrels for storing water and water-carts were sent with the road gang, and that water for drinking purposes was brought to them from above the dam. Five water-carts had been also sent with these men for the purpose of watering the road whilst it was being rolled by others; these carts were filled from the nearest water obtainable—that is, from pools in the nearly dry bed of the river, opposite to the Poona end of the road under construction. The prisoners admitted that they had drunk freely of that water, not only when they filled the carts, but also when they were made to wash before returning to the gaol after their day's task was over. The cholera patients to whom this query was put all unhesitatingly declared that they had partaken freely of it; moreover the warder who was in charge of the carts for supplying them with drinking water corroborated the fact in a remarkable manner; he stated that on the 25th and 26th of May he had conveyed to them less water than on the previous days, although the number of prisoners at work on the road was nearly three times as great. "The fact of the road gang drinking water taken from a source different to the one used by the remainder of the prisoners is placed beyond any doubt."

Was cholera communicated to these prisoners through the water they drank? This is the question I will now endeavour to solve.

On the morning of the 29th May Mr. Taylor (the gaoler) and myself visited the locality from which water for watering the road had been taken. The identical spot was shown to us by the warders on duty on the 25th and 26th, and their testimony was corroborated by our finding there several pieces of gaol clothing. Some 600 or 700 yards above this spot the river is barred; a dam was erected there some years ago for the purpose of securing a constant water-supply to the city of Poona, the river generally running nearly dry during the hot weather. The bed of the river from the dam downwards contained but little water; where we were standing we saw several large semi-stagnant pools, separated from similar small expanses by hugh boulders and moss-covered islets of volcanic rocks; slowly flowing streamlets connected these pools one with another, but on our side of the river-bed the current was so weak that we almost doubted its existence. Between the locality on which we were standing and the dam a number of washermen were at work; men and women were seen here and there performing their morning ablutions, &c.; cattle were roaming about; and a glance showed that the bed of the river between the dam and the place from which water had been taken for watering the road must be contaminated by excreta of all kinds. The river was not overflowing the dam on that day, and from inquiries we learnt that it had not done so for several days: one of the sluices was open, but on the opposite (Poona) side of the river. Water was taken from the pools above mentioned and forwarded to Dr. Gray, the chemical analyst to Government.*

Cholera existed at the time throughout the province, in Poona, and in the neighbouring villages. In India the bed of a river in the vicinity of a large city is the usual place selected by travellers before entering the town to perform their ablutions, &c.; washermen are constantly at work in the same locality; in fact, we could hardly expect to find anywhere so many agencies united to contaminate drinking water by means of choleraic discharges, and, irrespective of what the inquiry had already allowed us to surmise, we would have already strong grounds for accepting the outbreak as due to the propagation of cholera through drinking water. In this instance, however, we possess evidence still more direct and positive.

On the 22nd of May two fatal cases of cholera occurred in the village of Yerrowda, situate opposite the dam, and we learnt that on the evening of the 22nd these bodies were washed and burnt, and the clothes worn during their fatal illness washed some twenty yards above the spot from which water had been drunk by most of the road gang, and which proved so poisonous and so deadly to many of them.

Poona, July 1st, 1875.

REMARKS ON THE

ANATOMY AND PATHOLOGICAL RELATIONS OF A NEW SPECIES OF LIVER-FLUKE.

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ON the 9th of September, 1874, I made a post-mortem examination of the body of a Chinaman, and found in the liver, obstructing the bile-ducts, a large number of "flukes." A careful examination of these, and comparison with other known distomata, have convinced me that they not only differ from the ordinary liver-fluke (*Dist. hepaticum*), but constitute an entirely new species. I desire therefore to describe the salient anatomical characters of these flukes, then to give a brief account of the post-mortem examination alluded to, and lastly to make a few remarks upon the case.

The woodcuts which accompany this paper will facilitate the description. Fig. 1 represents a few of these flukes drawn to natural size. Fig. 2 is one specimen enlarged to about six times the natural size, showing the ventral surface. Fig. 3 represents the ova magnified 300 diameters.

FIG. 1. *Ad. Nat.*

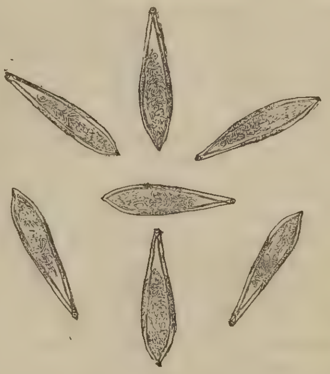

FIG. 2. × 6.

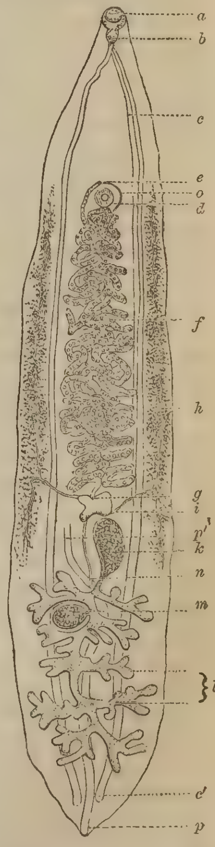

FIG. 3. × 300.

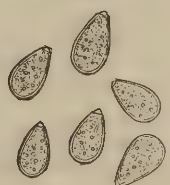

Fig. 2.—*a.* Oral sucker. *b.* Œsophagus. *c, c'.* Right alimentary canal. *d.* Ventral sucker. *e.* Genital orifice. *f.* Uterine folds. *g.* Ovary. *h.* Vitelligene gland (right). *i.* Vitelligene duct (right). *k.* Right testicle. *l.* Receptaculum seminis (?) *m.* Left testicle. *n.* Vas deferens. *o.* Termination of vas deferens. *p.* Pulsatile vesicle. *p'.* Water-vascular canal.

The body is narrow, flattened, lanceolate; the central portion being the broadest part of the animal, the anterior and posterior extremities tapering and pointed, the former, however, being much narrower than the latter, which is more strictly ovate. The surface of the body is smooth, quite free from hairs or spines even in the fresh condition. The borders have a slightly undulating outline. At the anterior extremity (Fig. 2) is situated the oral sucker (terminal), *a*—a hollow disc, provided with a well-defined sphincter. At the bottom of this cup-like cavity is the mouth; this leads into the pharynx, *b* (which is circular or slightly oval-shaped, and is probably muscular), and thence into the œsophagus. The œsophagus bifurcates in the median line of the body (a little distance above the ventral sucker) into two alimentary canals, *c*, which diverge as they pass downwards and outwards along the sides of the body, slightly widening as they proceed, and converge again towards the caudal extremity, close to which they terminate in blind cul-de-sacs, *c′*. These canals are unbranched throughout. On the inferior surface of the body is the ventral sucker, *d*; situated in the median line, and about $\frac{1}{6}$" (one-sixth of an inch) below the oral sucker. It is imperforate, and provided with a sphincter, the radiating fibres of which can be clearly distinguished. This sucker is slightly smaller than the oral, measuring $\frac{1}{34}$", whereas the latter is $\frac{1}{25}$".

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* Analysis of the water made by Dr. Gray, chemical analyst to Government:—Solid grains per gallon, 10·36; chlorine, ·95; hardness, total, 6·30; hardness, permanent, 3·42; oxygen removed by readily oxidisable matter of water at 140° F., ·072. Part per million of free ammonia, 0·32; of albuminoid ammonia, 0·22.

Just above the ventral sucker is a minute dark dot, *e*, which appears to be the genital orifice. No penis or penis-like appendage can be detected, but ova have, in several specimens, been seen to assume a linear arrangement between the little orifice just mentioned and the hollow ventral disc into which they have dropped. Opening into this genital orifice, in favourable specimens, can be traced the delicate tubular termination of a convoluted uterine tube. This structure is highly developed, and consists of a series of very intricate windings, *f*, which communicate posteriorly with a flattened, somewhat square-shaped body, the ovary, *g*. The uterine tubules are semi-opaque, but in the more transparent portions numerous ova are seen collected together within the folds. The uterus and ovary occupy rather more than the middle third of the animal.

Occupying the interspaces between the alimentary canal and the lateral borders of the body on either side are the dark, pigmented-looking structures, the vitelligene structures, *h*. These communicate with the ovary by two delicate canals, which run transversely inwards to it, and constitute the vitelligene ducts, *i*.

Placed a short distance behind the ovary is a large oval-shaped body, the testis, *k*; which is succeeded by a remarkable and peculiar development of branched, dendritic-looking structures, *l*, among which, in several specimens, a rounded smaller testicle (*m*) can be distinguished. This apparatus appears to be connected with the male generative organs, and forms perhaps a kind of receptaculum seminis. This is the most marked and distinguishing character of this fluke. The testes and branched receptaculum are of a rusty-brown colour, both of the same tinge,* and have granular amorphous contents; the connexion, however, between this apparatus and the testes is uncertain, but, as far as one can speak from a very careful examination of several specimens, the arrangement is that which has just been briefly sketched. The position and shape of the second or smaller testicle are also very variable. In some of the parasites only one large globular organ of this kind can be discovered; in others, the position of the second testis is lower down the axis of the receptaculum; in others again, instead of a distinctly rounded organ, a mere diffuse "blurring" of one of the branched tubes can be held to represent this second testicle.

Starting from the upper part of the male generative apparatus, a very delicate thread-like structure can be seen, *n*, which runs upwards by the side of the larger testis to the lower border of the ovary, and probably above it, but can be traced no further. This appears to be the seminal efferent duct, or vas deferens. The point at which it communicates with the female generative apparatus was not for a long time ascertained; but lately, in a specimen stained with carmine, and then *pressed* between thin pieces of glass, I have been able to discover (what seems to me the continuation of this tubule) a very delicate structure, *o*, curving round the ventral sucker on the *opposite side* to the termination of the uterine folds, and ending at the same genital orifice, or at a point very close to it, as depicted in the engraving (Fig. 2). As this tubule is a flexible elastic structure, it may very possibly run up the same side as the uterine tubule, and not occupy an opposite position; I have drawn it, however, exactly as seen in the specimen alluded to.

Lastly, at the caudal extremity of the body of the fluke may be seen a pulsatile vesicle or bulb, *p*, associated with the water-vascular system of the animal; the continuation of the same upwards, in the form of a vascular canal, can be traced for a certain distance, passing above the male generative apparatus in a winding course, and being lost sight of at a short distance to the left of the right testicle, *p′*. The average length of the distoma now described is $\frac{7}{10}$", and the breadth $\frac{1}{7}$". The latter is very constant; the former has slight variations—viz , from $8\frac{8}{10}$" to $\frac{6}{10}$".

I have not observed any further marked peculiarities in the minute structure and arrangement of the tissues and organs of this particular parasite but what have been described by systematic writers on entozoa; so that I refrain from adding unnecessarily to the length of this paper by giving detailed accounts of microscopic appearances already well known.

The ova are of distinctly ovoid shape (Fig. 3). A short distance from the more pointed extremity is a dark, transverse line, just as is usually seen in the ova of distomata, and indicating the line of contact of that lid-like organ or operculum, which, after a time, spontaneously separates. The average length of each ovum is $\frac{1}{833}$", and the average breadth $\frac{1}{1666}$"; thus, roughly speaking, it is twice as long as it is broad.

The individual from whose liver these flukes were obtained was a Chinaman, aged twenty, a carpenter. He was brought into the Medical College Hospital at midnight on September 8th, 1874, in an insensible, moribund condition. The only history that could be obtained from the "friend" who accompanied him was, that the patient had been suffering from "fever" of a continued type for about a fortnight. The insensibility was profound; the pupils were normal; the conjunctivæ looked pale. There was considerable dyspnœa; a hard, tense, distended, and slightly tympanitic condition of the abdomen; a hot skin, and an almost imperceptible radial pulse. He never rallied, but died, in much the same state, two hours and a half after admission.

A post-mortem examination was made the next morning, five hours and a half after death, a brief summary of which is as follows:—Body fairly nourished; pupils dilated; conjunctivæ jaundiced; rigor mortis strong in the lower limbs. The dura mater yellow-stained; vessels of pia mater everywhere gorged with dark blood, slight serous effusion also into its meshes; cerebral substance moderately firm; puncta large and bleed freely; grey matter of both cerebrum and cerebellum particularly dark—a deep leaden hue, such as is met with in many of the severe remittents of this country. The large pulmonary vessels at the roots of the lungs contained much fluid dark blood, but the lung-substance everywhere else was rather pale and anæmic—structurally healthy. One ounce of deeply yellow-tinged serum was found in the pericardial cavity; a few dark clots and fluid blood in the right chambers of the heart; the left were almost empty. The peritoneum was healthy, and no effusion was found into the abdominal cavity. The liver was large, swollen, and tense; superficially of a dark-purple colour, on section paler, more dingy or muddy-looking. Its parenchyma everywhere very soft. The large portal and hepatic veins were filled with fluid blood, and the bile-ducts particularly distinct from their large size, and distension with thick yellow bile. On incising the liver in different directions it was noticed that small, dark, vermicular-looking bodies escaped on to the table, and on more careful examination these were clearly seen to protrude from the bile-ducts, which, on being dissected, were found more or less obstructed by and containing them in large numbers, some lying free, others coiled up, and either solitary or in groups of twos or threes within the biliary ducts; all were dead. The gall-bladder was full; the cystic and cholodic ducts were patent. The bile in the bladder was of a very deep yellow (orange) colour, thick, and measured about an ounce and a half. No distomata were found in the gall-bladder, nor were any ova discovered on microscopical examination of the bile and lining membrane of this sac. Numerous ova and shreds of epithelium were found in the biliary canals. (The weight of the liver after incision was 54½ oz.) Portions of this organ were hardened, thin sections made, and examined microscopically. A most remarkable and intense pigmentation of the parenchyma was observed—not mere staining, but a positive infiltration of black pigment, granular in character, and not confined or specially distributed in the interlobular tissue, but occupying the hepatic cells also within the lobules; the greater portion being disposed in the form of minute, very dark, granular depôts, from which smaller molecules radiated in all directions as from a centre. The pigment matter appeared to be biliary rather than hæmatoid. Many of the hepatic cells were also infiltrated with fat, and the nucleus in the majority was ill-defined or altogether indistinguishable. The spleen was found enlarged; its capsule stretched, slightly thickened, and opaque; its substance very dark and pulpy; weight 13¾ oz. The kidneys were moderately hyperæmic and dark. The small intestines were found deeply bile-stained; the large, natural. The fæcal contents of both—partly solid and partly liquid—were bile-coloured, but no distomata were found in them, although carefully washed and examined.

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* In the diagram the engraver has made the testicles darker than the rest of the apparatus, and their contents somewhat largely molecular, but this is not correct.

Remarks.—The morbid anatomy of the liver in this case seems unequivocally to point to the presence of the flukes in its biliary ducts as the exciting cause of the acute and extensive structural degeneration of the proper structure of the organ, and of that cholæmic condition induced by the obstruction of the biliary channels which appears to have been the immediate cause of death. It is noticeable that the gall-bladder itself contained no distomata, nor exhibited any evidences of having been occupied by them, while the bile-ducts were found densely crowded. I must have collected at least thirty specimens in my dissections, and numbers doubtless still remain in those portions of the liver which I have preserved entire, for hardly any duct of medium size has not been found to contain two, three, or more of these parasites.

The discovery of this distoma may perhaps throw some light upon the pathology of those obscure liver enlargements and jaundices which every now and then, in this country at any rate, are presented to the practitioner; and although I never met with an analogous case, yet I can recall to memory a few instances during the past three years, of Chinamen especially, many of whom are settled in this city, who have applied to me in the medical out-patient department of this hospital for the treatment of obscure, hard, massive enlargements of the liver, with or without jaundice, and in whom I am now naturally inclined to suppose that a similar cause for the disease might have existed.

The Chinese as well as the Burmese are well known to be "filthy feeders," delighting in putrid messes of half-raw fish, &c.; they are bound by no caste prejudices (as the natives of India are) to abstain from any kind of "flesh, fish, or fowl"; they partake, moreover, of all kinds of "vegetable food." The sources from whence the larvæ of such parasites may be derived are therefore not far to be sought. In the present instance, I regret to say, I have been unable to gain any information as to the antecedent history and habits of the deceased. The "friend" who brought him to the hospital never reappeared, and the body after death was "unclaimed." With reference, however, to this question, my attention has been directed to a paper by Professor Leidy, of America,[*] who reports that he had received from Dr. J. G. Kerr, of Canton, China, a worm which "was vomited by a Chinese boy, aged fifteen, and brought to him" (Dr. Kerr) "an hour and a half after its expulsion, when it was still alive. It had the appearance of a leech, and was red in colour, about an inch and a half long, and three-quarters of an inch where widest. Dr. Kerr also stated that a girl of four years, of English parents, living in Canton, passed from the bowels at one time nine of these worms. With these exceptions Dr. Kerr had not met with anyone who had ever seen or heard of anything of the kind." Prof. Leidy is of opinion that this parasite is a true liver-fluke. He says: "The worm exhibits some differences from D. hepaticum as usually described, but perhaps not sufficiently to characterise it as a distinct species." The specimen had been preserved in strong alcohol, which had doubtless contracted and reduced it in size, "but it is yet larger than the size assigned to D. hepaticum. It is perfectly smooth throughout, and exhibits no trace of roughness to the integument. It is ovate-lanceolate in form, and gradually widens from the anterior to the posterior rounded extremity. The ventral acetabulum is twice the size of the mouth, and is situated about its own diameter behind it. The genital organ with the exserted spiral penis is placed just in advance of the ventral acetabulum. The measurements of the worm in its present condition are as follows:—Length, 17 lines; width at the posterior third, 7 lines; thickness near centre, 1 line; diameter of mouth, $\frac{2}{5}$ line; diameter of acetabulum, $\frac{4}{5}$ line."

With respect to the identification of the distoma found by me, I have carefully and diligently searched such works as are here accessible (works of reference being very few and with difficulty attainable in this country), especially the classical helminthographs of Dr. Cobbold,[†] of Van Beneden,[‡] and of Leuckart,[§] but have been unable to find the description of any distoma which possesses the anatomical peculiarities that distinguish the one now under consideration. That it is not the ordinary D. hepaticum there can hardly be any doubt. It is more closely allied to the D. lanceolatum of Mehlis; but, apart from certain differences in size and general conformation, there are very important differences in the position and construction of the male and female reproductive organs between these two species. To enter into an account of these minutely would occupy too much space, and, moreover, does not coincide with the primary or principal object I have had in view in the publication of the history of this case. I have been moved thereto more by pathological than purely anatomical considerations; nevertheless, I think I may be able to express my impressions with respect to the latter by exhibiting in a tabular form some of the more prominent differentiating peculiarities of these three distomata.[||] Thus:—

	D. Hepaticum.	D. Lanceolatum.	New Liver-fluke.
Length	$\frac{3}{4}''$ to $1''$.	$\frac{1}{3}''$ (8-9 mm.)	$\frac{7}{10}''$.
Breadth	$\frac{1}{2}''$ to $\frac{2}{3}''$.	$1\frac{1}{2}'''$.	$\frac{1}{7}''$.
Oral sucker	Smaller than ventral.	About same size.	Larger than ventral.
Integument	Covered by minute spines.	Smooth.	Smooth.
Intestinal canal ...	Branched.	Not branched. Terminates at lower fourth of body.	Not branched. Extends through the whole length of body to the caudal extremity (nearly).
Male reproductive organs	Form a series of spread-out vermiform tubes.	Form two distinct globular testes, placed one above the other in the median line *directly below* the ventral sucker.	Form one or two globular testes, occupying the lower third of the body *below* the female reproductive organs, and are connected with a very remarkable development (receptaculum seminis?).
Female reproductive organs	......	Occupy central and hinder parts of body *below* the testes.	Occupy the anterior and middle third of the body *above* the testes and seminal apparatus.
Ovum...	$\frac{1}{180} \times \frac{1}{270}$.	About $\frac{1}{600}'' \times \frac{1}{833}''$.	$\frac{1}{333}'' \times \frac{1}{1666}''$.

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[*] Proceedings of Acad. Nat. Sciences of Philadelphia, Part iii., p. 364.

[†] Entozoa and the Internal Parasites of Man.

[‡] Mémoire sur les Vers Intestinaux.

[§] Die Menschlichen Parasiten.

[||] I need hardly refer to the D. conjunctum of Cobbold. Although the anatomical "arrangement of parts" in this little fluke has a somewhat

In conclusion, I have to acknowledge my great indebtedness to my friend Dr. T. R. Lewis, who has afforded me much kindly assistance and encouragement throughout this research, and I would add that I intend to forward by the earliest opportunity to Professor Parkes, of Netley, a portion of the liver and several specimens of this distoma for the museum of the Royal Victoria Hospital.

Calcutta.

CASE OF

POPLITEAL ANEURISM CURED BY AN EXTEMPORISED COMPRESSOR.

By NATHANIEL ALCOCK,
SURGEON, ARMY MEDICAL DEPARTMENT.

M. H——, aged thirty-eight years, wife of a private in the 47th Regiment, was admitted into the Female Hospital, Aldershot, on July 8th, 1875. For more than six months she had felt undefined shooting pain about the right knee, without, however, being incapacitated from her usual employment. On Sunday, July 5th, she went as heretofore to the North Camp chapel, carrying in her arms a child eighteen months old; when descending the incline approaching the chapel she became suddenly conscious of a painful throbbing at the back of the knee, but remained through the service, and subsequently carried home the child. The pain continued through the evening and night of Sunday, yet she went on the following morning to wash at the washhouse; by this the pain was much increased, owing to the labour of carrying water to and fro, and at night it became so intense as to prevent all rest. On Tuesday morning she walked in great agony to the station hospital, and, returning with no little difficulty to her hut, remained lying down in accordance with the directions of the medical officer till the afternoon of the next day, when she was removed to the Female Hospital.

When seen at 6 o'clock P.M. on Wednesday, July 8th, there was an aneurism about the size of a small hen's egg, pulsating very strongly, with a feeling of forcible dilatation at each heart-stroke, as if the sac was very thin. Having in a female hospital neither the command of relays of students as in a civil hospital, nor of orderlies as in a military one, it was impossible to organise a corps of digital compressors. Accordingly, at 7 o'clock, a Carte's tourniquet was applied to the femoral, and pressure maintained with alternately complete and partial control of the circulation for four hours, but could not be continued longer owing to the pain excited. All treatment was omitted for the night.

At 11 o'clock on the day following Carte's tourniquet was again applied, a nurse's finger being made the immediate pad, as that was best borne. A second tourniquet was secured over the vessel at Scarpa's triangle, to be tightened from time to time as a relief to the first. Pressure was thus continued as completely as the patient's restlessness would admit, but was practically only intermittent, for seven hours, when it could be no longer tolerated. No appreciable alteration had taken place in the aneurism; further compression being quite impossible, the leg was at 6.30 P.M. tightly flexed upon the thigh, and left so for the night. Flexion as complete as could be accomplished by lacing the limb up in a kind of leather stays was kept up without a moment's intermission for three days and four nights.

At 10 o'clock on the 12th of July the tumour was again examined, and seemed to have become slightly less expansive, feeling as though the wall of the sac was a little thickened; but the amount gained was so very doubtful as to render the prospect of cure by this means very hopeless. Carte's tourniquet over a finger was resumed; but in an hour and a half the patient became so unmanageable from the severity of the pain that it had to be finally dispensed with, and the limb was again flexed. The treatment of the case seemed now narrowed to two alternatives—either continued anæsthesia by chloroform for eight or ten hours to admit a perfect trial of instrumental pressure, or operation. While endeavouring to decide upon the best course to be pursued, I remembered that Dr. Bellingham had found the weight of a conical piece of lead to be borne when no instrument would be submitted to. I accordingly got from the matron a tin funnel, inserted a cork into the narrow end, and covered this with a soft pad. The funnel was then filled with shot, and the whole enclosed in a conical calico bag to prevent the shot escaping. This was applied at 6 to 8 P.M. without causing much inconvenience. It was then removed, and the limb flexed for the night.

At 9.30 A.M. on the following morning (July 13th), the aneurism being unaltered since last examination, the shot-funnel was placed over the femoral at the fold of the groin, the exact position of the vessel being indicated by a piece of soap plaster, spread on leather, pasted over it, and additional shot was poured into the bag until the circulation was completely stopped; the limb was unbent to relieve the acute pain in the front of the knee, and by the almost incredible patience of the matron and the ward nurse the weight was held in this position for twelve hours and a half without the slightest variation. At the end of that time, to my very great astonishment, all pulsation in the tumour was at an end, and the aneurism cured.

For two days the funnel was applied for a few hours each day to secure the full contraction of the clot, and then was finally omitted. The total weight of the loaded funnel was 6 lb. 2 oz.

The collateral circulation was so effectually developed that the temperature of the limb was not at any time perceptibly lowered, nor has any inconvenience arisen from occlusion of the main artery.

The tumour is now (July 23rd) reduced to the size of a small walnut, and is perfectly solid.

Aldershot.

THE PHYSIQUE OF FACTORY CHILDREN.

By CHARLES ROBERTS, F.R.C.S.,
LATE ASSISTANT-SURGEON TO THE VICTORIA HOSPITAL FOR SICK CHILDREN, ETC.

The evidence given by Dr. Ferguson, of Bolton, before the Royal Commission on the Factory Acts, has produced a deep impression on the public mind, and has been noticed and commented on by The Lancet, *The Times*, and the public press generally. While ready to admit to the uttermost the ill effects on the constitution of children of the substitution of tea and coffee for milk in their diet, and of the degenerating effects of intemperance in the parents, and, worse still, intemperance and the use of tobacco in their progeny, I am disposed to think that Dr. Ferguson very much over-states his case, and for some reason, which requires explanation, his experience of the degeneracy of the factory population is not borne out by wider and equally exact and careful observation; but, on the contrary, there is evidence of the improvement of the physique of the factory children.

In the winter of 1872 and '73 I was engaged with others in investigating this subject, for the purposes of Dr. Bridges's and Mr. T. Holmes's "Report to the Local Government Board on the Proposed Changes in Hours and Ages of Employment in Textile Factories," and I had opportunities of examining, weighing, and measuring many thousands of factory children in Bolton (Dr. Ferguson's town), Bury, Rochdale, and other manufacturing districts, and afterwards of comparing them with the children in York and the agricultural districts in the North Riding; and the following notes, taken at the time and published in the Report, will show the result of that investigation:—

The factory children are fairly well developed, and remarkably free from constitutional diseases; and, with the exception of a disposition to flat-foot and a relaxed state of the ligaments of the knee- and elbow-joints, are free from deformities.

In general conformation of body the factory children do not compare favourably with the agricultural. In the manufacturing towns the children are short of stature, have

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close resemblance to that in the new distoma, yet its size (about ¼″) precludes at once its being recognised as anything more than an allied species, and *it has never yet been found in man.*

thick limbs and large feet and hands, and are muscular, and in tolerable condition as to fat. They produce the impression on the mind of having bodies too old for their heads (and ages).

Flat-foot, with a general disposition to knock-knee, is very common among the factory children, while both are rare among the agricultural, among whom there is a disposition to the opposite state of bow-leg.*

A few cases of deformity of the chest are noted in the tables as "pigeon-breasted," but they were all of a slight character. A few cases of the opposite state of depression of the sternum came under my notice also; but in no instance did I find a marked rickety affection of the long bones or of the bones of the face.

Scrofula, like rickets, appears to be equally rare among factory and agricultural children. Probably most of the cases of "old scars in the neck" recorded in the tables were the sequelæ of the eruptive fevers, as in most instances no other signs of scrofula existed.

In a large majority of the factory children the gums were red and spongy, but did not bleed, nor were there any other signs of scurvy. It is probable that this state of the gums is due to a deficient supply of vegetables in the dietary of the children. From numerous inquiries made among the children, I learned that they generally had meat and potatoes on three days in the week, and bread-and-butter and tea or coffee with little milk the remainder. The other meals also consisted of bread-and-butter and tea, and not of porridge made of oatmeal and milk as formerly.

The development and condition of the teeth in the factory children was very unsatisfactory. Many of the teeth were of a bad colour, badly shaped, and irregular. Teeth with contracted crowns, serrated edges, and deep perpendicular grooves were common; many were marked with deep transverse grooves, as if a file had been drawn across them, and when caries existed—which was very often—it was generally in the course of one of these grooves. All these imperfections in the teeth point to some fault in the health and nutrition of the child during the early stages of its development, but were not due to congenital syphilis.

The personal habits of the factory children contrast very unfavourably with those of the agricultural districts. They were dirty in both body and clothes, the hair unkempt and almost invariably swarming with lice; an irregular form of prurigo—almost the only skin disease found among them—and marks of scratching on the chest and back pointed to the existence of body-lice also. Few of the children were free from the marks of flea-bites. In all these particulars there was a marked improvement going from east to west, Bolton being the worst and Rochdale the best.

With the exception of the flat foot and the somewhat stunted growth of the children, nearly the whole of the disadvantages the factory children labour under are to be attributed to social causes rather than factory work—causes such as Dr. Ferguson so forcibly denounces, and which the Commissioners regret their inability to meddle with. My picture of the health and physique of the factory children is not, however, so dark and hopeless as his, and I can adduce statistical evidence in support of my position.

The following accounts of the weights of factory children nearly forty years ago—viz., in 1835—and in 1873, show a marked advantage in favour of the children of the present day. I also add the weights of the agricultural and town children not engaged in factory work, which may be considered the maximum standard of the labouring classes; and the weights of some boys in our public and middle-class schools, which we may consider the highest standard of our English race at their respective ages. I add also, for the purpose of comparison, the weights of some boys of the same ages in a London charity school, where they are well fed and have plenty of drill and exercise.

Average Weight in Pounds.

Age last birthday.	London Charity School.	Factory Report, 1835.	Factory Report, 1873.	Agricultural Children, 1873.	Public & Middle-class Schools, 1873.
9 years	51·63	51·76	58·72	60·02	61·98
10 "	54·53	57·0	62·74	65·29	67·2
11 "	58·32	61·84	67·92	71·01	74·19
12 "	62·8	65·97	71·06	75·0	78·98
Number of observations.	1770	160	2958	800	1210

From the table it will be seen that a factory child of the present day, of the age of nine years, weighs more than one of ten did in 1835; one of ten now more than one of eleven then; and one of eleven now more than one of twelve then; and it will be seen also that the factory children even of 1835 were superior to the London children of the present time. I regret that the statistics do not go to the higher ages referred to by Dr. Ferguson, but our investigations were limited to children under twelve years of age, who were employed as "half-timers." The numbers are, however, so regular in their increase for the respective ages that they may be relied on as a test of the general physical improvement of the factory population. The heights and chest-girths of the children are not given in the report for 1835, and Harrison's tables, published about the same time, are useless for purposes of comparison, as they include both sexes. Quetelet's tables, published also about the same time, are, for obvious reasons, inapplicable, as they refer to a different race.

I am inclined to think that the cry of the degeneracy of our labouring population has been too readily assented to by our profession; and, if this were the time and place, I could adduce other statistical evidence of improvement in another class of children; indeed, it is fair to infer that, with cheaper and better food, shorter hours of labour, less gross intemperance, and better sanitary arrangements, our whole English race should be improving in physical condition. I hope Dr. Ferguson will submit to the profession the statistics on which he bases his opinions of an opposite state of the degeneracy of the factory population.

Bolton-row, Mayfair.

CASES OF
RUPTURE OF THE MEMBRANA TYMPANI FROM BLOWS ON THE EAR.

BY SIMEON SNELL, M.R.C.S., &c.

THE publication in THE LANCET recently of Mr. Dalby's interesting cases of injuries to the ear has induced me to record a few brief notes of the following cases, which have come before me during the past year.

CASE 1.—J. N——, aged thirty-three, a turner, applied to me at the Sheffield Eye Dispensary in March, 1874, with a thin purulent discharge from the right ear and defective hearing. On examination, a perforation was visible in the anterior portion of the membrana tympani, and, on inflation, a little muco-purulent discharge escaped through it. He gave the following history:—Six months previously (September, 1873), whilst sparring with one of his companions, his head became firmly locked beneath his antagonist's arm. He struggled to free himself, and when, at length, he succeeded, he experienced a singing and buzzing sensation in the right ear, and found his hearing much impaired. Under treatment the discharge soon ceased, and he was lost sight of for a considerable time. Towards the end of November, however, an opportunity was afforded me of ascertaining the condition of the ear. The rupture had now closed, and the hearing had improved. On seeing him again a short time since, he thought his hearing quite perfect, and was surprised to find he could only hear my watch tick at eleven inches with the right ear, whereas with the left he heard it at thirty-six inches.

CASE 2.—On the 29th of April, 1874, I was requested to see, with a medical friend, a young gentleman about twenty years of age. He stated that on the 17th of the month he had had an altercation with a man, who had violently assaulted him, knocking him down, hitting him on the eye and head, and boxing his ears. When I saw him, in addition to several bruises on the head, there was a long, narrow contused wound of the right cheek, ecchymosis of the left eyelids and conjunctiva, and marks of violence on the auricle of the left ear. The left pupil was dilated; he said he was almost completely blind, and with the ophthalmoscope were discovered several fine capillary hæmorrhages in the retina. A few days later he drew our attention to the left ear, from which, he said, there had been some slight discharge after the assault, with constant buzzing noise, pain, and impairment of hearing. Examination disclosed a large rupture of the tympanic membrane, through which the patient easily blew a current of air. The eye regained its normal appearance, but at the end of July the ruptured membrane was not healed, and, since then, no opportunity has been afforded me of ascertaining its condition.

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* For statistics and remarks on this subject see my paper on "Flat-foot" in St. George's Hospital Reports, vol. vii., 1874, p. 211.

Case 3.—James M——, eighteen years of age. On November 13th, 1874, he was playing with a companion, who struck him forcibly on the left ear with his flat hand. After the feeling of heat and tingling following the blow had passed off, he noticed a singing noise in the ear, and fancied he could not hear so well. He also suffered pain, and there was a discharge from the meatus of a small quantity of sanguineous fluid. An examination on Nov. 17th disclosed a rupture of the membrane in front of the handle of the malleus, but smaller than in either of the other cases. The rupture soon closed, but his hearing remained defective, and, on recently testing him, I found that while he heard my watch at fifty-six inches with the right ear, it was audible only at twenty-nine inches with the left.

Sheffield.

NITRITE OF AMYL IN SEA-SICKNESS.

By CROCHLEY CLAPHAM, L.R.C.P. L., F.L.A.S., Ph.D.

In recommending the employment of nitrite of amyl as a remedy in the treatment of sea-sickness, I do so with considerable experience of its utility. During a trip round the world of nearly two years' duration, in which time I crossed the Pacific Ocean in various directions no less than eleven times, I made the treatment of this distressing malady my especial study,—with what result will be seen below.

On my way out east I ran through all the prevalent modes of treatment, nice and nasty—such as iced champagne, bottled porter, camphor, chlorodyne, belladonna, ice to the spine, &c.,—and, with the exception of the last-named, found them all merely palliatives, and of very uncertain action even to that extent. With respect to Dr. Chapman's spinal ice-bags, I can report favourably of their use in sea-sickness, when procurable; but people will not or cannot provide themselves with these articles, nor will ship-owners supply them in any number, and nothing can be more futile than attempting to treat twenty or thirty sea-sick people with one or two ice-bags.

As to the proximate cause of the malady, I entirely agree with Dr. Chapman that it consists of an undue congestion of the vessels of the spinal cord. On this point I had an excellent opportunity of drawing some conclusions from a post-mortem which I was fortunate enough to make whilst acting as superintendent of the Government Civil Hospital at Hongkong last summer. The case was that of a Chinaman who had been killed, whilst in the very act of vomiting during an attack of sea-sickness, by the fall of a heavy piece of iron from aloft. I found, on making the necropsy (four hours after death) that, leaving out of consideration the heart, which had been pierced by the falling iron, all the organs were healthy with the exception of the spinal cord, the vessels of which were literally gorged with blood throughout its entire length. I was struck with the similarity of this appearance to that presented by the spinal cord of an epileptic patient who died in the "status," and upon whom I made a post-mortem whilst at the West Riding Asylum, Wakefield. Coupling the post-mortem likeness to the resemblance which obtains in life between these two affections (pallor of surface, cold sweat, &c.), it occurred to me that the remedy which, in the hands of Dr. J. Crichton Browne, has proved so valuable in the epileptic "status," might be advantageously employed in the treatment of sea-sickness.

To test the truth of this surmise I made several trips across the Pacific, and tried the remedy altogether in 124 cases. Of these, 121 proved eminently satisfactory, there being no return of the vomiting after the administration of the nitrite; the remaining three cases being only unsatisfactory in so far as they required a further dose or two of the remedy.

The mode of exhibiting the drug which I adopt is by inhalation, three drops* of the nitrite being poured on a handkerchief and held *close* to the patient's nose. The inhalation must be conducted rapidly, so as to give the full influence of the drug without a *too free* admixture of air.

The action of the remedy in freeing the circulation and relieving the hyperæmia of the spinal cord will be quickly evidenced by a throbbing sensation in the temples (occasionally rather disagreeable) and by a more or less general flushing and increased warmth of the surface of the body. This warm and comfortable glow, which takes the place of the chilly sweat so disagreeable in this disease, is usually followed in the course of half an hour by a pleasant slumber, from which the patient wakes to eat a hearty meal. Should the sickness recur, which it may do after the lapse of twenty-four hours, the inhalation must be repeated. The patient should be in bed when under treatment, so as not to interfere with the subsequent sleep; and I have usually judged it better to allow one fit of vomiting to take place before applying the remedy, not only to ensure the *bonâ fide* character of the seizure, but also because I consider it advantageous unless the patient be in a very weak state of health. I only met with one case in which the medicine was refused on account of disagreeable effects, and in this instance, which occurred in the tropics, the patient complained that "it made him feel so hot he would rather be sea-sick."

In conclusion, I hope my experience of the remedy will be supplemented by that of the "sea-going" portion of the profession generally, and that any further facts elicited regarding its action will be duly published.

Thames Ditton.

A Mirror of HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

WESTMINSTER HOSPITAL.

CASE OF SEPTICÆMIA; PERIOSTITIS; PERICARDITIS; DEATH IN THREE DAYS.

(Under the care of Mr. Cowell.)

For the notes of the following case we are indebted to Mr. W. R. Cheyne, surgical registrar.

A school-boy, named Cornelius S——, eight years of age, was admitted into St. Mark ward on the morning of June 11th, in consequence of supposed injury to the left leg. The only clue to the present illness was the statement that the boy had recently trodden on some glass in a dust-bin and cut one of the toes of his left foot. He had been at school up to 12 o'clock on the previous day (June 10th), when he came home complaining of cramp and pain in the knee; and towards evening he became "light-headed." The boy had previously been quite healthy and active. There was some general enlargement of the left leg and thigh at the time of his admission, with hot surface and some tenderness. In the evening his temperature was 104·6°.

On June 12th the skin was hot, the tongue dry, and the mind wandering. There was great tenderness of the limb, with some increase of swelling, especially in the lower part of the thigh, and the least pressure or movement of the limb produced a scream. The swelling appeared to be due to enlargement of the shafts of the femur and tibia, and no fluctuation could be detected. There was a large pustular bleb on the back of the second toe, the position of the original wound, and there was also an excoriation over the inner malleolus.

June 13th.—The temperature rose this morning to 106·4°. The chest became much engorged during the day, but some relief was afforded by an emetic at night. A bleb, similar to that on the toe, having formed on the right little finger, was opened, and discharged chiefly blood and serum.

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* More should not be used without medical advice.

14th.—The patient had been delirious and restless during the night, but at noon to-day the temperature had fallen to 102·4°. The pulse was about 160, and very weak; the tongue was dry. The lungs were still much engorged, and the respiration had become more difficult, but was easier under the influence of a jacket poultice. The left thigh was less swollen, and there was now considerable œdema and redness over the upper third of the tibia. Later in the day the chest symptoms became more urgent, and the child died at 5.35 p.m.

The treatment had been at first acetate of ammonia mixture, then carbonate of ammonia, and later the addition of brandy. The hot-air bath produced some alleviation of the symptoms, and the consequent diaphoresis reduced the temperature.

Autopsy, twenty-two hours after death.—There were a few patches of recent lymph in each pleura, and a small quantity of serum. The lungs were congested, chiefly at bases, but there was no pneumonia. The bronchial tubes contained much mucus, and the lining membrane was highly injected. The pericardium was distended with turbid serum, and its surfaces were completely coated with a thick deposit of lymph. The muscular tissue of the heart and valves was normal. The other organs were quite healthy, and the body was well nourished.

The limb was examined, and the periosteum was found to be stripped completely from the lower third of the shaft of the femur by a thin layer of bloody serum containing a slight admixture of pus. The periosteum of the upper half of the tibia was similarly detached. The knee-joint was not implicated.

WEST LONDON HOSPITAL.

TWO CASES OF RETENTION OF URINE FROM LACERATION OF THE URETHRA; CATHETERISM; GOOD RESULTS.

(Under the care of Mr. Teevan.)

Charles O'H——, aged seven, was admitted into the hospital on the night of June 18th, suffering from retention of urine. Whilst the lad was riding on the back of a cart he fell off, about 4 p.m., became engaged in an altercation with the driver, and was knocked down and run over. Some blood escaped from the boy's penis, and he was afterwards unable to make water. When the patient was seen by Mr. Teevan the bladder was greatly distended, there were a few bruises on the right hip, and some blood-stains on the shirt. Mr. Teevan tried to introduce a small olivary elastic catheter, but failed. He then took No. 11 (French gauge) metal catheter, and by keeping the instrument well pressed against the roof of the urethra, and tilting up the point with the left forefinger in the rectum, succeeded in passing it into the bladder. When all the urine had flown out he cut off three inches of the shaft of the catheter, and tied the instrument in. Some ecchymosis appeared in the perineum on June 21st, and on the following day Mr. Alderton, the house-surgeon, withdrew the catheter, which had been borne very comfortably. On June 27th and 30th No. 11 metal catheter was passed, and again on July 3rd, on which day all ecchymosis had disappeared from the perineum. On July 7th, 12th, and 14th No. 15 metal was introduced, and on July 15th the boy was discharged quite well, passing a good stream of urine. Mr. Teevan, on July 17th, introduced No. 15 for the first time without the aid of the finger in the rectum. Soft catheters failed every time they were tried.

Case 2.—Thomas W——, aged thirty, a boot-clicker, was admitted into the hospital on June 20th, suffering from retention of urine. At 11 p.m. the previous night he was kicked in play in the perineum by a comrade who had only his stockings on his feet. The patient experienced much pain at the time, lost about half a pint of blood from the urethra, and was not able afterwards to make water. At 3 p.m. Mr. Teevan took a No. 15 olivary elastic catheter, passed it into the bladder with ease, and drew off a large quantity of urine, but did not leave it in, as the man could not enter the hospital till night. At 7 p.m. the patient was admitted. There was much blood on his shirt, and considerable fulness in the perineum, which was painful when pressed. At 11 p.m. the house-surgeon, Mr. Alderton, tried to pass a metal catheter, as the patient wanted to be relieved, but the instrument would not go. He then took a No. 11 (French gauge) olivary elastic catheter, and, having passed it with ease into the bladder, he drew off the urine and tied the instrument in. The catheter was retained for forty-eight hours, and after its withdrawal the patient had no further attack of retention. On July 1st Mr. Alderton passed No. 15 elastic catheter, and on July 3rd No. 16 was introduced by Mr. Teevan, and on July 7th and 10th No. 17 by Mr. Alderton. On July 12th Mr. Teevan passed No. 18, and the patient left the hospital the following day quite well, and able to pass a good stream of urine, which he had been unable to do for some years, as he had suffered much from stricture. On July 17th the man came to the hospital, when he was instructed in catheterism, and was enabled to introduce No. 18 soft catheter with ease for himself, and without drawing a drop of blood.

Mr. Teevan remarked that there were several points of interest in the above cases. Both patients had met with similar accidents. How was it, then, that metal instruments only could be passed in one instance, whilst in the other elastic catheters only could be introduced? These very facts established the diagnosis of the seat and particular form of laceration that had occurred in each case. M. Auguste Mercier had laid it down that if a laceration or false passage existed in the floor of the deep portion of the urethra, a curved metal catheter ought to be passed, as it could be made to hug the roof of the urethra, and so avoid slipping into the cul de sac in the floor. If, on the contrary, the laceration were in the roof, a straight elastic catheter ought to be introduced, as it always tended, when passed, to keep to the floor of the urethra, and would thus escape becoming locked in any rent in the roof of the canal. Inasmuch as in the case of the boy a metal catheter only could be introduced, it proved that the urethra had been torn in its floor, whilst the fact of an elastic catheter only being able to be passed in the man showed that the urethra had been torn in the roof. But how was it that the roof of the man's urethra had given way rather than the floor, which was the spot where the violence was applied? In all probability the following was the explanation. For some time the man had suffered from stricture in the deep portion of the urethra. Now, as a rule, in that complaint the floor was far more affected than the roof—i.e., the former was much thicker and stronger than the latter; hence, therefore, when the man was struck in the perineum, the weakest portion of the urethra, which was the roof, gave way rather than the floor, which was much stronger. The cases showed that soft and metal catheters had each their spheres of action, though, as a rule, if the urethra were completely torn across, a small olivary catheter would be found more likely than any other instrument to pick up the distal end of the divided canal. The treatment of a lacerated urethra was similar to that of a fractured bone. In each instance a splint was required to keep the ends of the thing torn in apposition, and in the instance of a lacerated urethra, the catheter acted as a splint. The retention of a metal catheter was always objectionable, as it tended to produce ulceration at some spot or other. Hence the less of the instrument that actually projected in the bladder the less chance would there be of cystitis. In order to carry out this object, several inches of the metal introduced in the boy's case had been cut off, leaving no more than was actually necessary to project in the bladder.

SOUTH LONDON OPHTHALMIC HOSPITAL.

TWO UNUSUAL CASES OF INJURIES TO THE EYE.

(Under the care of Mr. Edward Nettleship.)

Case 1. *Severe blow on the eye, followed by lasting damage to sight, without visible changes in any part.*—George S——, aged thirty-seven, a boiler-maker, received a blow from a lump of iron, which broke from some machine he was working at and struck his left eye; the blow was a forcible one, and knocked him down. Within two or three hours of the accident he went to a medical man and had a "drop" put into the eye, and very shortly after this the pupil was observed to be enlarged. No enlargement had been noticed before the drop was put in. He used the drops at home for several days, and attended the hospital for the first time ten days after the accident. He stated that the eye was "very bloodshot" for a few days, but that there was no swelling of the lids nor any prominence of the eye; indeed, the eye "seemed to be further in than the other, if anything."

On admission (Jan. 9th, 1875), the left pupil was partly dilated, and vision so defective in this eye that he could not see 200 Snellen at 20 ft. With a convex lens, 18 in., vision was raised from $\frac{20}{0}$ to $\frac{20}{40}$; and with + 6 he could see 2 Jaeger. With the right he saw $\frac{20}{30}$ unaided. The fundus of the left (injured) eye was healthy; and there was no trace of ecchymosis or other sign of injury about the eye or eyelid. He believed that the left had been as good as the right till the injury, but could not feel certain of ever having tried the eyes separately to test their sight until after the accident. He was an intelligent man. No treatment ordered.

Jan. 16th.—Vision of left = $\frac{15}{70}$; with convex 18 = $\frac{15}{40}$, very badly. Pupil still partly dilated. Right = $\frac{15}{30}$.

23rd.—Left pupil still slightly larger than normal. Without glasses with right he read 6 Jaeger; with left, 16 Jaeger.

The defect in the right (uninjured) eye depended on hypermetropia only, and he was directed to use + 20 spectacles.

On Feb. 27th sight of left eye still 16 Jaeger. Iodide of potassium in five-grain doses, with ammonia, was ordered thrice daily.

The sight was tried several times between the above date and April 24th, when it was found to be the same. Vision (without glasses): Right = 8 Jaeger; left = 16 Jaeger. At this date the left eye was again carefully examined with the ophthalmoscope after the use of atropine (the pupil having for long regained its ordinary size). No alteration of any kind was found in the fundus; the yellow spot region appeared healthy in the erect image.

Inquiries had been previously made as to syphilis, and his eldest child had been seen; there was no reason to think that he had ever had the disease.

The iodide was now omitted, and tincture of nux vomica prescribed in ten-minim doses, and continued regularly till June 19th, when treatment was discontinued.

On July 10th his sight and refraction were again tried with the following result:—Vision: Right = $\frac{20}{30}$ and 6 Jaeger (without glass); + 20 = $\frac{20}{20}$ perfectly; + 12 = 1 Jaeger. Left – $\frac{20}{50}$ and 16 Jaeger (without glass); + 30 = $\frac{20}{40}$; + 12 = 6 Jaeger badly, sight for near objects not being further improved by glasses higher than + 12.

As astigmatism was suspected, the patient was now directed to use atropine freely to the defective eye for several days, in order to try the refraction once more with accommodation fully paralysed.

On July 24th, the left eye being fully under the influence of atropine, its refraction was again tested, and $\frac{1}{12}$ of hypermetropia was found. With convex 12 sees $\frac{20}{40}$ partly. No astigmatism.

A final and very careful ophthalmoscopic examination was made at the same time, and nothing whatever abnormal was found in the eye. The media were clear and the fundus healthy. The details of the yellow spot region could be well seen by the direct method, and showed nothing unnatural.

Thus it appears that permanent defect of sight has been caused in this eye by the blow, unless we assume that the defect was present before. This fallacy, although it cannot be absolutely set aside by any conclusive statement on the patient's part, is almost negatived by the impossibility of assigning any cause for such previous defect. There was no old corneal opacity, and although both eyes were hypermetropic, there was no squint. It is true that the degree of manifest hypermetropia was not identical in the two eyes, but the degree was lowest in the bad eye, which does not agree with the hypothesis of an original difference of refraction between the two eyes having given rise to suppression of one image and consequent defect of the more hypermetropic eye. Moreover, the lens chosen for near objects was the same for each eye.

It may be suggested as not improbable that the blow caused hæmorrhage into the retina, or beneath it, and that a certain amount of disorganisation of its structure was thus caused, although the blood was afterwards completely absorbed. If this had occurred, however, it would seem unlikely that all traces of the blood should have been removed so soon as ten days after the accident, when the first ophthalmoscopic examination was made. Dr. Berlin, who has lately written on the subject,* considers the defect of sight in many such cases to depend on "transitory irregular astigmatism," due to changes in the lens. He describes haziness of a considerable area of the retina, sometimes with hæmorrhages, as the immediate result of the blow, and states that these changes disappear in as short a time as two or three days, but that some defect of sight remains after the ophthalmoscopic changes have vanished. If we accept this view a sufficient explanation is furnished of the condition of the fundus in the above case ten days after the blow.

Case 2. *Perforating wound of eye implicating the vitreous, but the lens escaping; simulation of an intraocular tumour.*—Mary R——, aged ten, was unpicking a laced boot with a fork when the prong slipped, jerked up, and wounded the left eye. She was taken to the hospital two days afterwards (July 4th, 1874), when Mr. M'Hardy found a perforating wound of the cornea with hypopyon; the treatment was atropine and a compress. The hypopyon was absorbed, but in other respects the eye did not improve. On the 23rd she was seen, in Mr. Nettleship's absence, by Mr. Carter, who found that a whitish reflex was thrown from behind the transparent lens simulating a gliomatous growth, but that the tension was diminished. He advised immediate excision. Mr. Nettleship saw the child for the first time on the 25th, and noted in substance as follows:—"Left eye: No perception of light; tension diminished; general congestion of sclerotic; eye not tender; no anterior chamber; a radial linear mark to inner side of centre of cornea, to which the iris adheres near its circumference; pupil slightly displaced, but nearly round; lens transparent, but shows a slight mark on centre of anterior surface; a whitish reflex, easily seen in daylight, from the back of the eye; by focal illumination it is seen that towards the circumference the white gives place rather suddenly to red colour, which is most abundant on the inner side of the eye (corresponding to the position of the wound)." An opinion was expressed that the substance behind the lens would probably prove to be lymph and blood in the vitreous, the result of a perforating wound passing close to the edge of the lens without wounding it, rather than a malignant growth. The eyeball was removed by Mr. Nettleship the same day, and, on dissection, a mass of yellow lymph was found behind the lens, quite covering its posterior surface, and lining the entire surface of the ciliary body. The retina was everywhere *in situ*, and, with the exception of slight milkiness, appeared healthy to the unaided eye.

NORTH RIDING INFIRMARY, MIDDLESBOROUGH.

CASE OF STRANGULATED INGUINAL HERNIA; ASPIRATION; RECOVERY.

(Under the care of Mr. Geo. Longbotham.)

For the following notes we are indebted to Mr. W. Stirling Anderson, house-surgeon.

R. W——, aged twenty-eight, was admitted on May 5th, 1875, suffering from symptoms of strangulated hernia. On the evening of the 4th he was engaged in his usual occupation, that of a labourer at a blast furnace, and about 8 o'clock strained himself severely when lifting some heavy weights. He continued to work on, without any pain or uneasiness, till 9 o'clock, at which hour his shift went off duty, but shortly after ceasing labour he experienced cramps in the belly. On looking at himself he found a swelling in his scrotum. He was visited at his home by a surgeon, to whom he did not say a word about the scrotal swelling, as there were several people in the room. After midnight he began to complain of very great pain in the swelling and lower part of the belly, vomiting setting in about the same time. The vomiting proving persistent, the medical attendant was sent for, and he endeavoured to reduce the swelling by taxis, but without avail. In the morning, about 8 o'clock, he was put under chloroform and the taxis again employed, but with no better effect. He was admitted into the hospital at 11 A.M.

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* Zehender's Klin. Monatsbl., 1873; abstract in Ophth. Hosp. Reps., vol. viii., p. 105.

On examination, a large inguinal hernia was found to occupy the left scrotal region. The tumour was very tense and red, showing at its neck a very decided constriction, just at the seat of the external ring. The patient having been put under chloroform, taxis was once more resorted to to effect reduction, but, proving futile, was not persevered in, as the state of the parts did not warrant this. The No. 2 needle of a pneumatic aspirator was introduced into the tumour, and four ounces of darkish serous fluid withdrawn. Mr. Longbotham then passed his forefinger up behind the cord so as to dilate the external ring with the canal above, and gently employing the taxis had the satisfaction to feel the tumour yield, and disappear within the abdominal cavity. A pad was adjusted, and one drachm of the solution of hydrochlorate of morphia was given.—Same day, 9.30 P.M.: Perfectly quiet; no pain complained of; he only has some uneasiness in inguinal canal on turning. Slops ordered. Temperature 98·4°; pulse 64.

May 6th.—Morning: Patient feels quite well this morning. Temperature 98·8°; pulse 64.—9.30 P.M.: Temperature 98·6°; pulse 76.

7th.—1 P.M.: Is quite well, and complains merely of being kept in bed. Temperature 98·4°; pulse 60.

Progress continued in the same satisfactory way, and on the morning of the 11th he had a spontaneous motion of his bowels. They were moved on the following day, also on the 13th, on which day he was discharged. At this time there was no tendency to recurrence of tumour even on coughing.

Reviews and Notices of Books.

A Manual of Histology. By Prof. S. STRICKER. American Translation. Edited by ALBERT H. BUCK, Assistant Aural Surgeon to the New York Eye and Ear Infirmary. New York: W. Wood and Co. London: Trübner and Co. 1872.

STRICKER'S Manual of Histology has taken such an established position as the text-book on this subject, and has become so well known in England through the excellent translation of Mr. Henry Power, published by the New Sydenham Society, that it may seem almost superfluous to call attention to an American edition published so long ago as 1872. But although well known in America, we understand that the work has been only recently introduced into England, and it deserves notice on other grounds.

The first part of this edition is simply a reprint of Mr. Power's translation, constituting the first volume of the edition of the Sydenham Society. The remainder of the work has been retranslated by Mr. Buck and his American coadjutors. Mr. Buck's work includes the articles on the liver, the larynx and trachea, the lungs, kidneys, supra-renal capsules, ovary, serous membranes, organs of taste, and the development of the simple tissues. The articles on the urinary bladder and testicle are translated by Ed. L. Keyes; those on the mammary gland, male and female external genital organs, and uterus, and on the membranous labyrinth and the synovial membranes by Thomas E. Salterthwaite; the organ of vision by Henry C. Ens; and the other minor articles have been entrusted to Drs. F. Delafield, Lucius D. Bulkley, and J. Orme Green. Of the articles on the nervous system those on the spinal cord and sympathetic nervous system were undertaken by Dr. Edward C. Seguin, whilst to Dr. James J. Putnam fell the lot of translating Meynert's article on the brain of mammals.

The translations are for the most part exceedingly good and clear, and whilst adhering to the original text, they are free from German idioms and are neither laboured nor obscure. The advantage of the plan of entrusting the translations of articles to gentlemen specially acquainted with subjects treated of is very apparent, enabling the translator to give the equivalent terms commonly in use, a great gain when we consider how much words tend to become specialised in their application. In some cases a desire for exactness has led to a translation of the *ipsissima verba* used in the German, instead of the substitution of the English equivalent; thus we find the *fenestrum ovale* called the "oval window," a translation which, though graphic, seems scarcely less advisable than that of the *foramen rotundum* as the "round hole." A similar inacuracy is found at the heading of each article, where the abode of the author is designated by "*in*" instead of "*at*"—thus "Th. W. Engelmann, *in* Utrecht," which is German, not English.

We naturally turned to Meynert's article on the Brain of Mammals as a crucial test of the value of the translation, but here we found that the American editor had been at a great advantage as compared with the English. The translation was entrusted, at Prof. Meynert's special request, to Dr. J. F. Putnam, who was at the time a pupil in Meynert's laboratory, and well acquainted with his researches, and in all doubtful points referred to the author for information. Bearing in mind the difficulty experienced by Mr. Power, aided by Drs. Payne and Broadbent, in translating or even understanding some portions of this obscure article, and the dictum of a German physiologist, that "es muss erst Deutsches gemacht werden," we were prepared for a similar experience in the American translation; but we are not surprised to find that Dr. Putnam found it desirable to act the part of an interpreter rather than merely that of a translator. It would, indeed, have been impossible to do otherwise, if the author's views were to be represented, and Prof. Meynert may be congratulated on having found so able an exposition of his researches, such as could only have been undertaken by someone thoroughly acquainted with his preparations. Otherwise there was some danger lest his observations should share the fate of Jean Paul Richter's philosophy, whose author, when asked its meaning, said (to quote Hans Breitmann), "Gott im Himmel only weiss, for I have quite forgot." It is satisfactory to have such a guarantee that Dr. Putnam's translation really gives Meynert's views, for we frequently find that a single word, apparently with little meaning, and which has been considered as such by the former translators, is expanded into a long explanatory sentence by Dr. Putnam, with the effect of completely changing the meaning of the whole context. The result is that Dr. Putnam's translation, whilst more connected and intelligible, is much longer than that of the Sydenham Society. We give a passage taken at random from the two translations, of which Mr. Power's may be taken to be an accurate translation of the original:—

SYD. SOC. TRANS.	DR. PUTNAM.
The tegmental origin of the antero-lateral column permits distinct areas to be distinguished in two different directions; first, those placed one behind the other, which, proceeding from the grey floor, are (1) the *posterior longitudinal fasciculi*; (2) the (middle) motor area; (3) the fillet (*Schleifenschichte*, Reichert); and, secondly, those in lateral juxtaposition, which are (1) the region of the *anterior column*, forming the territory adjacent to the raphé that is bounded laterally in the pons by the roots	Thus constituted, the surface obtained by cross section of the collective groups of fibres conveyed by the tegmentum to the antero-lateral spinal column may be divided, for purpose of description, into different districts, as follows. Proceeding forwards from the grey floor of the fourth ventricle, three such districts, lying *one behind the other*, may be distinguished. The first contains the *posterior longitudinal fasciculus*; the second, the (middle) *motor region*; the third, the *stratum lemnisci* (Reichert). Again, in proceeding from the median line outwards, there may be distinguished two such districts lying

of the nervus abducens, and in the oblongata by the roots of the hypoglossus; and (2) the region of the lateral column, extending from the boundary as far as to the ascending roots of the fifth, in which also the *pes* of the *fillet* is enclosed. (*Fuss de Schleife*, Stilling.)	*side by side*, the first being occupied by the groups of fibres destined to form the anterior spinal column, a region which borders on the median raphé, and is bounded outwardly, in the pons, by the roots of the nervus abducens; the second by the group of fibres destined for the *lateral column*. The latter district borders on the former, and extends outwards as far as the ascending roof of the fifth pair, enclosing therefore the *pes lemnisci*. (Stilling.)

It is obvious that Dr. Putnam's translation should rather be called a paraphrase or exegesis, and it might well be retranslated into German to replace the original article.

Of the general get-up of the work we cannot speak too highly; the type is clear, and there are few press errors, and the illustrations throughout are especially well engraved. The only objection is the unwieldy size of the book, which is complete in one volume, and can therefore hardly be called a "handbook" as regards its portability.

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D. Lond. Third Edition. pp. 424. London: Renshaw. 1875.

The author of this valuable little work is to be congratulated on the demand for it that has already called forth a third edition. It affords gratifying testimony to its value and popularity as a text-book. It possesses, further, all those qualities which render such a book popular among students. It is written in clear and concise language; it is confined almost entirely to statements of fact, theoretical views being for the most part kept out of sight, and it is, above all, fully and exceedingly well illustrated. The number of illustrations, indeed, has increased rapidly with each addition, and we perceive in the present edition that several woodcuts have been replaced by new and original drawings. The author has also bestowed a careful revision on the text, adding such new matter as was necessary to keep the work up to a level with modern pathological research, rearranging and rewriting some chapters. Among other new matter we notice a chapter on tissue-changes in pyrexia; a brief account of pulmonary emphysema under the head of atrophy; the pathology of "surgical kidney," &c. Some additions have also been made to that valuable chapter of practical remarks on the preparation and mounting of specimens, which was first introduced into the second edition.

The Monthly Microscopical Journal. August 1st, 1875. No. LXXX.

This number contains several articles of unusual interest. Dr. Braithwaite continues his account of the Bog-mosses (sphagna), with details of the Sphagnum portoriceuse and Sphagnum macrophyllum. The Rev. D. Edwardes, after alluding to the various units of linear measurement that have been proposed, as the quadrant of the meridian, the length of a pendulum vibrating seconds, the diameter of a sphere of the same volume as the earth, and pointing out the objections to all, suggests that the wave length of orange light in vacuo, which would give 1,500,000 wave lengths in one yard, would prove an excellent standard. What do the physicists say to it? To this succeeds a short and rather amusing paper on the Microscope and its Misinterpretations, by John Michels, chiefly bearing on the differing descriptions that have been given of the Podura scale. Dr. Beatty describes a mode of double staining wood and other microscopical sections, founded on the fact that benzole fixes the aniline colours. Dr. Martyn has a good paper on Conjoined Epithelium, particularly referring to the "prickhand ribbed" cells of German writers. Dr. Bastian's address delivered before the Pathological Society of London on the Microscopic Germ Theory of Disease is reprinted *in extenso*. Dr. Fleming describes a modification of Rutherford's freezing microtome. Lastly, Dr. Lionel Beale has a paper on the Origin of Life.

IMPERFECT MEDICAL QUALIFICATION.

Some years ago it was pointed out by a contemporary that a large proportion of the practitioners of the country whose names were on the Medical Register were possessed of only one qualification. It is very unsatisfactory to have to report that the same state of matters seems to continue. In accordance with the standing orders of the General Medical Council, the Registrar has recently issued the list of those gentlemen who have registered in the first six months of the year, giving the nature and date of their qualifications, and the date of their registration. The list of new registrations is very large—namely, 419. This number is much in excess of that in any corresponding period, and shows that if there is not an increasing number of practitioners, there is at least an increasing conviction of the advantages of being registered. Clearly, for legal purposes, a man can scarcely be said to have qualifications until they are registered. The fees accruing to the Council for this batch of registrations will amount to the sum of £2095. But in our opinion the most interesting point in this list is the large proportion of gentlemen who have but one qualification to register. Thus, out of a total of 419 registrations, 164 are registered with *one* qualification only—viz., Member Royal College of Surgeons of England, 101; Licentiate of the Society of Apothecaries, London, 25; Lic. Royal Coll. Phys., Edin., 3; Lic. Royal Coll. Surg., Edin., 10; Lic. Fac. Phys. Sur., Glas., 8; Univ. of Glas., 3; Lic. Royal Coll. Sur., Irel., 6; Apothecaries' Hall of Dublin, 4; University of Dublin, 1; Queen's University in Ireland, 3. From this it appears that two-fifths of those newly registered are unqualified in regard to one branch of the profession. The single qualification is in the large majority of cases a surgical qualification. Thus of the 164 single qualifications 125 were surgical, as against 39 medical. The bulk of medical practice is made up of medical cases, for attendance on which gentlemen with surgical qualifications are not enabled to recover. If any facts could give the death blow to the present system of licensing practitioners, or a stimulus to the movement for a one-portal system, it would be such facts as those we now publish.

THE WINTER SESSION AT THE LONDON MEDICAL SCHOOLS.

The metropolitan medical schools will open on the 1st of October, with the exception of Westminster Hospital and University College, at which institutions the session commences on the 4th of the month. The usual introductory addresses will be delivered as follows:—At St. Mary's by Dr. John Randall, at St. Thomas's by Dr. Payne, at the Westminster by Mr. Davy, at St. George's by Dr. Robert Barnes, at the London by Dr. Bathurst Woodman, at the Charing-cross by Mr. Fairlie Clarke, at King's College by Professor Curnow, at University College by Professor Corfield, at the Middlesex by Mr. Thompson Lowne, and at Guy's by Dr. Stevenson.

As is well known, the custom of delivering an introductory address at St. Bartholomew's Hospital has been discontinued for some years. The London School of Dental Surgery will commence its session on October 4th by the distribution of prizes, on which occasion Sir James Paget is expected to attend.

THE LANCET.

LONDON: SATURDAY, AUGUST 21, 1875.

ALTHOUGH opinions were at first greatly divided as to the significance and importance of the recent meeting of the British Medical Association at Edinburgh, the final decision seems to be that as far as the business of the sections and the general arrangements at Edinburgh itself were concerned matters were well enough, but as far as concerned the management of the general business of the Association there was great room for improvement. Whatever was good and commendable has been already sufficiently dwelt on in our columns and elsewhere, so that it may not be uninteresting or unprofitable to take a different view, and to consider some of the lessons which the experience of the meetings affords.

In the first place, the election of Sir ROBERT CHRISTISON to the presidential chair was a happy circumstance, and went far to allay suspicion and to appease many of those who had felt aggrieved at the manner in which they had been treated by the Committee of the Council. To those, indeed, who did not know that some members of the professorial staff of the University had at one time positively declined to take part in the business of the Association, on the ground that great want of respect had been shown to certain of their colleagues, no sign of resentment or of want of sympathy was apparent, even at the first general meeting. Everything calculated to give at least an outward appearance of unanimity seemed to have been arranged, and very efficient means had been taken to avoid the possibility of a discussion. Few persons, for instance, knew why the Professor of Medicine in the University of Edinburgh was not present at any of the meetings of the Association, and fewer still could conjecture why the presidency of the Medicine Section was given to a London physician who is not attached to a tutorial hospital.

Evidence was not, however, long wanting that the Council of the Association regard themselves as irresponsible representatives of the Association. At the conclusion of Sir ROBERT CHRISTISON's long but in many respects excellent address—which we shall notice on a future occasion—the first general meeting was held. As we have already announced, at this meeting, which probably did not comprise more than fifty members beyond those who were also members of the Council, the most important business of the whole year was transacted in a manner altogether extraordinary. Instead of adjourning the meeting till some time when they could be certain of a full attendance, the Council, contrary to the wishes of those present not of their own body, actually voted for the adoption of their own report, unread. So harmoniously did they work together that, by the aid of a few votes from the non-official members, they were able to override the thirty-one independent members, who desired that the report be either read at once or printed for circulation among the members, and discussed next day or at any other more convenient time. Such a proceeding as that we have referred to may have been legal, but can scarcely be said to be exactly constitutional. The Council are the responsible representatives of the Association, but their responsibility is certainly nullified or reduced to a minimum if they have the power to vote for the adoption of their own report, and by that means to contravene, as they may do in the small meeting, the wishes and desires of the members of the Association. If such an undesirable course were again adopted, it would not be surprising to find the members determined to undertake the election of members of the Council, which seems at present to be self-elective, and in future to keep a very strict watch on their proceedings.

Scarcely less remarkable than the adoption of the report of the Council, unread, was the adoption, under identical conditions, of the remodelled bye-laws of the Association. It was urged by Dr. SIBSON that the bye-laws had been carefully considered by the Committee; so that, although there was much that was undesirable, and even objectionable, he begged that those present would waive all discussion and accept *en bloc* the bye-laws of which, under the circumstances, they knew nothing. When, however, a protest was made that a similar argument had been made use of to avoid discussion of the altered bye-laws at the private meeting of the Council in the morning, Dr. SIBSON admitted that, although he wished to avoid any discussion of the bye-laws at that meeting, there were some things that would require alteration, and that some part of what had been done would before long have to be undone. There would, he pointed out, be plenty of opportunities to discuss the bye-laws next year, and it was competent to anyone, by giving due notice, to propose the alteration of the existing bye-laws. After this procedure had received the strong recommendation of Mr. HUSBAND, of York, and Dr. CARPENTER, of Croydon, it was finally accepted by the members, notwithstanding the vigorous and manly protest of Dr. CHADWICK.

Another incident occurred at the first general meeting which must be mentioned here, as it affords a good illustration of the manner in which the Council does its work. Before the report was adopted, Mr. O. PEMBERTON, of Birmingham, stated that he was desirous of calling the attention of the members to the fact that on the list of names of those who were going to read papers there were the names of two ladies, who, he presumed, were members of the Association. Dr. SIBSON and Mr. HUSBAND observed that, as there was nothing about the admission of lady members in the report, the question could not at that time properly be discussed. Mr. PEMBERTON replied that he would read the terms of the motion he intended to make, and then it would be seen whether he was out of order. The motion was as follows:—"That it be an instruction to the secretary, between now and the next annual meeting, to issue a circular addressed to every member of the Association, requesting an opinion 'Yes' or 'No' as to the admission of female practitioners to membership." The President at once stated that he should not allow the subject to be moved. The matter then dropped; there was, however, a tacit but distinct understanding that Mr.

PEMBERTON'S motion should be brought forward at the next general meeting. Accordingly, next morning Dr. FALCONER, who occupied the chair for a few moments in the absence of Sir ROBERT CHRISTISON, promised Mr. PEMBERTON that he should have an opportunity of bringing his motion forward as soon as the business on the Agenda paper had been transacted. In due time Mr. PEMBERTON rose, and, in proposing the motion of which he had given notice, said that he did not know how the ladies referred to had been made members of the Association—whether by a vote of the Committee of Council or by the vote of any branch; but he thought that on such a question the sense of the Association should have been previously taken. Without saying whether the matter commended itself to his judgment or not, he pointed out that the rules of the Association speak of the members invariably as of the male sex. Dr. MARSHALL, of Clifton, in seconding the motion, reminded the members that they have, or at least should have, some control over the management of the business of the Association, and that they should be prepared at the annual meetings to devote some time to the transaction of business, as well as to mere complimentary speeches. He astonished not a little the majority of those present at the second general meeting by informing them that during their absence on the previous evening the report, which few had read or knew anything about, had been passed. The members were, he alleged, too willing to leave their affairs to be conducted by the Committee of Council; and the admission of ladies to the membership of the Association unknown to the members generally was, he hinted, sufficient proof that some kind of control or check should be kept on the action of the Council. By whatever means the ladies had been appointed, a great liberty had been taken with the rules of the Association. An innovation so important should not have been made without first ascertaining the feeling of the entire Association. After Dr. A. P. STEWART, a member of the Council, had informed the audience that it was he who had had the pleasure of proposing Mrs. GARRETT-ANDERSON, one of the ladies referred to, and that that lady had been duly elected by the Metropolitan Counties Branch, Dr. CARPENTER, of Croydon, who on the previous evening had advocated the adoption without discussion of the altered bye-laws, submitted that, according to those very bye-laws, Mr. PEMBERTON must give at least seven days' notice of his motion, and he even went so far as to move that Mr. PEMBERTON be requested to give due notice of his motion. This amendment, which necessarily precluded the consideration at that meeting of the admission of ladies to membership, was seconded by Mr. E. HART, who spoke of the disabilities that the members would impose upon themselves by adopting Mr. PEMBERTON'S resolution, as they would require the sanction of the President of the Board of Trade to empower them to reject ladies. Fortunately, however, the attendance of the members at this meeting was large, and questions could not be disposed of as they had been the previous evening. The audience showed most unmistakably that they had formed very strong opinions on the matter,—that, as the Council had practised one irregularity, they would make another, and for once override their bye-laws. When Sir R. CHRISTISON observed that Mr. PEMBERTON'S motion was in order, and Dr. STEELE had remarked that the Association could surely give instructions to its secretary without seven days' notice of the motion, Mr. HART withdrew the seconding of the amendment. The result was that, when Mr. PEMBERTON'S motion was put to the meeting, it was carried with only one dissentient.

The business at the other general meetings was all of less interesting character, and did not call forth much discussion. Dr. BEGBIE'S address has already been noticed, and in another column will be found some remarks on Professor RUTHERFORD'S Address in Physiology. It remains, therefore, to consider briefly Mr. SPENCE'S excellent address. Here let us say that if Mr. SPENCE had previously consulted the wishes of the majority of the members of the Association he could not have succeeded better in meeting their views. Large numbers of persons had attended Mr. LISTER'S demonstrations on antiseptic surgery, and there was a widely expressed desire to hear something on the other side, and it was felt that the most competent person to offer an opinion would be someone connected with the Edinburgh Infirmary who did not practise antiseptic surgery. Mr. SPENCE'S address was therefore gladly received. We need only refer to the abstract of Mr. SPENCE'S address that we published last week to show what is the opinion of the Professor of Surgery at the Edinburgh University of the value and importance of antiseptic dressings.

It will be seen that we have in our remarks dwelt more on the political than on the professional aspect of the British Medical Association. We have, in no captious spirit, pointed out a few failings and shortcomings which everyone who has the welfare and prosperity of the Association really at heart must desire to have put right. Under proper management the British Medical Association is capable of becoming a great power for the political and social advancement of the profession; and if the governing authorities can succeed in convincing their constituents that they seek only to carry out the wishes of the entire Association, these annual meetings will become valuable means of promoting the union and good fellowship that should exist among the members of an honourable profession like that of medicine.

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ALTHOUGH much has been written concerning the symptomatic phenomena of heatstroke—better known under its less appropriate and more limited name of "sunstroke,"—yet but little advance has been made with regard to the pathological changes at the root of the affection. This is, doubtless, in great measure owing to the frequently sudden fatality of the worst cases, and their occurrence under conditions which render careful and accurate post-mortem investigation impossible. Yet hardly a summer passes—if not in this country, at least on the Continent, and far more in the United States and the tropics—without some cases of this nature occurring. We propose, therefore, to direct attention to the most recent attempt to explain the symptomatology by a rational interpretation of the changes detected after death, which has been made by Professor ARNDT, of Greifswald, in VIRCHOW'S *Archiv* (vol. lxiv., p. 15). Although much of his argument is based upon assumptions and not upon actual histological proof, yet, taken as a whole, it cannot but be considered as of certain value, and worthy of passing notice.

The groundwork of Professor ARNDT's contribution is but small—viz., the records of three autopsies made in the year 1870 upon fatal cases that occurred in the 3rd Army Corps of the German Army then stationed at Berlin. The literature of this subject is full of the records of cases occurring in military life, where the too rigid adhesion to unsuitable modes of clothing and discipline has lain at the root of the mischief. Of this our own Indian Army affords many sad examples. In the present case three divisions of the corps mentioned marched out on exercise (*Uebungsmarsch*) from headquarters at the end of July, 1870. The march lasted about five hours, inclusive of two halts; but the day was sultry in the extreme, and the route lay through the arid sandy plains surrounding the German metropolis. The troops were insufficiently supplied with water; and in spite of the relaxation from heavy marching order which was permitted as soon as a few men showed signs of distress, many succumbed to the effects of the heat before the day's march was over. Of the number attacked (it is not stated how many) seven died; and of these, as above mentioned, three supplied Dr. ARNDT with the material of his research. The most striking pathological changes were fluidity of the blood and engorgement of all the larger systemic and pulmonary vessels, associated with marked anæmia of the parenchyma of the viscera—brain, liver, kidneys, &c. Thus side by side with engorgement of the coronary and cardiac vessels, and even subperi- and endo-cardial ecchymoses, the muscular tissue of the heart was pale and swollen. The brain was moist, its ventricles distended with fluid, convolutions flattened, and sulci obliterated; and yet withal the veins and sinuses of its membranes were full of blood. ARNDT remarks that this condition of brain has been erroneously described as hyperæmic, whereas the nervous substance was really in a high degree anæmic. The condition of the other viscera was similar. There was the same overfilling of the larger vessels of the liver and kidneys, while the parenchyma was pale, and the organs notably enlarged. The intestinal and vesical mucous membrane was equally pallid; but the condition of the mesenteric vessels was not noted. In the lungs only did the hyperæmia seem to prevail uniformly. Upon what did this "parenchymatous anæmia" depend? This question was readily answered as to the liver, kidneys, and muscle,—all of which presented the characters of the condition known as "cloudy swelling." The brain, however, presented rather the condition of œdema; but was it here even mere œdema? Dr. ARNDT thinks not; and judging from the analogy presented by the other viscera, he concludes that in the brain also there was a similar condition of "cloudy swelling" of the cellular elements—a condition which he believes to be of an inflammatory rather than of a degenerative nature.

Now this condition of muscles and viscera, it is well known, is found to its most marked extent in infectious diseases—as typhus, typhoid, variola, pyæmia, &c.; and in all such cases, be it observed, there are two factors at work—viz., an altered blood condition and high pyrexia. It is met with in its highest degree in those cases in which the second factor predominates, the changes being most marked in those patients who have succumbed at the height of the febrile process. Adverting then to the important place taken by rise in the temperature of the body in heatstroke, the writer gives full details of the affection in its different degrees of intensity. Even in the mildest cases—those most readily subdued by treatment—the temperature of the body may rise from 100° to 104° F. or more; this is accompanied by rise in the rate of the pulse and respiration, increase in secretion of sweat (and here he differs from other authorities, for he avers that only in the severest examples is the skin dry), thirst, muscæ volitantes, tinnitus aurium, oppression at the chest, &c. The transient nature of such cases and their ready relief are enough to show that grave organic mischief is not set up here. But in less favourable cases the temperature rises to 105° or 107°, the pulse to 140, and the respirations to 40, with aggravation of all the symptoms, together with headache, convulsions, and other nervous disturbances. From such an attack recovery is tedious, and permanent mental weakness may be left behind. Finally, in the worst cases of all (those which Dr. MOREHEAD has classed under the head of "cardiac" as distinguished from the "cerebro-spinal" form), the skin becomes very dry and pungently hot, the temperature may reach 111°, the pulsations of the heart are too rapid to count, its sounds are inaudible, and death may occur suddenly from syncope, or after a slight rally the patient may relapse and die comatose. In cases, then, either of the second or third degree, it is evident that organic changes have been set up, so that, even if recovery ensue, their effects are left behind.

Analysing these facts, ARNDT attempts to explain them from the morbid states found after death. The fluid dark blood has been found by OBERNEIER to be of acid reaction and to contain an excess of urea. Whether this acidity be due to an excess of carbonic or of lactic acid is a matter of question; but it is enough to know that here also, as in septic diseases, the blood is charged with noxious products. However, it is probable that here this is of minor importance to the rise in the temperature of the body, which is the initial fact, and one wholly in accordance with recent experimental research upon the effects of high temperature upon the bodily organism; for in these experiments the parenchymatous changes were such as described here—viz., "cloudy swelling"; and, with facts such as these, we are forced to admit that a high rate of temperature *is* a most grave factor in disease. In heatstroke, then, the rise in the bodily temperature is the primary act; it may lead to sudden death by setting up incipient myocarditis; or, if the patient survive a little, all the organs more or less bear evidence of a parenchymatous change, as shown by "cloudy swelling" of their elements—a process maintained by the morbid blood. On this hypothesis, too, in cases of recovery, may be explained the change that renders the brain a *locus minoris resistantiæ*, thus rendering the subject of sunstroke prone to the development of insanity, epilepsy, or other neurosis.

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IT would be comforting if it were possible to accept Mr. DISRAELI's definition of "Sanitary Reform." We refer to the interpretation of that not unfamiliar phrase offered by the Prime Minister in his "summing-up," at the Mansion

House, towards the close of a session which he was pleased to characterise as "crucial," and charged with the onerous duty of "redeeming your pledges." It is to be deprecated that any question or difference of opinion should arise as to the nature of those pledges. If one party to a contract claims, while the other declines, to hold it discharged, there is commonly an end of mutual confidence; and it cannot be denied that a contract having very direct relation to this question of sanitary reform was entered into between the Conservative party and the country when the former was raised to power. We should, therefore, be unfeignedly sorry to find that we had been misled by the glib use of a phrase which Mr. Disraeli somewhat tardily complains is "so little understood." Still we cannot forget that what the medical profession, and probably the public, understood by sanitary reform, was something incomparably better defined than "most of the civilising influences of humanity." Sanitary reform is undoubtedly one, perhaps not the least potent, of the civilising influences of humanity; but it does not follow that a Government, which in some vague sort of way strives to foster civilising influences, can claim credit for inaugurating an era of sanitary reform. Nevertheless, such an era we believe the country expected when, after having for five years strongly and studiously "impressed upon the public mind that sanitary reform was the great object and need of the day," the propounders of this gracious doctrine undertook to demonstrate their theory in practice. Looking to the sanitary reforms already effected, the real business can scarcely be said to have begun. It is, therefore, almost irritating to be told that the phrase upon which the whole undertaking hinges is "little understood"; that, in point of fact, it is susceptible of a more diffuse construction than simple folk supposed; and that instead of strong measures for the protection of the public health, a visitation of good intentions must be held to redeem the pledge and satisfy the contract.

A less discouraging view of the political situation seems impossible, because the session which has just closed is pointedly declared to have been "a crucial one," specially devoted to redeeming the pledges given by Ministers before taking office. The Cabinet reviews the labours of the last six months, expressly in this light, with complacency and even self-gratulation. This is not the time, nor are we disposed, to be unthankful for small mercies, provided always that they are not paraded as substitutes for the larger benefits we have a right to demand. We do not under-estimate the difficulties with which the Government has had to contend. We recognise and make full allowance for the general inertia produced by exhaustion. But looking at the results of a year's labour, not too critically, and frankly accepting them as the products of a sincere endeavour, it is impossible not to be disconcerted at the pitiful dimensions of the output, and still more seriously dismayed by the lack of stedfast purpose the work accomplished betrays. When we are asked to regard it as the redemption of a pledge to resolutely and effectually prosecute sanitary reform, the feeling of dissatisfaction changes to one of chagrin.

The session opened well. The Queen's speech gave prominence to Bills projected for the improvement of the dwellings of the working classes in large towns, for the consolidation and amendment of the Sanitary Laws, and for the prevention of the pollution of rivers. The business of the opening night was of happy augury. On the 13th of February we observed with satisfaction that "the President of the Local Government Board gave notice of his intention to introduce a Bill to repeal the Adulteration of Food Acts, and make better provision for the sale of food and drugs in a pure state. ...... Not less remarkable than the prominence thus assigned to sanitary measures in the work of the session was the tone in which these measures were referred to by various speakers in the House of Commons." We were prompted to say—"The sanitary measures proposed show that the Prime Minister is about to give effect in Parliament to those principles of social legislation which he announced from the hustings; and the masterly statement of Mr. Cross in introducing the first of the measures gives hope that the sanitary work of the Government will be conceived and furthered with due regard to its gravity and perplexity."

Hope told a flattering tale. The original conception was well enough. The preliminary sketches presented to Parliament and laid before the country, if not faultless, were fair; their colouring was firm, and even captivating. The severest, the most captious, critics acknowledged the skill of the artist. A feeling of calm and trustful contentment possessed the public mind. But when the time came to produce the finished pictures, wrought on the lines and in the spirit of the approved designs, some were too far from completion to be exhibited at all, or, on frivolous pretence of want of space—as in the case of the Rivers Pollution Bill,—were quickly lumbered out of sight; while others, what with lowering high lights, picking out shadows, blending half-tints, and generally scumbling over marked features and striking contrasts, had wholly lost their character and effect. Perhaps the most successful achievement was the consolidation of Sanitary Laws—the idea of *amendment* had practically dropped out,—but this was of the nature of a catalogue, rather than an original art work. We have given the Government full credit for their Artisans' Dwellings Act, and are prepared to cherish the most generous hope as to its success. For the rest, bold, terse Bills became attenuated and feeble Acts; prohibitory restrictions dwindled into permissions to refrain from wrong-doing, or at best facilities for doing right. In some instances, notoriously that of the Food and Drugs Bill, matters have been muddled instead of being mended. The strong arm of the law, which threatened to strike down and crush offences, was adroitly limited to showing its prowess by killing flies on the whole skins of offenders. Concession extracted the sting from compulsion; and Samson, shorn of his locks and with his eyes put out, was left leaning against the door-posts, ready to be crushed by the fall of the house he had promised to bring down on the heads of his enemies. All this may have been interesting and significant from a party-political point of view, but it was infinitely aggravating to the common sense and earnestness of an anxious people. The grievances of which the nation had long complained and for which it looked hopefully for redress, the evils under which it groaned and chafed, the perils by which its life was beset, were real, and would not admit of pleasant trifling. If, already, a feeling of fretful discontent has sprung up in the stead of placid expectancy, if peevish distrust has begun to take the place of respectful confidence, the Government has only itself to thank for the untoward change in public sentiment. Its misfortunes have been of its own making. It has suffered little from the wit and nothing from the energy of political opponents. Five years of unremitting endeavour to impress upon the public mind that sanitary reform is the great object and need of the day could not be without its effect. The disappointment occasioned by the discovery that a pledge to compass that object and satisfy that need is to be redeemed by performances little more than perfunctory must be proportioned to the depth of the impression of need and urgency intentionally produced.

It seems inexplicable that the Government should seriously elect to be judged by the session so strangely concluded. We can understand Ministers making the best of what they cannot amend; and if the attempt to place their achievements in the most favourable light, and to throw a veil over their failures, were undertaken in a spirit of modesty—if they pleaded obstacles to progress and prayed time for the fulfilment of their promises, the situation would engage sympathy, and might even command respect. But when they point triumphantly to the past as "crucial," when they claim the acknowledgment that they have redeemed their pledges, it is impossible to feel otherwise than disheartened and perplexed. The very ground of hopefulness is cut from under our feet. To tell a nation you know its objects better than it knows them itself, to expend time and argument in impressing it with the deepest and keenest sense of its needs, to hold out the most brilliant promises of redress—if you are entrusted with its confidence,—and when you grasp the reins of government to do next to nothing, and that little indifferently; then to turn round and protest you have redeemed your pledges, which were "little understood," is more likely to ruin the prospects of a Ministry, be it never so fair-spoken, than a world of mere stupidity or an age of simple inaction. Great expectations unrealised readily give rise to great revenges. To repeat the experiment of generous undertakings without a fixed determination to discharge the obligation in full and at all costs would be to dare the disgust as well as the disappointment of an indignant people. Nothing short of a complete and effectual remedy for the social and sanitary evils exposed will now suffice to allay the anxieties or quiet the importunities of a nation growing daily more intelligently solicitous about its physical and mental health. It is too late to play with sanitary reform, and the time has gone by when the public mind stood in need of special enlightenment as to what that includes and implies. True wisdom will hasten to blot out the declaration that the session which closed on the 13th inst. was "a crucial one," and a discreet "political conscience" must defer to a more propitious moment the boast of having successfully performed "the operation known as 'redeeming your pledges.'"

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DR. WM. RUTHERFORD in his recent address in Physiology—or, as it is still designated in the medical schools of Scotland, the Institutes of Medicine—grappled with the question of Vivisection. He was not content with touching upon a subject which, in his opinion, only required to be firmly grasped in order to deprive it of any injurious effects on the future of physiological and medical science. Dr. RUTHERFORD maintains that a great and deplorable error was committed when the unreasonable clamour of the anti-vivisectionists was met in a spirit of compromise, instead of one of stern resistance. Speaking to the members of the British Medical Association, he said that he need scarcely remind them that physiology is an experimental science. Apart from experiments which are the result of artifice, disease and accident are constantly bringing about conditions which partake of the nature of experiments, and are sometimes of great physiological significance. Still, this teaching of disease and accident leads us but a short way, and the pursuit of physiological truth by their aid is often an uncertain, devious, and complicated method. It is excessively difficult to analyse the effects of disease, and to separate the phenomena from one another sufficiently to attribute them to their respective pathological causes, or to precisely apportion the share which this or that structural change has had in their production. On the other hand, the difficult task of pathological analysis grows less as physiology advances. Dr. RUTHERFORD was able to draw a truthful and effective contrast between the very imperfect and indirect theoretical method of physiological instruction in the past and that by demonstration and experiment at the present time. No one can doubt for a moment that the reasoning, critical faculties are educated in the proper sense of the term, and that far more real, definite, practical knowledge is acquired, where men are trained to see and examine for themselves the experimental evidence on which such knowledge rests. Dr. RUTHERFORD maintains that this critical and definite knowledge regarding animal mechanism cannot be attained unless students be shown experiments on living animals; and he strongly condemns the pretensions of anti-vivisectionists, their unceasing clamour, and the impetus which recent attempts at legislation have given to such pretensions. As our readers are aware, we have all along maintained that a good deal of ignorant presumption and a spirit of insincerity and exaggeration have been displayed by the opponents of animal experimentation; but on these grounds alone, if for no other reasons, we held that it would be desirable that the question should be calmly and dispassionately investigated by a properly constituted commission, on which the claims and objects of science were adequately represented. In the minds of many very able, educated, and conscientious persons grave doubts exist as to the objects, extent, and nature of the experiments carried on in this country, and as to how far they are justifiable. It is necessary that a cloud of ignorance and prejudice should be dissipated, in the first place; and, in the second, we thought, and we continue to think, that, as there is a responsibility connected with the taking of life and the infliction of pain, it is a very legitimate and desirable subject for examination whether the limits of justifiable animal experimentation can be defined. It is admitted on all hands that we are justified in taking the lives of the lower animals or inflicting pain on them under certain circumstances. It is the law of nature universally followed in the animal world, and it is a necessity of man's existence. Moreover, sportsmen do not hesitate to inflict pain and death in the pursuit of a selfish gratification, and Dr. Rutherford was therefore able to use this argument with effect when he declared that the pain produced in all the physiological experiments in this country in the course of a year is as nothing when compared with that inflicted upon animals by the members of Her Majesty's Lords and Commons in an autumn holiday. It is, consequently, not for sportsmen to be the first to cast a stone at the vivisectionists. It may be argued that in the case of sport the animals killed serve for food; that they have a chance of escape; that there is no deliberate intention to inflict pain, but to kill; and that the animals hunted or destroyed are, generally speaking, useful for food, or are themselves destructive or injurious to man and other animals, or would become so if they propagated their kind unrestrictedly. On the other hand, there is the sentimental objection to vivisection arising out of a natural repugnance to experiments undertaken in cold blood on horses, dogs, and cats, the faithful companions and servants of men, with a deliberate foreknowledge that some experiments will cause much, and it may be prolonged, pain to the animals subjected to them, although the ultimate object may be the relief of pain and the furtherance of scientific discovery.

We confess that we think Dr. Rutherford presses his principles too far when he argues that, teaching by demonstration being the most successful method, we are therefore always warranted in having recourse to it. Physiology and chemistry are both experimental sciences. The chemical lecturer can have no hesitation about employing any number of experiments, or of repeating them indefinitely to illustrate every step he takes; but we may fairly assume that the physiologist would be restrained by the thought that the materials with which he has to deal are not so much inert, lifeless matter, but sentient living things. We hold, therefore, that it would be both unnecessary and cruel to demonstrate every physiological truth by experiment, or to repeat indefinitely the same experiment simply because by such demonstrations the lecturer could make his teaching more definite, precise, and valuable. If, as Dr. Rutherford avers, all the experiments on the higher animals that are really required for the purpose of education can be performed painlessly with the aid of narcotics, then, of course, he takes away the sting. But we do not for one moment believe that Dr. Rutherford would lend the weight of his authority in support of all the alleged practices of Professor Schiff, for example. Indeed, on a careful perusal of Dr. Rutherford's remarks, it will be seen that he fully admits narcotics should be used whenever it is possible to do so; and that he acknowledges it is not necessary for a sound physiological education that students be shown *all* the experiments that are needed to demonstrate physiological truths, but only such as directly affect cardinal points of physiology. We do not doubt that the subject, regarded in a legislative aspect, is one of extreme difficulty; but that is no reason why the attempt should not be made to ascertain the extent to which experiments on animals are carried on in this country, the conditions under which they are undertaken, and the persons by whom they are performed. The British Medical Association, we believe, itself set forth some years ago the conclusions which it had arrived at in this matter after it had been investigated by a committee; and we cannot see that any reasonable objection can be urged against a similar investigation being undertaken by a Government Commission at the present time, to whose deliberations the matter had better meanwhile be left. It is neither by compromise nor by stern resistance that the objections of a large body of influential persons can be overcome, but by a careful inquiry as to the truth or otherwise of the allegations against the practice of vivisectionists, so as to determine, if possible, the limits within which animal experimentation is right and justifiable.

Annotations.

"Ne quid nimis."

MENINGITIS OR TYPHOID.

The account which a correspondent has furnished of a recent medico-legal case in the North of England will be perused with considerable interest. The differential diagnosis between meningitis and typhoid fever, on which it turned, is a not unfrequent clinical problem of considerable difficulty; and it has before now, if we mistake not, formed the subject of discussion in a court of law. It is rarely, however, that the pathological appearances in such a case afford ground for continued difference of opinion. That it was so in this instance is not, we think, very creditable. The case would appear to be sufficiently clear. A man died on the seventeenth day of an acute illness, of which intense headache, delirium (both continuing till death), constant vomiting, confined bowels, and convulsive movements in one arm, were the main characters; the illness beginning a few weeks after a blow on the head, and the two being connected by continuous head discomfort. The post-mortem appearances in the head, though not very distinctive of meningitis, were compatible with it; but those in the intestine were, according to our received opinions, quite sufficient to exclude typhoid fever. Death on the seventeenth day of typhoid fever has always hitherto been accompanied by intestinal ulceration, and in this case there appears to have been no more evidence of intestinal irritation than the administration of a purgative would account for. The surgeon to the Railway Company, being two hours late at the post-mortem examination, could give no evidence of value as to the morbid appearances, and the verdict was very rightly given for the plaintiff.

OFFICERS OF HEALTH.

The report of Colonel Henderson contains, under the head "Common Lodging-houses," a paragraph exceedingly complimentary to officers of health. He says: "During the late epidemic of scarlet fever in the metropolis, which was of so severe a character as to call for special attention and advice from the medical officers of health as to the precautions necessary to be taken to prevent its further spread, I can with pleasure state that only four cases occurred in registered common lodging-houses, which is a subject of congratulation when it is remembered that about 27,000 persons are accommodated, most of them of the poorest class." This is high praise, and comes opportunely as an encouragement to a laborious and most earnest class of public servants whose efforts for the general welfare are not always, or, perhaps we may say, even commonly, appreciated. The intervention of officers of health is too frequently looked upon with some dislike and suspicion by private practitioners. If it could be arranged to pay officers of health adequately for their services, and to relieve them wholly from private practice, one of the most serious obstacles to their usefulness, as a staff specially organised to crush out disease, would be removed. It would be well if the intervention of skilled sanitarians could be secured immediately an epidemic occurs; and if, without in any way, either sentimentally or practically, interfering with the medical man in attendance, they were able to direct and enforce the precautions necessary to isolate cases, and exterminate the active causes of "infectious" or "contagious" disease. But it is indispensable that medical officers of health, to be widely and sufficiently appreciated, should not themselves be practitioners. It is a mere question of money whether the preservation of public health is confided to a staff of special experts, or left as an unrequited service to be rendered, willingly enough, but under the pressure of more general daily business, by a profession always overworked and commonly underpaid. It is not worthy of a great people or a wise State to leave its vital interests to be thus vaguely and spontaneously protected. Public health is worth paying for. It is worth as much as lighting, paving, or safeguarding our streets. We do not expect these services to be rendered for nothing; why should we expect men who are busy curing disease to devote time and effort to prevent it? Society has recognised the need of a staff of officers of health; it will be wiser and cheaper in the long run to pay them sufficiently to make the service thoroughly skilled and exclusive—a duty and a profession, apart by itself.

THE COLOSSEUM A SANITARY NUISANCE.

THE above announcement seems a startling one, but it has a certain foundation in fact. In the course of the excavations carried on under the eye of the Commendatore Rosa to determine the true arena of the Colosseum, many fragments of columns, capitals, plinths, and other decorative objects were found; and furthermore, at the depth of twelve metres, the *specus emissarius*, or reservoir and conduit for the water with which the amphitheatre was flooded on the occasion of *naumachiæ*, or mock sea-fights. This *specus emissarius* also received, through its upper trunk, the subterraneous water of the Esquiline, Celian, and Palatine hills, and carried them by its lower trunk through the valley between the Celian and Palatine, towards the Circus Maximus till it debouched in the Tiber. These trunks and their feeders having in the course of centuries become choked up, the water supplied to them has filtered into the surrounding soil, till at the depth of a few metres you have only to dig and, as in the Forum and the Campus Martius, water bubbles up freely. The Colosseum, forming a kind of basin, soon yielded water during the excavations, and in such quantity that hydraulic pumps were in constant requisition to enable the workmen to proceed. Now that the excavations have for the time been suspended the pumps have not been in play, and so the water has accumulated till quite a lake has been formed in and around the Colosseum, and the Romans are in terror lest the exhalations from it should poison the neighbourhood. By order of the Minister of Public Instruction, accordingly, a commission, consisting of Drs. Ratti, Lameuzi, and Carlucci, have investigated the apprehended evil at its source, and have, in an elaborate report, formulated the reassuring opinions—1st. That the water accumulated within the Colosseum can cause no injury to health, because it is not stagnant, but, thanks to the old *specus emissarius*, still runs, and is renewed, being taken up by the surrounding soil. It is open to the air and atmospheric action, while there are no confervæ or lacustral vegetation on its surface, but, on the contrary, it is clear and even potable. 2nd. That, though thus far innocuous, the water must have more rapid and fuller vent; and this can easily be afforded by the Government engineers. 3rd. That with such accelerated flow the water, tapping as it does the Esquiline, Celian, and Palatine, will improve the soil of those localities by draining them far more thoroughly than hitherto. 4th. That during the prevailing heats the hydraulic pumps are better idle, as their active play would only expose a larger area of mud to exhale freely in the sun. 5th. That outside the Colosseum the shafts sunk by the excavators, and more or less welling up water, had better be closed, as not immediately drained off by the *specus emissarius*. 6th, and finally. The turned-up soil before the Colosseum, being imperfectly drained, particularly below the Temple of Venus and Rome, and around the Meta Sudans and the Arch of Constantine, and even now becoming a quagmire, must be well sprinkled with lime and covered with gravel, so as to suppress the effluvia already too perceptible to the wayfarer. And so ends the Roman physicians' report, which has allayed the fears of a rather susceptible neighbourhood, and reinstated in public favour their grand old patient the Colosseum.

INJECTION OF QUININE INTO THE TRACHEA IN INTERMITTENT FEVER.

IN some cases of the most pernicious forms of intermittent fever the stomach is so irritable that it is useless to administer quinine by the mouth, as it is immediately rejected; and the state of the circulation in the cutaneous capillaries is such that little or no absorption would take place were it administered hypodermically. In such instances great and immediate benefit may be derived from the injection of solution of quinine into the trachea, as appears from the very interesting and remarkable cases recorded by Claude Bernard, in his recently published "Leçons sur les Anæsthésiques," as having occurred in the practice of Dr. Jousset of Bellesme. One of these cases, much curtailed, was as follows. Some years ago Dr. Jousset, travelling in the northern part of the Greek Archipelago, was called in the morning to see a Greek child, aged twelve, who was seriously ill. On arriving, he was informed that the child was delicate and liable to febrile attacks, but had been in her ordinary health the day before, when she had been playing with other children. In the evening she had suddenly become pale and shivery, and the parents thought her dead; but after two hours or less she had partially recovered and fallen into a deep sleep. In the course of the night she had two more fainting fits. When Dr. Jousset saw her she was lying on a thin mattress on the floor, extremely pale, with deep sunken eyes—in a word, like death. The respiration was scarcely perceptible; the pulse from 38 to 42, very feeble. Slight indications of intelligence still remained. On auscultation coarse râles were heard. The belly was soft, the liver normal, the spleen very large. M. Jousset diagnosed it as a case of malarial fever of bad type; and he immediately endeavoured to give the patient some quinine, but vomiting was induced, and syncope. Having previously had a successful case, he at once proceeded to inject a solution of hydrochlorate of quinine into the trachea. He inserted the trocar of a Pravaz' syringe into the middle of the trachea, between the first and second cartilaginous rings. A little difficulty was experienced, as the thyroid gland was large, and he only satisfied himself that the point was free by blowing through the canula. The pulse was now 31. No effort at coughing was made, and he thought she had succumbed. Five minutes after the pulse was 40. The limbs were now covered with warm flannel and light friction made. In ten minutes the pulse had risen to 45, and an involuntary evacuation occurred. She murmured some words. In thirty-five minutes she asked for some drink. She complained of intense pain in the head, which, however, was not hot. In an hour the pulse had risen to 96; and shortly afterwards she was in her ordinary health.

THE PRESCRIPTION OF "SPOONFULS."

THE coroner for the City of Exeter has been the means of entering on the death-register a strong and useful protest against the time-honoured practice of prescribing medicine by the spoonful. It is pretty generally known that the teaspoon and tablespoon of the present day are of far from fixed capacity, and may, moreover, be said to average nearly double the size that was in vogue little more than a quarter of a century ago. If, therefore, the terms teaspoon and tablespoon were even qualified by the words "old" or "new style," some guide would be given as to the quantities intended; this, however, is seldom the case. A month or two since the infant daughter of a coach-trimmer, aged nineteen days, died in Exeter, under conditions that suggested poison as the cause. The result was an inquest, and a chance examination of the Exeter death-register the other day for another purpose, showed that the cause of death of this infant was returned in the coroner's certificate in the following manner:—"Congestion of the lungs, accelerated by an overdose of opium, innocently administered by her mother from a *modern* teaspoon containing two drachms, instead of from a teaspoon of older date, containing one drachm." The evidence given at the inquest is not before us, and therefore we are unaware of the form of opium that was administered to the infant, or under whose advice it was given. The probability is that the mixture was one of those deleterious compounds known as "soothing syrups," and that the "directions for use" prescribed the teaspoonful. However this may have been, it is beyond dispute that the term "spoonful" no longer signifies a quantity which is sufficiently definite and intelligible to the public, and should therefore be abandoned.

URBAN DEATH-RATES IN ENGLISH AND SCOTCH TOWNS IN JULY.

THE Scottish Monthly Return of Mortality in the eight principal towns of North Britain is in some respects fully as valuable a contribution to vital statistics as the Registrar-General's Weekly Return in England. The summary of twelve monthly returns gives correct statistics for a year, whereas from weekly returns accurate numbers for a year can never be obtained. On the other hand, the promptness of information as to mortality from zymotic diseases in the eighteen large English towns contained in the weekly returns has a well-defined value, which more than outweighs the greater completeness of detail in the Scotch monthly return. One of the objections to the want of uniformity in the system of publication north and south of the Tweed is the difficulty of comparing the results for the Scotch and English towns. We propose to institute a brief comparison for July by using the figures from the Scotch monthly, and from the English weekly returns relating to the twenty-eight days ending 31st July. The eighteen English towns have a present estimated population of 6,682,033, while that of the eight Scotch towns is but 1,171,989. The annual death-rate in the English towns during the four weeks of July was 22·7 per 1000, whereas in the Scotch towns the rate for the month was 23·5. As regards the mortality from the seven principal zymotic diseases, it was equal to 5·5 in the principal urban population of England, and did not exceed 4·8 in that of Scotland. The zymotic death-rate in England during July is governed by the rate of infant mortality, and the annual death-rate from diarrhœa in the eighteen English towns during that month was 2·7 per 1000, whereas in the eight Scotch towns it did not exceed 1·3 per 1000. Excluding diarrhœa from consideration, the death-rate caused by small-pox, measles, scarlatina, diphtheria, whooping-cough, and fever, was 2·8 in the English towns and 3·6 in those of Scotland. Among the English towns the death-rate from all causes ranged from 14 and 16 per 1000 in Portsmouth and Norwich, to 29 in Nottingham, Salford, and Newcastle-upon-Tyne. In the Scotch towns the rate was only 16 per 1000 in Aberdeen, and ranged upwards to 25 in Greenock, 26 in Glasgow, and 31 in Paisley. The death-rate from the seven zymotic diseases was as low as 0·8 in Portsmouth, while the highest rate was 9·8 in Salford. The zymotic rate in the Scotch towns ranged from 2·0 per 1000 in Aberdeen, to 7·1 in Greenock and 7·8 in Paisley. We can only now apply one more comparative test to the mortality statistics of the large English and Scotch towns during July. The death-rate from various forms of fever, of which typhus and enteric are the most fatal, was equal to 0·40 per 1000 in the eighteen English, and to 0·58 in the eight Scotch towns. The comparison is in favour of the health or sanitary condition of the English towns on each point, excepting alone the death-rate from diarrhœa, which in July was nearly twice as high in England as in Scotland. It is impossible here to discuss the cause of this greater fatality of diarrhœa south of the Tweed; the intimate relation between temperature and the mortality from this disease must, however, be remembered, although there is reason to believe that in the poorer classes more intelligent care of infant life is found in the Scotch than in the English mother.

ABEYANCE OF VACCINATION IN KEIGHLEY UNION.

WHILE those who firmly believe that vaccination secures the nearest known approach to immunity from the worst forms of small-pox are anxiously awaiting the result of that tedious form of prosecution of the Keighley Board of Guardians by *mandamus*, few appear to be aware of the present all but complete abeyance of vaccination within that union. Previously to 1873 there appears to have been no organised opposition to vaccination in the neighbourhood, at all events the number of defaulters was then inconsiderable. Between the beginning of 1873 and the middle of 1875, however, of about 4421 children born in the union, no less than 2344 remain unvaccinated; neither have all the other 2077 children been vaccinated, as considerable numbers died before the statutory six months from birth had elapsed, until which they are not classed as defaulters. It is also to be noticed that, in spite of the small-pox epidemic, which usually causes a large increase in the number of vaccinations, the defaulters were considerably more numerous in 1874 than in 1873. At a recent meeting of the Keighley Guardians, Dr. Macnab, one of the public vaccinators, resigned his appointment because he had attended at the vaccination stations four times a month during the year, and not a single case had been presented to him for vaccination! This board, at the same meeting, passed a resolution, with the help of the chairman's casting vote, not to receive some statistics of small-pox and vaccination drawn up by the medical officer of the workhouse, because he refused to place his books in the hands of the guardians, in order that they might test the accuracy of his figures, and investigate the cases. Such an investigation could not, however, be satisfactory after the death and burial of so many of the small-pox patients. So long as the anti-vaccination agitators insist upon believing that the vast majority of the medical profession and of the intelligent public are conspiring to maintain vaccination by false and "cooked" statistics, it is useless to attempt to reason with them.

MEDICAL AND SANITARY FATALISM.

It is quite time that an urgent protest was entered against a species of fatalism which is now finding its way into reports of certain medical officers of health, and is leading them to attempt to forecast not only the prevalence of disease, but the proportion of deaths that will result from it. The Peculiar People confess to a belief that disease is inevitable and invincible, only yielding to prayer; but what becomes of our boasted medical and sanitary progress, if epidemics are to be professionally prognosticated to run the same course and to lead to the same mortality as in times gone by? It may answer a useful purpose for medical officers of health, in order to stimulate their sanitary authorities to continued activity, to warn them that the study of what it is now the fashion to call waves of disease leads to the conclusion that we may soon expect an epidemic of one or other disease. Crying wolf, however, is a dangerous weapon—it is a two-edged sword that cuts both ways. Dr. Tripe, in his recently-issued report upon the sanitary condition of Hackney, says that during 1875–6 a very much larger mortality from scarlet fever must be expected. The medical officer of health for Hackney is perfectly justified in calling attention to the probability that if the epidemic of scarlet fever in London, which has more or less prevailed since the latter part of 1874, is to run the course of previous epidemics, its fatality may revive later in the year. Is it not fair, however, to express a hope—nay, a belief—that the sanitary condition of London has improved, and that epidemics will continue to show a declining fatality? Did not the cholera epidemics of 1832, 1849, 1854, and 1866, successively show a marked decrease in mortality in London? This attempt to prophesy increased fatality of scarlet fever appears to us to show a want of confidence in our increased power to deal with epidemics which is especially out of place in a medical officer of health's report.

URINALS.

Although London is supposed by some fortunate persons to be empty at the present time, a section of the population is still compelled to exist within its precincts, and, with a temperature of considerably over 70° Fahr., to endure many mundane inconveniences. Among those of an offensive character may be classed the metropolitan urinals. It is an unsavoury subject, but we are bound to declare that these indispensable establishments, whether in the street, at the railway station, or on the river, are for the most part in a superlatively nasty condition, and sometimes intolerably stifling. The individual who invented and fabricated the elaborate receptacles of nastiness fitted in most London urinals, can by no means be classed as a benefactor of mankind. The pan itself (utterly superfluous and useless) is usually coated with a foul deposit, the exit pipe blocked up, and flow of water *nil*, as though the officials were chiefly concerned in reserving specimens for clinical examination. These places are rendered still more hideous by an attempt made in some cases to ornament with coloured tiles, patent ironwork "treadles" and the like, the latter of which soon, of course, rust, and the levers get out of gear. According to our own observation the only clean and wholesome place of the kind at the present time is to be found at the Victoria Station of the London and Brighton Railway. It is absolutely roofless, the compartments are placed back to back, no vile pan arrangement exists, slate only is used in the construction of the urinal, and a continuous stream of water flows into a wide gutter beneath, laid at a good incline. If urinals constructed in this way are properly cleaned out several times in the day (according to frequency of occupation), and *liquid* instead of solid deodorisers or disinfectants used, and the abominable pans abolished utterly, no accumulation need take place (if the drains below are free), and we who are compelled to remain during the dog-days in this "deserted village" would possess one nuisance less. It appears, to us, indeed, that a periodical examination of all such places, including those on the steamboat piers, should be made by the officers of the various sanitary authorities.

PARIS AND LONDON IN 1874.

The *Bulletin récapitulatif de Statistique Municipale*, relating to Paris for 1874, has just been issued by the Préfet de la Seine. It corresponds with the Registrar-General's Annual Summary for London, and although its statistics are published in a far more elaborate form than those for London, they afford the means for a comparison between the vital statistics of the two largest cities of the world. The population of London in 1874 was very nearly double that of Paris; the density of population in persons to an acre was, however, only 44 per acre in London, whereas it was 96 in Paris. The marriage-rate was 8 per 1000 in London and 10 in Paris; the birth-rate 35 in London and 29 in Paris; and the death-rate 21·6 in London and 22 in Paris. Whereas the marriage-rate in Paris exceeded that in London by 25 per cent.; the birth-rate in Paris was 20 per cent. below that in London. The death-rate in the two cities in 1874 showed little difference, and yet, in consequence of the variation between the birth-rates, the natural increase in the population during the year, by excess of births over deaths, was equal to nearly 14 per 1000 in London, whereas it was not more than 7 per 1000 in Paris. Notwithstanding that the marriage-rate in Paris considerably exceeds that in London, the proportion of illegitimate births in Paris was nearly 27 per cent., while in London it is only about 4 per cent. With regard to the mortality statistics, the annual Paris Bulletin contains information in far greater detail than the London Annual Summary. The rate of mortality is given for each of the twenty arrondissements, and for each of the eighty quartiers into which Paris is divided. In the twenty arrondissements the death-rate in 1874 ranged from 15 per 1000 to 27. It is somewhat remarkable that in the arrondissement in which the density of population is greatest in Paris—namely, more than 300 persons per acre—the death-rate did not, in 1874, exceed 16 per 1000. London figures show a very different result.

THE LOCALISATION OF SENSORY CENTRES IN THE BRAIN.

At the recent meeting of the British Medical Association, Dr. Brunton read a paper, communicated by Dr. Ferrier, containing an "Abstract of Experiments on the Brains of Monkeys, with special reference to the Localisation of Sensory Centres in the Convolutions." The experiments, which were conducted by trephining and the destruction of the sensory centres by means of a red-hot wire, led to the following results. These centres are bilateral, so that when one of the centres of touch was destroyed, there was loss of tactile sensibility in the corresponding half of the body. Stimulation of the centre of hearing caused the animal to prick up its ears as if it heard something, while destruction of the whole of this centre rendered the creature totally deaf. Destruction of the centre of vision corresponding to one eye (e. g., the right) only rendered the animal temporarily blind in that eye, the function, after twenty-four hours, being carried on by the opposite centre. In the discussion that followed, Dr. Nairne pointed out that other observers had arrived at conclusions different from those of Dr. Ferrier, and that the brain of a monkey could not be taken as exactly similar to that of a man; but Dr. Brunton thought the mistake made by German and other investigators who differed from Dr. Ferrier was, that they took the brains of animals lower even than the monkey to correspond with that of man. M. Dupuy had arrived at different results. He said that he had found that when the centres of motion on one side of the brain were removed, paralysis followed for a short time throughout the corresponding part of the body, but that when the centres were removed from both sides of the brain there was no paralysis at all.

THE COLLEGE OF PHYSICIANS AND PSYCHOLOGICAL MEDICINE.

The Royal College of Physicians of London has instructed its Registrar to prepare and submit a regulation to the College, "That students who wish to qualify for the examination for the membership or licence of the College may substitute, if they so desire, a three months' course of clinical instruction in the wards of a lunatic asylum for the same period of attendance in the medical wards of a general hospital." The College, by this step, does no more than recognise adequately the importance of psychological medicine. It has the merit of exacting from its candidates a pretty good measure of hospital practice. In the case of candidates for the membership attendance is required for three winters and three summers on the medical practice of a hospital, and for three winter and two summer sessions on the surgical practice. Almost the same demand is made of candidates for the licence. Clearly three months of this period might not unprofitably be spent in the study of mental disease. Even for purposes of general practice the knowledge so acquired would be useful, and for those contemplating more exclusive attention to psychological medicine the knowledge would be invaluable.

THE COAGULATION OF THE BLOOD.

M. Glénard, of Lyons, finds that the influence of foreign bodies in determining the occurrence of coagulation in blood is the less, the closer their physical texture resembles that of the physical texture of the bloodvessels. Coagulation is the indication of the death of the blood. It is capable, according to M. Glénard, of being revivified as long as it remains fluid in a bloodvessel even away from the body. The blood of an ox can be transfused into a dog with success six hours after removal from the body. The coagulability is retarded, but not destroyed, by concentration of the blood, which acts in a manner analogous to the admixture of salt. An analogy may be drawn between the effect of deprivation of water upon the rotifera. Blood contained in a bloodvessel which had been removed from the body of an animal may be slowly dried, and when the vessel has a horny consistence, the contained blood may be powdered and subsequently mixed with water, in which it forms a solution capable of undergoing spontaneous coagulation, even after it has been filtered.

BLIND USE OF DRUGS.

Heads of families who are in the habit of indiscriminately using patent medicines for all sorts of affections and all ages should be warned of the disastrous effects which sometimes result from the ignorant administration of drugs, valuable in themselves and when given under proper medical advice, by the facts elicited at a recent inquest before Mr. Bedford. A child, aged six months, suffering from diarrhœa, was given a dose of chlorodyne by her father. Death soon after ensued. Although, after a post-mortem examination, an opinion was given that diarrhœa was the cause of death, it is easily conceivable that a very small dose indeed of the preparation would prove fatal to a baby. Chlorodyne contains opium, chloroform, and prussic-acid, ingredients that should teach any one of the risk of giving it to children under a certain age.

NEW MEDICAL SCHOOL IN GLASGOW.

We understand that the managing body of the Glasgow Royal Infirmary are about to receive authority, under a new supplementary charter, to establish in connexion with the hospital a medical school. The opening of the Western Infirmary, in close connexion with the University, has had the foreseen and natural effect of draining from the older hospital the greater number of University students. It says much for the energy of the directors of the Royal Infirmary that they have taken the earliest opportunity of obtaining powers to render the great resources of their hospital for practical teaching more largely available for students of medicine. The new school will have this advantage over the existing extra-mural school, that the University authorities will be able and, we have no doubt, glad to exercise the powers they possess of recognising attendance, within certain limits, on the lectures delivered at the infirmary as qualifying for graduation. The sole plea on which the University has hitherto refused to accept the certificates of the teachers of Anderson's University—viz., the assumption of academic status implied in the name of the institution—will not exist in the present case. We shall watch the establishment and progress of the new school with kindly interest and the best wishes for its success.

MISPLACED BENEVOLENCE.

A lay contemporary states that "Adelina Patti has evinced her deep and earnest sympathy with sufferers from throat disease by promising to return from the Continent some time in September for the purpose of laying the foundation stone of the Throat and Ear Hospital in Gray's-inn-road." Someone should inform the fair cantatrice that there is not the slightest need for establishing an excrescence of the sort named. Patients suffering from throat and ear affections are skilfully treated at our general hospitals. If the Marquise de Caux is desirous of gracing with her presence—which of itself would ensure a large measure of pecuniary success—the inauguration of a new medical charity, let it be one which receives the commendation and support of the profession.

DRUNKENNESS IN IRELAND.

The Report of the Inspector-Generals of Irish Prisons for 1874 shows an enormous increase in the amount of imprisonment for drunkenness in that country. The number of commitments to borough and county gaols has increased progressively from 6645 in 1867, to 14,008 in 1874. These represent, it appears, a more severe degree of punishment rather than a corresponding increase in the amount of drunkenness. Short periods of imprisonment, under forty-eight hours, are spent in the local bridewell, and are not included in the report. The magistrates have endeavoured to lessen the amount of intoxication by lengthening the period of imprisonment for it, as they are able to do under the new licensing Act. But the repetition for each offence of a comparatively short period of imprisonment is apparently, as might be expected, of no effect. It only, as the Inspector-Generals point out, enables the drunkard to recover from the effects of his debauch, and sends him out ready, and probably much inclined, to renew it. They recommend that habitual drunkenness should be visited with a term of imprisonment sufficiently lengthened to afford some chance of permanent recovery. But it is improbable that such a measure could be carried out. The moral of the report and recommendation is the urgent need for institutions which would not be prisons, in which the habitual drunkard could undergo a seclusion which would be remedial rather than directly punitive, and in which he might have some chance of recovery.

"RAILWAY SHOCK."

THE remote effects of shock on the nervous system constitute a grave financial drawback to the prosperity of some of our railway companies, and afford a ground for not a little divergence of opinion, out of which the unfortunate sufferer does not always obtain his due. The occurrence of a period of perfect health between the receipt of the accident and the supervention of the nervous symptoms is a condition to which the mind of a jury is particularly obtuse. They are more conscious of the promising field for simulation which this class of symptoms afford than of their possible reality and gravity. It is no doubt right that this should be the case to some extent. But a very slight degree of nervous breakdown may be sufficient to entirely disable the sufferer from following his accustomed employment. This was the result of a severe shaking in a case tried in the Sheriffs' Court a few days ago. The plaintiff was a commercial traveller, whose income depended on his constant use of railways, and it was alleged that the pain and nervous excitement which persisted two years afterwards incapacitated him from travelling to an extent which warranted heavy damages. The evidence, however, was not sufficient to satisfy the jury that more than very moderate compensation was indicated by the facts of the case.

PARENCHYMATOUS HEPATITIS.

AT a recent meeting of the Société de Biologie M. Cornil gave an account of the changes met with in the livers of patients who had died from parenchymatous hepatitis supervening in the course of puerperal fever, leukhæmia, typhoid fever, and variola. In all these cases he found similar changes to those which he had previously described as taking place in cirrhosis. The smallest biliary capillaries were filled with epithelial cells, finally obliterating the channels altogether. These changes being most marked in the peripheral ducts of the lobule, it is easy to account for the production of jaundice in these cases, the bile contained in the central canaliculi not being able to escape into the interlobular ducts. It will be seen that this explanation of the occurrence of jaundice in febrile affections is based on the view of there being mechanical obstruction to the outflow of bile; and whereas this obstruction is usually attributed to catarrh of the larger hepatic ducts, it is, on these researches, simply placed further back—viz., in the periphery of the lobules themselves.

SANITATION IN LEICESTER.

IN consequence of the prevalence and fatality of diarrhœa in Leicester during the last few months, the sanitary authority of the town determined to institute an inquiry into the cause and condition of such an abnormal visitation of disease. Dr. Buck and Mr. Franklin have been appointed to carry out the work of investigation, for which they are to be rewarded. They are instructed to visit every house in which the death of a child under five years of age from diarrhœa has occurred since the 1st July, and to ascertain particulars of each illness, and whether deceased had received regular medical treatment. The important questions of diet, the health and occupation of the parents, and the condition of the drainage are also to be worked out. The inquiries are to extend to all localities of the town where infantile diarrhœa is now prevailing, although no death has occurred, and a report is to be made with as little delay as possible. We have no doubt that the energetic action taken by the health authority will be the means of bringing to light the origin of the disease, and of indicating measures for its suppression.

THE CHAMELEON.

M. BERT has recently made some curious observations on the chameleon, which apparently indicate a very unusual relation of the two halves of its nervous system. Having removed the right eye of one of these animals, he produced, by irritating it, a rapid change of colour on the left side of the body. The right side was much longer in changing its colour, and did not acquire the same tint. He subsequently removed the left eye, and found that then the change of colour on irritation was regular and identical on the two sides. In another experiment he found that one of these animals, the right cerebral hemisphere of which had been removed, used only the left paw. On the subsequent removal of the left hemisphere it presented very active and bilateral reflex movements.

MAJOR BOLTON, in his last monthly report of the London water-supply, expresses an opinion that the contamination of water from the gases generated by sewage is of more frequent occurrence than is generally supposed. The gases are extremely liable to flow back into the cisterns and become absorbed by the water unless the overflow pipe is brought outside the house and the end left exposed to the air, instead of being carried into the drain. Although this simple and effective plan has been advocated over and over again in our columns, the importance of the subject warrants us in again impressing upon householders the necessity for its general adoption. The cisterns should be frequently cleaned out, especially after periods of flood and turbidity.

THOSE whose hard fortune compelled them to travel by the Underground Railway during the very hot days we experienced in the early part of this week must have realised the sensation of taking a Turkish bath, without being benefited by the processes of shampooing and washing. When these railways were first started, it was promised that the ventilation of the tunnels would be gradually improved as the system became developed. No real improvement, however, has been effected in this direction, and the atmosphere along the line is as foul and vitiated as ever. In all seriousness, we think the offensive acrid smoke and stifling heat inseparable from a journey on the Metropolitan should be avoided as much as possible by weakly persons.

FOUR years ago it was determined to commemorate John Hunter's long residence in Kensington—a period of nearly thirty years—by placing a memorial window in Kensington parish church. The last appeal for subscriptions is now being made. The sum in hand for the purpose amounts to £80, and further subscriptions (limited to 21s.) are solicited by Mr. Frank Buckland, 4, Old Palace-yard, Westminster, and Mr. J. J. Merriman, 45, Kensington-square, W. A list of donors will be published in the course of the year, and a drawing of John Hunter's house and grounds forwarded to each subscriber. Hunter will be worthily associated with Newton, Addison, and others whose memories are similarly preserved in the church.

THE existing Public Health Acts of 1872 and 1874 prohibit sanitary authorities and other parties from terminating their sewers in water-courses. Dr. Cameron, of Dublin, however, in a recent report on public health, considers that there are great difficulties in the way of disposing of sewage, and believes that in many cases it will be far the cheapest plan to allow the rivers to remain, as they have always been, the great natural drains, or main sewers of the country, and to procure supplies of pure water from a distant source.

WE are informed that the Royal Commission on Copyright has been definitely settled by the Government, and will, it is expected, meet to take evidence about January next, under the presidency of Earl Stanhope. The objects of the Commission will be to see how far, and in what direction, international, colonial, and domestic copyright can be improved. The subject is one of considerable interest to medical authors, some of whom will, we hope, be called before the Commission.

IN London 1483 deaths were registered last week, including 1 from small-pox, 36 from measles, 87 from scarlet fever, 7 from diphtheria, 50 from whooping-cough, 22 from different forms of fever, and 147 from diarrhœa. Different forms of violence caused 56 deaths, 10 of which were due to drowning. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained, on the 14th inst., 225 patients, of whom 163 were under treatment for scarlet fever and 6 for small-pox.

THE Secretary of State for the Home Department has directed Colonel Cox, R.E., to hold an inquiry with reference to a complaint of the Lea Conservancy Board, that the purification and disinfection of the sewage matter passing through the sewage works of the Local Board of Tottenham are insufficient. The want of such an inquiry has been felt in the locality for a long time past.

LADY COTTESLOE died a few days ago from the effects of poison taken inadvertently. She was suffering from rheumatism, and, in addition to taking medicine, was using a lotion, which, in an unfortunate moment, she drank in mistake for the mixture. After two days' suffering she died. Her ladyship was seventy-two years of age. We suppose the lotion contained aconite or belladonna.

THE Governors of the Royal Infirmary for Children and Women, situated in Waterloo-bridge-road, have decided on temporarily closing the institution in order to make certain much-needed alterations. A ward capable of holding 25 additional beds is to be added to the building.

DR. HARDWICKE held several inquests this week on bodies where death was directly attributed to overcrowding and want of fresh air. Evidence of a shocking condition of existence was given, and the imperative necessity of an Artisans' Dwellings Act was demonstrated.

WE understand that Mr. Corbett has, in consequence of ill-health, resigned the chair of Anatomy and Physiology in Queen's College, Cork—an appointment that he has most creditably held for a period of twenty-four years.

ACCORDING to recent accounts from Rome, the Pope's health has greatly improved within the last few weeks. His Holiness now does a large amount of work.

WE understand that the epidemic of enteric fever in Müller's Orphan Houses, Bristol, has now been almost entirely stamped out.

Correspondence.

"Audi alteram partem."

THE CASE OF GENERAL REECE, C.B.

To the Editor of THE LANCET.

SIR,—The very singular medico-legal questions involved in the case of the late unfortunate gentleman, General Reece, the publicity given to it by the coroner's inquest held at his death, and the article in THE LANCET of last week, may render some authentic account of his case interesting to the profession.

On the 1st day of July last I was requested to see General Reece. I found him in his own lodgings, a comfortless room without carpet, in almost total darkness, the shutters being perforce closed, as the lower pane of the window had been broken. General Reece received me very politely. We had a long conversation. I gathered from him and from his attendants that on the 17th of March he had had a seizure of some kind in the night, that this was followed by paralysis of the lower extremities, which he erroneously thought was now better. He had two nurses from an institution in the neighbourhood during the whole time. Within the last three or four days they had sent to the same place for a male attendant, the General being beyond their control and having broken the window. Against this man General Reece spoke in terms of great dislike.

He had, besides the paralysis, bronchitis and some symptom of heart disease. I advised his removal to a house in which his son was lodging, some few doors off in the same street. I thought he had been well and judiciously treated by Dr. Broxholm, and his medical treatment therefore remained unaltered. I had no doubt that General Reece was of unsound mind, and that certificates of lunacy were legally indispensable in his removal. These were accordingly signed by Dr. Broxholm and myself. Dr. Wood was also consulted, but was unable to write a certificate, although perfectly agreeing with me in my opinion of the General's mental state.

It was found impossible to remove the General from his house, although Dr. Broxholm and I had thought it practicable the day before. The curious question then arose, Could a patient be legally kept under control without certificates in his own lodgings as he could be in his own house? Upon this the opinion of the Commissioners in Lunacy was obtained, and under their direction an order was made by the son of General Reece, authorising the detention of his father, addressed to Wheeler, another attendant from the same Institute for Nurses. The certificates, signed by Dr. Broxholm and myself, were put in force, and General Reece was placed under the protection of the Commissioners. Dr. Broxholm and I considered the General to be suffering under organic brain disease, and to be partially imbecile, the effect of age and hard service in India. If there could be any doubt as to the correctness of the conclusions arrived at by the constant medical attendant of the General and myself, it may be dispelled by the fact that Dr. Maudsley, on the 13th of July, made an affidavit to the fact that the General was the subject of "senile insanity." After frequent visits I made a similar affidavit about the same date, and these affidavits are confirmed by the "statement" sent up by Dr. Stewart, as the official medical attendant under the statutes of lunacy. Dr. Quain and Dr. Wilks were also consulted in General Reece's case. As far as I know there has been no opinion as to the sanity of General Reece given in opposition to our affidavits by them or any other physician.

On the 12th of July the General died. Mr. Low, his banker and executor, applied for a coroner's inquest, alleging that confinement as a lunatic had accelerated his death. The verdict, as a matter of course, was "Death from natural causes." One or two of the jury (not the coroner, as it was erroneously reported) thought that confinement as a lunatic had been injurious. They would hardly have thus given pain to the General's family if they had known that the employment of such confinement, light as it was, was forced upon them by the exigency of the lunacy laws, and in my opinion could not have been carried out with greater gentleness and skill than it was by Dr. Broxholm. It is significant that Mr. Low should have made the application for an inquiry at the deceased General's own request. It was one of the marked characteristics of the General's infirmity of mind that he thought himself ill-treated by his sons, who, he thought, had kept him in bed, the fact being that he could not walk or even stand up without assistance.

In the opinion of Mr. Low, General Reece was always of sound mind. Upon his representation, the Commissioners in Lunacy made the most stringent inquiries into the case. At his application, judge's orders were freely made to give him access to the patient. At his desire, on the General's death, a coroner's inquest was held, at which Dr. Broxholm was closely examined. A writ of *habeas corpus* was also about to be issued; and, as it was, one of the judges himself went down to see the alleged lunatic, taking with him his own physician, Dr. Langston. It may be presumed that this course was adopted in order that the judge might be perfectly assured of the physical impossibility of the family of General Reece taking him into court. The action taken by the learned judge, Baron Cleasby, proves how much importance he attached to the question, and the promptitude with which he would have acted if he had found it necessary.

Mr. Low may be right; Dr. Broxholm, Dr. Maudsley, and Dr. Tuke, together with the family of General Reece, may be wrong. But it is abundantly clear that nothing has been done, on the one side, inconsistent with the conduct of people of proper feeling acting under the advice of physicians of reputation; nor, on the other side, has there been any difficulty in obtaining the fullest opportunity for investigation, and, if wrong had been committed, of speedy redress.

The case of General Reece shows very forcibly the intense jealousy of our English law of any undue interference with the liberty of the subject, and, with the present legal safeguards, the impossibility of any really sane man being wrongfully treated as a lunatic.

I am, Sir, your obedient servant,

Harrington Tuke.

Albemarle-street, W., August 18th, 1875.

WOOD v. THE MANCHESTER, SHEFFIELD, AND LINCOLNSHIRE RAILWAY COMPANY.

To the Editor of The Lancet.

Sir,—I think this trial, both on account of the medical questions which were raised in its course, and of some incidents in connexion with it, is worthy of notice in your journal, and will be of more than usual interest to the profession. It was brought, as you will see from the accompanying report, by the widow of a farmer, to recover compensation for the death of her husband, which it was alleged was due to the negligence of the defendants.

On Nov. 21st last the deceased was travelling on the company's railway, and as his train was standing still at Conisborough Station an engine and tender ran into it. The deceased was much shaken, and received a blow on the head, which left a contusion the size of a florin, by being thrown against the door of the carriage. He received also minor injuries about his wrist and elbow. Immediately after he got home he complained of pain in the head, and spent a restless night. He was able, however, next day to go to Dr. Seaborne for advice, feeling very unwell. He was given an aperient, and advised to go to bed. The company's medical officer, Mr. Fox, visited the deceased on Nov. 30th, and found him suffering from headache, sleeplessness, and shakiness. There was still the bruise on the temple. Up to Dec. 24th deceased suffered more or less constantly from the same symptoms, at times more or less severe, but on that and the following day he appeared to be so much better that he hoped he had quite recovered his former good health. Indeed, for some days previously the advisability of coming to an arrangement with the company about compensation had been discussed.

Late on the evening of the 25th December, however, the headache and restlessness returned in a more intense form, this time accompanied with vomiting. From that date he kept his bed, Dr. Seaborne attending him, and he was so much worse on January 2nd, that Mr. Lister, of Doncaster, was called in. His symptoms were then, intense headache, persistent vomiting, inability to retain food, constipation (except for two days, after a repeated aperient, of which more will be said), intolerance of light, muscular twitchings, and delirium. He was seen again by the company's medical officer on January 6th, who found him with a pulse of 130; temperature 103·4°; pupils dilated; a dry, brown tongue; pain on pressure in right iliac fossa. There was no rose rash anywhere on body. From this time until the 9th January, when he died, deceased gradually became comatose, with occasional violent delirium, convulsive twitchings, retention of urine, constipation, and dilated pupils. He was apparently partially conscious at times in the midst of his delirium, till near his death.

The post-mortem examination was arranged to be made on the 11th, and was fixed for 10 o'clock, notice of which was sent to the medical officer of the company. He did not, however, arrive till after 12 o'clock, and until, after waiting an hour or more for his attendance, the examination had commenced. It is owing to this unfortunate circumstance that a difference of opinion has existed with respect to the exact condition of the membranes, and the appearances they presented before and after his arrival—appearances which, from the peculiar nature of the case, were apparently the most important feature of the whole.

The contention of the railway company was, that deceased had, since the injury received (and for which they acknowledged their responsibility), contracted enteric fever and died of it.

The medical attendants of the deceased treated him for meningitis, and were of opinion that he died of that disease, and not of enteric fever. What light did the post-mortem throw on it? Did the appearances all point strongly to the one or undoubtedly to the other? And with respect to this part of the inquiry, and as one of the two gentlemen who made the examination, I will first mention those facts which were admitted by all to exist, and then those on which there was some difference of opinion. The conclusions which ought to be drawn from certain given conditions or groupings of facts I will not enter upon, except to indicate what were the views taken, and to give an example of the sort of questions raised, the attempted solution of which was attended with great difficulty to the legal mind. They are, indeed, purely medical questions, which, if they are cleared up, will certainly not be in a court of law. I think I am not wrong in describing the admitted facts of the post-mortem as these:—Lungs slightly congested; old pleuritic adhesions, left side; liver rather congested; heart healthy; kidneys healthy; duodenum, jejunum, and upper two-thirds of ileum healthy; in lower third of ileum intestinal catarrh; congestion and slight tumefaction of three or four of Peyer's patches; no ulceration; mucous membrane smooth and intact over its entire surface; no evidence of hæmorrhage in bowel; considerable quantity of healthy-looking fæcal matter of firm consistence. Spleen variously estimated at from 7 to 10 ounces—not weighed; not unduly soft. On the part of some—*both* who actually made the post-mortem—there are stated to be appearances of recent acute inflammation of brain membranes—viz., thickening and opacity of arachnoid; patches of effused lymph; adhesions in anterior portion of dura mater to the bone, and of both layers of arachnoid; meningeal vessels turgid; brain slightly injected. Mr. Fox, the company's medical officer, who came late, could not admit seeing adhesions or effusion, but admitted seeing several "pieces" or "filaments" between the layers of arachnoid, these not being bloodvessels. This, I submit, is rather an important admission.

So much for the intrinsic facts of the case. Then, in support of the theory of enteric fever, the railway company brought forward witnesses to show that in May last year there was defective drainage in the neighbourhood, and that there was a tank into which the drainage ran, which tank overflowed to such an extent that the overflow might reach a well in a quarry at some distance, from which quarry well the water was fetched which the family of deceased had used; that in May, 1874, there had been three or four cases of fever, probably enteric, in cottages close at hand; that the water had been tested, and that the water from the quarry well contained ·37 of a grain of ammonia per gallon, and some organic matter. This estimate was formed on

January 11th, 1875; no quantitative analysis was made in May, 1874. In opposition to this it was stated that the stratification was such that it dipped towards the tank or cesspool, and that it could only be after a heavy rain that it could overflow to such an extent as to reach the quarry well. It was thus difficult to prove *specific* contamination of the water, of which deceased used very little for drinking. None of the family, ten in number, among whom were six children, had suffered in health, the water being boiled for even washing purposes.

This, then, is the substance of the evidence, and it becomes a question to decide whether the symptoms during life, with the previous history, the post-mortem revelations, and the collateral circumstances of a sanitary nature, go to prove that the deceased died from the effects of injury or of enteric fever. It is really a case of *traumatic meningitis* versus *enteric fever*. Is there any way of deciding authoritatively which it has been? In favour of meningitis are the history of the blow and the nervous shock, headache; symptoms pointing beyond doubt to concussion and irritation of the brain up to the time of his death, with the exception of two or three days (from the 23rd December to 26th December), absence of characteristic rose rash, absence of diarrhœa, absence of ulceration of Peyer's patches after death. Did the *specific* (?) poison of enteric fever step in on those two or three days and go on to a fatal ending? If not then, when? If it did so show itself on the night of December 25th, was it a necessity that ulceration should be present? On this point Dr. Mahomed, of St. Mary's Hospital, is emphatic. If the fever lasted over sixteen days, he would certainly expect ulceration after death. In this opinion he is confirmed by Dr. Ellison and Mr. Wheelhouse. But did the fever, if it was there, last so long? Are there any means of dating accurately the commencement of the fever? In answer to this, Dr. Clifford Allbutt, with the scientific impartiality which would be expected from him, admitted that the early symptoms of enteric fever were very uncertain in duration and kind, and that it was impossible, in a great number of cases, to say when the fever commenced, as, after its first inception, there was a "silent period" of longer or shorter duration. If, then, there be an absence of the characteristics of enteric fever —of those which make it a certainty—(although, of course, there *may* be no rose rash, or diarrhœa, or ulceration in the progress of a fatal case of enteric fever), is there anything in this case which is inconsistent with traumatic meningitis? The intestinal catarrh and tumefaction of Peyer's patches would be presumptive of enteric fever, if taken apart from other circumstances, but when it is added that the deceased had administered to him strong purgatives (composed of calomel, scammony, and gamboge) by Dr. Seaborne, on account of constipation, and afterwards calomel again, with the effect of diarrhœa for two days, it is not surprising that such a condition existed. Niemeyer was referred to in corroboration of this. It is also a well-known fact, that in traumatic or inflammatory fever the same occurs, the intestinal mucous membrane presenting the "appearance of acute catarrhal inflammation, with some swelling of the lymphatic structures, if there has been diarrhœa" in the course of the disease. I am quoting from Dr. Green's Pathology and Morbid Anatomy, second edition, page 226. Further on are mentioned some interesting results of Dr. Burdon-Sanderson's observations on the subject, which show that the lesion setting up the inflammatory process need not necessarily communicate with the external air in order to give rise to a septicæmia. This is the explanation I should have given of the intestinal catarrh, though no doubt it was aggravated by the purgatives.

The intermission of a day or two, as shown by Mr. Erichsen, is a very frequent occurrence in cases of traumatic encephalitis.

It was unfortunate that the spleen was not weighed at the post-mortem, but as it was not judged by anyone to be beyond the limits it might reach in health, it does not affect the issue, though it also becomes enlarged sometimes in traumatic fever.

The medical evidence in this case extended over three whole days, and resulted in a verdict for the plaintiff, and I cannot but think that if the medical profession were in possession of all the evidence they would come to the conclusion that it was a just and true one, and that the jury have deserved the praise accorded another jury by yourself in The Lancet of July 31st, for their discrimination—that "through juries science often speaks." It is no doubt a pity that the case was ever allowed to go to trial, and that the railway company was advised to show such uncommendable alacrity in making intricate a case which, standing on its own merits, was tolerably clear from the commencement. Would it not have been a suitable dispute for arbitration by competent judges?

I am, Sir, yours faithfully,

Doncaster, Aug. 13th, 1875. J. B. Withington.

P.S. Some blame was attached to the medical attendants of the deceased for raising an objection when the medical officer of the company wished to remove the affected portion of intestine for examination by an expert—after the brain and the membranes had been so destroyed as to be unfit for a similar purpose. Doubtless it would have been better had the objection not been made, but should not the membranes have been treated in the same way?

It would be interesting to know whether the iliac pain and tympanites Mr. Fox noticed on his visit was before or after the administration of the strong purgatives, and also whether it would have been more strictly in accordance with professional usage to have visited the patient in conjunction with his own medical attendant?

CHLOROFORM OR ETHER.

To the Editor of The Lancet.

Sir,—I have read (in your impression of August 7th) with great pleasure the interesting and practical letters of Messrs. George Pollock, R. Brudenell Carter, and J. Warrington Haward, and am glad to avail myself of the opportunity of recording my personal experience of the relative merits of chloroform and ether as anæsthetics. My observations have not been anything like so colossal in their proportions as Mr. Carter's, but inasmuch as they have been made in connexion with a different class of cases, they may be of interest to those travelling the same professional track as myself.

I have used ether and chloroform in about an equal number of cases during the last two years. Those in which ether has most favourably commended itself to my attention are the cases in which it is often necessary to continue the anæsthetic for a considerable length of time, such, for instance, as ovariotomy, abdominal sections, operations upon and in the region of the uterus, vagina, perineum, rectum, &c. It is not a very uncommon occurrence to meet with instances in which continuous anæsthesia is necessary (from various causes) for an hour, an hour and a half, or even two hours under exceptional circumstances. In such cases ether is a most valuable and reliable anæsthetic. Once well under its influence the patient is perfectly quiet and free from the various indications of pain which are, not uncommonly, observed when chloroform is inhaled, as well as from the sudden attacks of spasmodic cough so often met with in chloroform administrations; these spasmodic troubles are most unpleasant to the operator. Reaction after ether, when long continued, is both rapid and well marked. I may here state another most important fact—viz., that I have never known vomiting to occur after ether inhalation. This is a point of vital importance to those having much to do with ovariotomy, plastic operations about the bladder, perineum, &c. I well remember a case, ten years ago, which was the occasion of the greatest possible anxiety. Vomiting of a very urgent character came on during the night following the operation. So severe and prolonged were the spasmodic contractions that the sutures gave way, and the abdominal contents were forced out of the cavity. The patient had again to be placed under chloroform while they were returned, and the wound again secured. The lady recovered ultimately, but the accident was a most unpleasant and dangerous one.

The failures in plastic operations about the bladder and perineum from the same cause (vomiting) have, in my experience, been more numerous than from all other causes put together. If this is the experience of practical men, how highly ought they to appreciate so valuable an anæsthetic as ether.

There is a certain small percentage of cases met with from time to time to which chloroform appears to be altogether unsuited, and in which, if pressed, it would be, as far as I have had an opportunity of judging, incompatible with the life of the patient. Three such cases have come under my personal observation during the present year. The first was a lady aged twenty-six, suffering from a very obscure and painful abdominal tumour. A thorough and careful examination, under chloroform, was deemed necessary to complete the diagnosis. The second was that of a young lady aged twenty-one, who had been suffering from continuous uterine hæmorrhage for four months, which had greatly reduced her strength and impaired her general health. This lady, being unmarried, strongly objected to a vaginal examination, and chloroform was necessary to overcome the objections of herself and friends. The third was that of a married lady aged thirty-eight years, suffering from an old-standing fistula in ano. Although these three ladies differed so much in age and class, as well as in the diseases from which they severally suffered, yet the effects of chloroform upon them appeared to be identical. After chloroform had been inhaled quietly for a short time, sudden and distressing symptoms of suffocation occurred, accompanied with severe struggling and spasmodic pains about the region of the heart of a most alarming character. So great and urgent were the general symptoms, that for some minutes there were considerable doubts as to the ultimate safety of the first and third cases. In all the contemplated operations had to be abandoned for the time. The first two cases, however, took ether, preceded by the "gas," two days after the unsuccessful attempts with chloroform, with the greatest possible ease, comfort, and safety, while the third was so thoroughly frightened by her chloroform experience that nothing could induce her to try the ether; she preferred the pain of the operation to what she called "the horrors of chloroform." These, I submit, are types of the class of cases which fall victims to chloroform inhalation when pressed beyond a given point. I feel certain that two of the three patients mentioned above would have died if the chloroform had been continued.

There is another important class of cases in which ether is entitled to supremacy over chloroform—namely, those of extreme nervous irritability, whether the result of constitutional peculiarity, of disease, or of alcoholic absorption. It is a well-known fact that such persons will usually absorb an extraordinary quantity of chloroform, which in some cases appears to accumulate in the system. Suddenly, when all seems to be going on satisfactorily, the head falls to one side, the face becomes deadly pale, the lower jaw drops, the eyelids are widely separated, while the eyes are fixed and staring, giving to the patient the appearance of death, respiration being for the time arrested, and the heart's movements reduced to a feeble flutter. I have, unfortunately, had more than one opportunity of observing such cases. By active artificial respiration, &c., such patients usually recover, but they are not by any means pleasant objects for contemplation.

Since writing the above I have read Mr. Hodges' letter on the "relative *ultimate* safety of chloroform and ether" (THE LANCET, August 14th). It is suggested that the inhalation of ether is more frequently the cause of bronchial irritation than chloroform. My experience would lead me to the confirmation of this view under certain circumstances—viz., where ether is given *directly* and in *large* doses it will be followed by a certain percentage of cases of bronchial irritation, leading to troublesome bronchitis. But this is not the case, as far as I have had an opportunity of observing, where the ether is *preceded* by the nitrous oxide gas.

I must apologise for this long letter, but the importance of the question at issue must be my excuse.

I am, Sir, your obedient servant,

Chester-square, S.W., August, 1875. THOMAS CHAMBERS.

THERE has been an outbreak of foot-and-mouth disease in the neighbourhood of Thurles, Tipperary, but a considerable abatement in the malady has lately taken place. A good deal of sickness, however, prevails among children in the locality, which is supposed to arise from the deleterious effects of drinking milk from cows affected with the disease.

BIRMINGHAM.

(*From our own Correspondent.*)

SMALL-POX at last seems to be dying out; only four new cases being reported for the week ending August 7th, while no deaths from the disease have taken place, and only twenty-nine patients remain in the special hospital. Had equally good means of isolation existed at the outbreak of the epidemic in 1871, there would not, probably, have been 7699 reported cases and 1269 deaths. The sad but convincing lesson has taught our sanitary authorities the importance of endeavouring to stamp out the disease in future by efficient vaccination, early removal and isolation of all cases, and treatment by a special medical officer in a detached hospital. Other sanitary improvements are about to be undertaken by the Corporation under the Artisans' Dwellings Act, in the removal of some of the wretched hovels now occupied by the working classes, and the substitution of new modern buildings, with good approaches, and suitable drainage and water-supply. The deaths for the past quarter have been, according to Dr. Hill's recently issued report, at the rate of 24·30 per 1000, a slight increase of the rate over the corresponding period of last year, but rather due to the prevalence of chest and brain diseases than to those of a zymotic type.

The new fever wards opened in May have not been much used at present; only eleven cases were admitted up to the end of June, but all of these did well. As the advantages of the hospital become better known, no doubt parents will be more ready to send their children to it. Typhoid fever is still present, though it is not of a severe type.

The Birmingham already overcrowded workhouse is to be extended, and an additional resident medical officer appointed; such an officer ought to have been elected long ago, for the work has for years been greater than any one surgeon could perform thoroughly.

The Committee of the Children's Hospital have wisely determined to cease putting infectious cases in the present in-patient wards, and to build two detached infectious wards, each to contain ten beds, also a new mortuary at a greater distance than the present one from the main building.

Walsall is going to make a special effort on the 28th inst., by means of simultaneous collections in all the manufactories and workships, to increase and further develop the cottage hospital. A new wing is wanted to accommodate serious accidents and burns, and this will cost about £1000—a comparatively small sum for such a purpose, and one which ought to be raised in so wealthy and populous a place as Walsall on any one Saturday in the year without the slightest difficulty.

Lord Lyttelton presided at the annual meeting of the Governors of the Birmingham and Midland Eye Hospital, when a very gratifying report was presented; 800 in-patients and 7626 out-patients were treated during the year, as against 658 and 7230 respectively during the preceding year, and the reserve fund had increased from £1644 to £2329. A larger and more commodious building was suggested, but no decision was come to as to removing the hospital from its present central and very convenient site.

Dr. Ballard has again been giving trouble to the sanitary board of another of the great "Black Country" towns by one of his outspoken reports. Wednesbury, however, is spoken of somewhat more favourably than Oldbury or Sedgley, in that its streets are better kept, and that its water-supply is more ample, only 11·8 per cent. of the houses being unsupplied with waterworks water. Still the death-rate is high, the sewers are miserably bad and insufficient, and "description could not impart a notion as to the terribly unwholesome condition of some of the courts and of the habitations in them."

Mr. F. G. Hamilton, who has for the past twelve months been performing the duties of house-surgeon at the Queen's Hospital, has been elected senior house-surgeon to the Royal Free Hospital, London.

There have recently been two successful cases of amputation at the hip-joint in the Children's Hospital. In one case, where the operation was performed for extensive necrosis in a boy aged twelve, there was a rapid recovery; but in the other, a girl aged six, convalescence was protracted. Antero-posterior flaps were made in each case; no tourniquet was used, the vessels being compressed by the thumb, and yet very little hæmorrhage occurred. Under the care of Mr. Elkington and Mr. Thomas, there have also been two excisions of the hip-joint, which seem likely to do well.

At the Queen's Hospital Mr. West performed ovariotomy on a woman aged thirty-eight, who had been married seventeen years, and was the mother of eleven children. The cyst was multilocular, and contained 300 ounces of yellow albuminous fluid, in which floated a great quantity of cholesterine crystals. A small incision was made, and the pedicle fixed with Wells's cramp. On the fourth day the superficial, and on the seventh day the deep, silver sutures were removed, and the patient is free from all symptoms of peritonitis, and is likely to make a good recovery.

Mr. Furneaux Jordan lately had under treatment a man aged thirty-four, the palm of whose hand was lacerated by machinery, and who, on the eighth day after the accident, showed signs of tetanus. The wound was at first poulticed and then dressed with terebene. Chloral hydrate in thirty-grain doses, and subsequently bromide of potassium, were administered with excellent effects, for the tetanic spasms ceased, and the patient was, at the expiration of a month, on the high road to recovery.

Birmingham, August, 1875.

PARIS.

(*From our own Correspondent.*)

Professor Wurtz, Dean of the Paris School of Medicine, having been appointed to the vacant chair of Chemistry at the Faculty of Sciences, will necessarily be obliged to send in his resignation as Dean of the Paris Faculty. On account of the difficulty, however, which is experienced in finding a successor to him, his resignation has been withheld until the reopening of the School in November next. The appointment will very likely be given to M. Sappey, Professor of Anatomy, or M. Gavarret, Professor of Natural Philosophy. All the professors of clinical medicine or surgery are exceedingly reluctant to accept the post of dean, which would take up much of their time, and materially interfere with their professional and nosocomial pursuits.

Active preparations are being made for the forthcoming session of the French Association for the Advancement of Science, which is to take place at Nantes on the 27th, 28th, and 29th inst. The meeting promises to be as successful as those previously held at Lyons and at Lille. It will include many pleasant scientific excursions into Brittany. The medical section bids fair to be highly active and well represented. Amongst the medical and scientific notabilities who have promised to be present on the occasion may be noticed the names of Dumas, the celebrated chemist; Claude Bernard; Wurtz; Professors Baillon, Broca, Verneuil; Marey, of the Collége de France; Lancereaux and Pozzi, of the Paris School of Medicine; Bertillon, Gallard, Pouchet, de Ranse, &c., of Paris; Professors Courty and Béchamp, of Montpellier; Ollier, of Lyons; Leudet, of Rouen; Azam, of Bordeaux, &c. &c. Any information required on the subject of the meeting may be obtained by writing to the secretary, 76, Rue de Rennes, Paris.

It is said that the new Minister of Public Instruction has decided on the adoption of a hygienic measure of reform as regards the dress of the schoolboys in the Lyceums or Government schools. The youths, instead of wearing the present kind of rather tight uniform frock-coat, buttoning up closely in front, would have a loose woollen jacket, allowing greater freedom of movements and fuller expansion of the chest. There is no doubt that the proposed reform would be excellent from a sanitary point of view.

The Municipal Council of Paris is now considering a report on the contemplated rebuilding of the dissecting-rooms of the Ecole Pratique and of the Clinique d'Accouchement, of the urgency of which all who have visited the precincts are fully aware.

According to an article published by the *Pungolo* of Milan, the cremation of a dead body, that of a Chevalier Keller, has been authorised and effected in that city in the presence of several distinguished advocates of incineration, amongst whom were M. Palasciano, of Naples; Professor Coletti, of Padua; Dujardin, of Genoa; and Messato, of Naples.

The heat is at present very severe, and several cases of sunstroke are daily registered. In the provinces the heat has been equally intense, and Professor Daubree, of the Paris Museum, was very nearly killed by falling in one of hollows of the Auvergne mountains under the influence of sunstroke.

In the last list of nomination of Knights of the Legion of Honour figure the names of some professional brethren for the distinguished services which they rendered during the inundations at Toulouse and Agen. Dr. Bonnemaison, head physician, and Nelson Batul, head surgeon of the Toulouse Hôtel Dieu, have been especially singled out. The name of Sœur Penin, the worthy Lady Superior of the same hospital, who, by her great energy, contributed to save so many lives, must also be mentioned with the preceding, as having been the object of the same distinction.

The distribution of prizes has just taken place at the celebrated School for the Deaf and Dumb, founded by the Abbé de l'Epée. The ceremony was presided over by M. Rihouet, Councillor of State, and as he delivered his address one of the professors of the establishment conveyed it to the pupils by means of gesture and mimicry. More than 250 scholars performed afterwards a series of military exercises, going through various manœuvres, which were commanded and executed by means of signs as quickly as if by verbal orders.

Paris, August 18th, 1875.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Aug. 12th:—

Price, Arthur, Surrey Villas, Thornton-heath, Croydon.
Stephens, Charles, Upper Parliament-street, Liverpool.

The following gentlemen passed the Primary Professional Examination on the same day:—

Bain, David Stuart Erskine, Charing-cross Hospital.
Todd, John, University College.

The Library of the Royal Medical and Chirurgical Society was closed on Monday last, the 16th instant, and will be reopened on Thursday, September 16th.

Dr. John Lowe has been placed on the Commission of the Peace for King's Lynn, and Mr. John L. Williams, M.R.C.S. Eng., for Carmarthen.

Alderman Wm. Groom, J.P., public vaccinator for the first district of the Wisbech Union, has been awarded the first Government grant of £18 4*s.* for successful and efficient vaccination.

The ship "Bremen," of Liverpool, is reported to have just put in to San Francisco with every one on board, passengers and crew, more or less ill with scurvy. Sixteen persons died on the voyage, three while within sight of port.

Bequests, &c., to Medical Charities.—Mr. James D. S. Douglas, of Chilston-park, Maidstone, has bequeathed £200 each to the West Kent Hospital and the Ophthalmic Hospital, Maidstone. Mr. Thomas Osborn has given £100 to the Northampton General Infirmary.

Medical Appointments.

Alcock, J., M.R.C.S.E., has been appointed Public Vaccinator for the Parish of Burslem, Staffordshire.

Archer, E. G., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 5 District of the Guiltcross Union, vice Farrington, resigned.

Ashby, H., M.B., has been appointed Demonstrator of Anatomy at the Royal Infirmary School of Medicine, Liverpool, vice Harris, resigned.

Baines, E. C. A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Nettlebed District of the Henley Union, vice Munro, resigned.

Barker, A. E. J., L.R.C.S.I., has been appointed an Assistant-Surgeon to University College Hospital.

Beck, M., F.R.C.S.E., has been appointed Teacher of Operative Surgery at University College, vice Heath, resigned, on being appointed Holme Professor of Clinical Surgery.

Bullmore, W. K., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Falmouth Parish Urban Sanitary District: £20 per annum.

Conolly, Rowley, M.R.C.S.E., has been appointed Surgeon in Charge of the European Residents in River Brass, West Coast of Africa, vice Stanmore, whose term of service has expired.

Curwen, C., M.R.C.S.E., has been appointed a Junior House-Surgeon to the Royal Free Hospital, vice Griffiths, resigned.

Davies, H. H., M.R.C.S.E., Medical Officer for the Llandyssul District of the Newcastle-in-Emlyn Union, has been appointed also Public Vaccinator; also Medical Officer of Health for the Llandyssul Sub-district of the Newcastle-in-Emlyn Rural Sanitary District, vice Jones, deceased.

Dunlop, W. M., M.B., C.M., has been appointed Surgeon to the Woodbridge Court of the Ancient Order of Foresters, Suffolk.

Fearnley, W., L.R.C.S.Ed., has been appointed Medical Officer for the Parish of Lerwick and Gulberwick, Shetland, vice Macdonald, resigned.

Hamilton, F. G., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Free Hospital, vice Powell, resigned.

Hart, Dr. W. H., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births and Deaths, for the Tullow Dispensary District of the Carlow Union, vice Burnett, deceased.

Hayman, F. D., M.R.C.S.E., has been appointed House-Surgeon to the Metropolitan Free Hospital, Devonshire-square, vice Gallimore, resigned.

Hincks, T. S. H., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Herefordshire District of the Hay Union, vice Smith, resigned.

Hodson, H. A., M.R.C.S.E., has been appointed a Junior House-Surgeon to the Royal Free Hospital, vice Hayes, resigned.

Lewis, Mr. T., has been appointed House-Apothecary to the Bridgwater Infirmary, vice Smith, resigned.

M'Aldowie, A. M., M.B., C.M., has been appointed House-Surgeon to the Royal Surrey County Hospital, Guildford, vice Birch, resigned.

Marshall, A., M.D., L.F.P. & S. Glas., has been appointed Medical Officer to the Ayrshire Friendly Sick Society, Kilmarnock, for 1875–76.

Nally, W. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kinwarra Dispensary District of the Gort Union, Co. Galway, vice Hynes, resigned, and since deceased.

Nolan, J. J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Tullow Fever Hospital, vice Burnett, deceased.

O'Kelly, R. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Medical Officer at the Limerick Union Workhouse.

Parsons, F. J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Royal Humane Society for Portland.

Petit, J., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Resident Superintendent of the Donegal Lunatic Asylum, Letterkenny, vice Merrick, appointed to the Antrim Lunatic Asylum, Belfast.

Poore, G. V., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to University College Hospital.

Roe, C., L.R.C.S.I., has been appointed Superintendent and House-Surgeon to the Chalmers' Hospital, Banff, vice Donald, resigned.

Smith, P., M.R.C.S.E., has been appointed Ophthalmic Surgeon to the Queen's Hospital, Birmingham.

Taylor, J. M., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Burslem South-West District of the Wolstanton and Burslem Union, vice Goddard, resigned.

Walby, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Medical Officer to the No. 2, or North District of the Ladies' Charity and Lying-in Hospital, Liverpool, vice Pughe, transferred to No. 8.

Births, Marriages, and Deaths.

BIRTHS.

Campbell.—On the 13th inst., at Wellesley-terrace, Prince's-park, Liverpool, the wife of Wm. Macfie Campbell, M.D., of a daughter.

Duncan.—On the 12th inst., at Buckingham-palace-road, the wife of H. M. Duncan, M.D., of a son.

Snagg.—On the 13th ult., at St. Vincent, West Indies, the wife of Richard Snagg, M.R.C S.E., L.R.C.P.Ed., of a son.

Ward.—On the 15th inst., at Saltburn, Twickenham-common, the wife of Martindale C. Ward, M.D., of a daughter.

Weber.—On the 13th inst., at Grosvenor-street, the wife of Hermann Weber, M.D., of a son.

MARRIAGES.

Pringle—Smith.—On the 17th inst., at Nolton Chapel-of-Ease, Bridgend, Henry Turnbull Pringle, M.D., Medical Superintendent of the Glamorgan County Asylum, to Jessie Isabella, only daughter of the late Thomas George Smith, Esq., of Bridgend, Glamorganshire.

Ross—Smith.—On the 10th inst., at St. Peter's, Brighton, Alexander Clarke Ross, M.D., Surgeon-Major Army, to Sarah Ann Watts, daughter of the late George Smith, Esq.

DEATHS.

Anniss.—On the 6th inst., at Albert-road, Tamar, Devonshire, Wm. James Anniss, L.F.P. & S. Glas., aged 38.

Digan.—On the 9th inst., at Plymouth, Patrick Digan, M.D., R.N., aged 55.

Inglis.—On the 11th inst., at Worcester, Florence, wife of Alex. Inglis, M.D.

Jefferiss.—On the 8th inst., at Dalkeith, Robt. R. Jefferiss, M.R.C.S.E., aged 74.

Johnson.—On the 14th inst., at Southwick-street, Hyde-park, Cavendish Johnson, M.R.C.S.E., Surgeon-Major Indian Army (retired list).

Ker.—On the 7th inst., at Dumfries, John A. Ker, M.D.

Rowley.—On the 10th inst., at Milton-next-Sittingbourne, Kent, John Rowley, M.R.C.S.E., aged 63.

Snow.—On the 16th inst., at Lincoln, James Snow, F.R.C.S., in his 95th year.

Ward.—On the 10th inst., at Penistone, Yorkshire, John Ward, M.R.C.S.E., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Silent Paving.

The Whitechapel District Board of Works have gracefully responded to the application of the authorities of the London Hospital for a silent paving material to be laid down in the roadway fronting and at the eastern end of that institution, by passing a resolution that East Mount-street be paved with wood. The boon which will be thus secured to sufferers in the hospital in the shape of increased quiet will necessarily be of incalculable value, and cannot but be heartily appreciated by the patients, especially by those in whom the nervous system is more directly affected.

Enquirer.—An excellent little book on the subject (Mushrooms) has been written by Mr. Cook.

The paper of *Mr. Robert Lawson* (Wakefield) shall be immediately published.

Case of Double Facial Paralysis and Deafness in a Patient suffering from Syphilis.

To the Editor of The Lancet.

Sir,—The following case is, I think, of sufficient interest to warrant its publication.

R. W——, male, aged thirty-five years, tall, spare, and not over temperate in habits, just before leaving America for England, became infected with syphilis. Three weeks after inoculation a small indurated chancre made its appearance at the frænum of the prepuce, and was followed in a few days by enlargement of the inguinal glands of the right side, and in eleven days by sore-throat and a macular eruption about the face and neck. No treatment was adopted during the voyage; but upon admission to the Lock Hospital of the Liverpool Workhouse on the 17th December, 1873, he was given a solution containing five grains of iodide of potassium, with one drachm of solution of perchloride of mercury, three times a day. Symptoms of salivation manifesting themselves on the 1st January, 1874, the mixture was discontinued. At this time he complained of pains about the body, more especially of the right side of the head and right shoulder, which became intensified at night. There was slight nodulation of the right clavicle and tenderness down the spine, with startings of both legs, and a constant singing in the ears. On the 2nd of January the patient became aware of inability to close the right eye, and from this date symptoms of *right* facial paralysis developed themselves. On the 28th of the same month the left side of the face became similarly affected, and by the 31st the whole face had become a blank expressionless mask. He was unable to close either eye, and when he tried to whistle the breath came out between the lips in a horizontal line from one corner of the mouth to the other. The hearing was equally good in both ears, and sensation perfectly natural on both sides of the face. Though no more mercury had been given, symptoms of salivation still persisted. As he complained of great pain in the brows and head, with restlessness and inability to sleep, he was given bromide and iodide of potassium. By the 10th of February the symptoms of intense restlessness, sleeplessness, and pain had become relieved, and the left side of the face had resumed some of its natural appearance, the muscles of that side putting on a tremulous involuntary motion. The hearing on the right side now began to get dull, and, all symptoms of salivation having for some time passed away, the patient was given one mercurial vapour bath a day, with the result of the reappearance of salivation on the third day. On Feb. 24th there was great prostration of strength and severe pain in the right ear, in which were heard loud sounds as of rushing water. Upon examination with the ophthalmoscope, the optic discs were seen to present a fringe of vessels, forming a vascular ring, in the centre and round the outside of which the parts were pale. This vascular ring was darker in the left than in the right eye. Upon applying glycerine to the tongue, it was tasted distinctly at the right edge, but not at all at the left edge. Faradisation of the muscles produced muscular spasm on both sides. On March 10th the hearing on the left side began to be affected as the right was a month previously. One grain of mercury with chalk and ten grains of compound ipecacuanha powder were now given at night, but, the gums becoming tender, had soon to be discontinued. On April 4th, in order to test the patient's susceptibility to the action of mercury, half a grain of mercury with chalk was ordered to be given twice a day; but on the third day, the specific action of the drug manifesting itself, and erysipelas showing itself on the left side of the head and face, it was discontinued. The erysipelas extending over the whole of the head and face, a mixture of iodide of potassium, iron, and ammonia was given; and on the 9th of May, after the erysipelas had entirely passed away, thirty-grain doses of iodide of potassium alone were administered, and increased till as much as sixty grains three times a day were taken. Under this treatment the patient's health steadily improved, and he became quite stout and strong; the deafness of the right ear passed away, and the left side of the face began to assume a more mobile and natural appearance, the right side, however, continuing paralysed. At the end of July the left side of the face presented its natural appearance. There was, however, complete deafness on that side. The right side of the face still showed evidences of paralysis, though slight. There was a scaly papular eruption on the left arm, and the right inguinal and left cervical glands were slightly indurated.

As the patient ate well, slept well, and felt well, he considered himself quite well, and, against advice, persisted in discontinuing treatment and resuming his seafaring career.

I remain, Sir, yours &c.,
J. H. Barnes,
Late Surgeon to the Liverpool Workhouse Infirmary.
August, 1875.

Honorary Secretary.—The bill is a most discreditable production. If anything could add to the discreditableness, it would be that the writer should be in good practice, and not able to fall back on the common excuse of impecuniosity. The Medical Society in question should express and record in plain terms its opinion.

Mrs. Duckett.—It does not constitute a disqualification.

Human Styes.

A week or two ago we referred to a proposal which had been made, under the new Artisans' Dwellings Act, to improve a foul spot lying to the north of Holborn, and bounded on the west by Gray's-inn-lane. Another area, in Whitechapel, of even worse character, is about to receive the deserved attention of the Metropolitan Board of Works. In this area there wallow 2369 people, each person having, according to Mr. Liddle's estimate, only on an average 8·2 square yards, and the rate of mortality in the locality was, in 1873, 38·4 per 1000. The description by Mr. Liddle of some of the courts and alleys in this region is simply appalling, and serves to show the urgency of the need of the legislation which Mr. Cross's Act has to some extent supplied.

Dr. Muscroft (Pontefract) is thanked for his letter.

The Death under Chloroform at Quarry Bank.

To the Editor of The Lancet.

Sir,—I must apologise for again troubling you with a letter upon the above subject; but Mr. Ashmead's letter in last Saturday's Lancet, in which he tries to controvert my statements, compels me once more to deal with a few facts relating to the case.

1. Let me say that since I last wrote I have obtained from the coroner an official copy of the evidence given at the inquest, and shall therefore, in any allusion I may make to Mr. Ashmead's evidence, quote word for word from that document.

2. In Mr. Ashmead's letter to you he says, "the condition of the heart's cavities indicated syncope, yet the bloody froth issuing from the mouth and nostrils, and the intense violet tint of the face, as well as the condition of the lungs, pointed towards death from suffocation."

There can be no doubt whatever that the appearance of the face was entirely post-mortem, the result of decomposition—not surprising when the state of the atmosphere and the time of year are taken into consideration, together with the fact that the subject had been dead three days. Mr. Ashmead himself, in his evidence, confirms this fact; for he says "the skin had commenced peeling off the arms in consequence of decomposition."

3. The point in his letter, however, that I wish most particularly to draw attention to is the following: "The statement that the abdomen contained three pints of pus is perfectly Munchausen in character. In the hurry of cross-examination I overstated the amount, which was, in reality, not more than three ounces diffused about." But this is in direct opposition to Mr. Ashmead's own statement as given in evidence to the coroner, in which he says: On examining the abdomen, a *large quantity* of matter—pus—was found there." Afterwards, in cross-examination, he stated: "There was more than a pint of matter collected in the abdomen."

With regard to my statement of the case in The Lancet of August 7th, I simply said that Mr. Ashmead did not in my presence make any examination as to the amount of pus in the cavity, and that I should certainly think, from appearances, that there must have been at least three pints of pus.

Mr. Ashmead also stated before the coroner that he detected chloroform in the tissues. I am not aware of any known process by which it could be detected three days after death.

In urging upon the police in the first instance the necessity of an inquest, I did so believing it to be a duty incumbent upon me to have elucidated a matter of so much importance to the public and of such interest to the profession.

With these remarks I leave you and the readers of The Lancet to judge who deserves the name of "Munchausen."

I am, Sir, yours truly,
August, 1875. Hugh R. Ker.

P.S.—One of the leading London pathologists taught me, when a student, never to rely on any test for consolidated lung, save that of throwing portions of it into water. This test was not applied at the post-mortem.

Danger of "Wakes."

At Haslingden an outbreak of small-pox is reported by the medical officer of Health, Dr. Harrison, to have originated as follows:—Three weeks ago an Irish haymaker took the disease and died. The rural sanitary authority put out placards warning people to keep away from the infected dwelling, but the Irish persisted in visiting it. When the man died the medical officer appointed a watchman, who stayed until midnight, and then left. After this the Irish entered, and held a wake over the body. Soon after the wakers were stricken, and two died, whose remains it was found necessary to bury within twelve hours. There are now four persons suffering from small-pox in the village, and whose infection is traced to the disastrous and stupid custom practised by the Irish.

A. M.—The law has not prescribed any rules on the subject.

Unqualified Medical Practitioners and the Registration of Deaths.

To the Editor of The Lancet.

Sir,—In corroboration of what your correspondent states in your last, I may add that, as a result partly of registrars not being supplied with a copy of the Medical Register, one of these gentlemen in my neighbourhood stated it was not his business to test the validity of any certificate transmitted to him; that if a certificate, signed, and purporting to be from a registered practitioner, came to him, he did not think of questioning it. He has, however, since, on receiving a certificate from an unqualified person on blank paper (not official), gone to the friends and asked them if they were satisfied that their child or relative died of the complaint so stated!

Another registrar in an adjoining parish, on getting a certificate signed by a medical man who did not see the case from first to last, when this was reported to him, did make inquiries, and finding this to be irregular, to say the least, reported the same to the superintendent registrar of the district, who told him it was no business of his, and if some other medical man in the neighbourhood chose to take it up he could do so.

These are two instances out of many under my observation, and which only go to prove what a sham this registration of deaths is as at present carried out.

Yours &c.,
August 17th, 1875. Justitia.

Ovarian Compression in Fits of Hysteria.

Dr. Charcot, of La Salpêtrière, believes that in the majority of hysterical fits there exists an *aura* which takes its starting-point in one or other of the ovaries, and sometimes in both. Therefore, in order to arrest immediately a fit of hysteria, it suffices to exert strong pressure over the ovary where the aura is seated. In his hospital wards he has often shown the effectiveness of the method, alternately checking an hysterical fit or allowing it to go on by applying or removing compression. In order to exert protracted pressure he makes use of a sort of tourniquet. In manual compression, the fingers are pushed down behind the pubis, where the artery can be felt distinctly beating.

Chiron.—The letter is too long for insertion. We shall consider the question.

Army Medical Department.

To the Editor of The Lancet.

Sir,—In a leading article of a contemporary of the 24th ult., commenting on some Army Medical Regulations recently issued, there are so many erroneous statements that one feels constrained to notice them, as they may give rise to much misconception outside the department. A contrast is drawn between these Regulations and the book of Medical Regulations issued in 1859, and the completeness of the latter as compared with the former is dilated on. All the criticism, however, is uselessly expended, as it is based on the utterly wrong assumption that the rules just issued constitute the new code in its entirety. It is well known that they form only a very small portion of it, dealing merely with four subjects.

The part of the paragraph referring to attendance on parades, which has been taken as an illustration of slovenly, unintelligible composition, and contradictory statements, is, I find, an extract from the Queen's Regulations, which, no doubt, had to be quoted as the authority on the matter; and to instance, if indeed necessary, a parallel case, of the significance in which the word "attendance" is employed, everyone in the service is aware that a medical officer is said to attend rifle firing, although he may not be actually on the ground, but only within call.

The regulations with regard to the distribution of the sick, which is adduced as another example of contradiction, were practically in force in every consolidated regimental hospital—that is, the sick were grouped regimentally, and treated by the regimental medical officers; but certain wards were appropriated for sick prisoners, cases of infectious disease, ophthalmic cases, lunatics, &c., and in these wards patients were treated irrespective of corps distinction. The duty of thus segregating certain cases, and determining the wards in which they are to be placed, now devolves on the medical officer in charge, and therefore he is given the power detailed in paragraph 3, page 9. One fails to perceive wherein the inconsistency exists.

It is asked, what about those medical officers who live at a distance from the station hospital when the sick are to be treated by the medical officer attached to corps? It is well known that a great outcry was raised when medical officers attached to corps were debarred from hospital practice. Now that they are to attend to the sick of their corps "as far as practicable" in the station hospital, an objection is at once raised on the score of a contingency that may occasionally arise, and which it is the duty of the administrative medical officer of the district to provide for.

The remark made with regard to those living within the prescribed radius is simply a slur on medical officers who ought to be acquainted with the army circular, in which the distance is laid down. No doubt the extent of the prescribed radius will be mentioned in the new code in its proper place.

With regard to paragraph 7, page 6, in which it is stated that non-commissioned officers and men are not to be treated out of hospital, it is merely a quibble to assert that it is contradictory to the preceding, which, on the other hand, plainly shows that it only can refer to patients requiring hospital treatment.

The query is put, How can a medical officer attached to a regiment keep the regimental medical records in barracks when he is to treat the sick of the corps in hospital? The answer is, that there are regimental medical returns and station hospital returns; the former are kept in the barracks, because they are not wanted at the station hospital; and the latter at the hospital, as they are not required in barracks.

In fact, not one of the charges brought against these Regulations has been in any way substantiated; and to show the unfair, one-sided kind of criticism in the article referred to, out of four subjects, two, that would be, I dare say, susceptible of some modification before the new code is issued in its complete form, have been seized upon for unfavourable comment.

In conclusion, I have only to add that where so many blunders have been committed by the writer, one begins to doubt his capacity to judge of the capability of those who have the responsibility of drawing up the new code of Army Medical Regulations.

Your obedient servant,
August, 1875. Fair Play.

Lex.—A registered practitioner cannot legally depute to an unqualified assistant the duty of signing certificates required by law. If our correspondent knows of an instance in which paupers are attended entirely by an unqualified assistant, he should report the facts to the Board of Guardians or the Local Government Board. Such a system is both discreditable and illegal. Friendly Societies have the remedy in their own hands, and may do as they please.

Sigma.—Information as to baths will be found in special works. Our correspondent will judge better than we can of the fee for the surgical service referred to. The other service mentioned was not a professional one.

Discharge of a Calculus from the Umbilicus.

To the Editor of The Lancet.

Sir,—A case somewhat analogous to the second of those related by Mr. Edward C. Anderson in this day's Lancet is given in the "Biennial Retrospect of Medicine, Surgery, &c., for 1871-72," published by the New Sydenham Society, page 279. It is the case of the discharge of a cholestearine calculus, weighing 390 grains, from the umbilicus of a young lady. It was supposed that the calculus had been three years making its way to the surface.

I am, Sir, yours faithfully,
Penzance, Aug. 14th, 1875. A. B. B.

Cookery.

Considering the important part that the skilful preparation of food plays in dietetics, it is to be regretted that the labours of the National Training School of Cookery have not been attended with more success than the published results would seem to imply. Out of 766 pupils who have passed through the school, only three have succeeded in obtaining diplomas as teachers. These numbers are so disproportionate as to suggest some defect in the method of instruction, were it not for the strong testimony that has been borne to the excellence of the lectures given at South Kensington.

Mr. Lawson Tait. — Centralblatt für die Medicinische Wissenschaften, No. 26, 1875.

The Indian Medical Service.

To the Editor of The Lancet.

Sir,—As a regular reader of The Lancet, I have an opportunity of seeing many of the letters and communications written on the subject of the medical services, Naval, British, and Indian, and it is with regret that I observe there is an apparent misunderstanding as to the value of the Indian service, as compared with the others, as a career for the young surgeon. It is a matter for regret, inasmuch as it places us in a false light, and misleads others.

I have no private ends to serve, I may remark, in speaking depreciatingly of the service to which I have the fortune to belong. What I am about to say is mainly intended for the benefit of those students or others who may at the present moment be contemplating entering one of the public services, and who may not have as yet decided which they consider worthy of their choice. I would advise those who have no special reason for selecting the Indian service, to pause ere they do so in preference to entering one of the others, with the new Naval Medical Warrant before their eyes, and the prospect, it is to be hoped, of an early adjustment of the grievances of the officers of the army medical department.

I shall say nothing of the advantages or otherwise of the sister services, inasmuch as students can easily inform themselves thereof at home, but shall confine my remarks to the Indian service, in regard to which such mistaken views frequently prevail amongst students, and teachers, too, for the matter of that, to whom the former so frequently look for advice on the point.

I have an honest wish to represent the Indian medical service in its true colours, even though my doing so may destroy the illusions of some of Dr. Fayrer's audience on the occasion of his recent address at Netley. About this same address the *Indian Medical Gazette* of June 1st remarks: "The address dwells exclusively on the bright side of an Indian career, and the prizes of the service are prominently exhibited. A curtain is drawn on the dark side—unemployed pay, officiating appointments, frequent and expensive moves, not a little favouritism and jobbing, confused administration, depreciation of the value of salaries, increasing expenses of living, bad health, separation from wife and children, domestic troubles and trials." And I would add from myself, though last not least, miserably inadequate pensions on retirement. I ask, in the name of fairness and common sense, why did the address dwell exclusively on the bright side of an Indian career? Is it fair, is it just, considering the weight that would naturally attach to Dr. Fayrer's utterances on the subject, and the degree to which they may influence, if not determine, the career of many who are still *in statu pupillari*, either directly or indirectly through their teachers? If a man were to dwell exclusively on the advantages of service on the West Coast of Africa, and the rapidity of promotion accruing therefrom, I wonder how many of those who accepted his dictum, and acted upon it, would afterwards bless him? Dr. Fayrer's good fortune and success, though, doubtless, no more than he deserves, may at the time have helped him to forget that his career should not by any means be taken as illustrative of that of the average Indian military or civil surgeon.

To return to the points noted in the *Indian Medical Gazette.* The "unemployed pay" rule alluded to is a source of great disappointment and heart-burnings to the young surgeon. From the wording of the rules supplied to him from the India Office, he is led to expect, as I was myself eight years ago, that he is entitled to the employed rate of pay on passing the prescribed examination in one of the languages of the country, and performing duty. But no such thing. It may be years before he is permanently posted to a regiment or civil station, until when he draws the unemployed rate only, plus some acting allowance. The latter is not unfrequently swallowed up in travelling expenses, if the acting appointment be of short duration, or the journey a long or expensive one, as the Indian Government will not allow travelling expenses if the increase in emoluments be never so small. This is no imaginary picture, as a reference to the Army List will show that there are surgeons on the Madras establishment of the season of '69 who have up to the present never been permanently posted to either a military or civil appointment. Officiating appointments involve diminished allowances, uncertainty of tenure, and frequent moves, every one of which latter is more or less expensive.

I shall allow myself to do no more than mention the fact that favouritism, jobbing, and confused administration exist in the Southern Presidency. The depreciation in the value of salaries, however, is a matter of common interest to all; the depreciation in the value of money and ruinous rate of exchange on home, with unfortunately the concurrent increased and increasing expenses of living, are unpleasant facts, and most unquestionably seriously diminish the value of Indian appointments.

The probability of bad or deteriorated health from lengthened residence in the tropics, with the certainty at some time or other of separation from wife and children, are, and have always been, drawbacks to an Indian career; but ought, none the less, be taken into account in estimating the relative value of the different services while there is still a choice.

The pension rules, framed for other days and under different circumstances, are miserably inadequate to enable a man, after a service of twenty-five or thirty years in India, to live in comfort at home, and help to provide for a family, if haply he have such; and the depreciation of the value of salaries and increased expenses of living above alluded to render it simply out of the question for the majority to save sufficient to supplement these pensions to any extent.

I dare say it is known to the Editor of The Lancet, and it ought to be to everyone who contemplates an Indian career, that the medical funds, which formerly formed one of the principal attractions of the service, are no longer available, Government, with cruel parsimony, having debarred all those who entered since 1860 from joining them. These funds, which often enabled a worked-out man to retire by supplementing his pension, have now, as their most miserable representative, the Indian Family Pension Fund of 1873, which, though demanding high donations and subscriptions, gives a wretched pittance to widows and orphans, and lacks altogether the annuity branch, which provided an annuity after a certain number of years' service, as above mentioned. This new Fund is, in the opinion of many, no better, if so good as an insurance on one's life, high though the Indian rates for the latter are.

These, Sir, are some facts connected with this much belauded and eulogised service, which students are encouraged so to enter.

There are other matters which I should much wish to notice, but that I fear I have already trespassed too much on your space, but which may form the subject of a future communication, if you will permit me.

I trust you will give insertion to this in the columns of The Lancet, and that it may be the means of provoking expressions of opinion from other members of the service, and so ventilating our grievances.

I remain, Sir, your obedient servant,
Madras Presidency, June 19th, 1875. Local.

Value of Partnership.

A Constant Subscriber.—Everything depends on circumstances. A good partnership—by which we mean association with a good partner in a sound practice—should be worth two years' purchase; but a bad partnership would be cheaply avoided at the cost of one year's profits.

A. M. D.—We have not received copies of the examination papers referred to by our correspondent. They are published in the departmental blue-book; but it is not our practice to print them in our columns.

Dropsy of the Amnion, requiring the Removal of the Fluid and consequent Induction of Premature Labour.

To the Editor of The Lancet.

Sir,—The following case will, I think, be found sufficiently interesting and rare to warrant its publication.

Mrs. G——, a tall, pale woman, of active habits, and the mother of eight children, two of whom were twins, engaged me to attend her some three months previous to the time expected. She at the same time complained of loss of appetite, weariness, &c.; but her reason for sending for me was that she scarcely passed any urine; it often did not amount to more than three or four ounces in the twenty-four hours; it was intensely acid, and loaded with lithates; no albumen. For some weeks I tried various diuretics, tonics, &c., but without benefit. She steadily got worse, so that about four weeks after I first saw her she had to take to her bed. She now had constant cough, sleeplessness, loss of appetite, and great emaciation, and seemed to be in a very critical condition. On placing my hand on the abdomen, I found it enormously enlarged, and uniformly fluctuating. The girth at umbilicus was forty-two inches. On vaginal examination, the uterus felt like a tightly distended bag of fluid; the os high up, and pointing backwards; cervix entirely obliterated; ballottement very well marked. I requested my friend Mr. Cheesman to see the case with me, and we came to the conclusion that it was one of dropsy of the amnion, and that the membrane should be perforated without delay; but we thought it our duty to urge on the friends the propriety of calling in Mr. Martin Coates, of Salisbury, who came and agreed to what we proposed doing.

The following day I perforated the membrane with a porcupine quill, intending to let the water drain off as slowly as possible. In less than an hour two gallons had been caught, and at least one more had soaked through the bed. Pains came on in about six hours afterwards, and in two hours more she was delivered of a male infant, who feebly gasped once or twice. The placenta came away naturally, and was very small. In all the similar cases I can find recorded it seems to have been extremely large.

I forgot to say that no fœtal heart could be heard, and that on one occasion I distinctly felt, through the abdominal wall, the movements of the child.

The patient made a good recovery, and is now in excellent health.

I remain, Sir, yours truly,
Gillingham, Dorset, August, 1875. T. Woods, L.R.C.P. Lond.

Ancient and Modern Medicine.

To the Editor of The Lancet.

Sir,—In discussing Dr. Warburton Begbie's Address in Medicine, you state that the question he quotes from Sir Wm. Hamilton, "Has the practice of Medicine made a single step since Hippocrates?" was put by the illustrious professor in 1832, and you ask whether, "allowing that Sir William's question was not unreasonable in 1832," there was any justification for Dr. Begbie reviving it in 1875.

Allow me to draw your attention to the fact, which you can easily verify for yourself in one of our public libraries, that the question referred to was not put in 1832, when the original article appeared in the *Edinburgh Review*, but that it appeared for the first time in 1852 in the collection of the Professor's essays, published under the title of "Discussions on Philosophy and Literature," and that it was then contained in a note which was enclosed in square brackets, to signify that it was new matter. This note having naturally given offence to some of the Professor's medical colleagues in the University, another was added in 1853 in the second edition, in which the author strove to justify his position by stating that he had only quoted from high medical authorities, and making further quotations from them to the same effect. It is from these two notes published in 1852 and 1853 respectively that Dr. Begbie has quoted, though probably many readers of the Address would have thought, with you, that he referred to the original article. It seems to me, however, that the fact of Sir Wm. Hamilton's question having first appeared twenty years later than you supposed, fully justifies Dr. Begbie's selection of it as his text, and adds point to your observations as to its ungraciousness.

I am, Sir, your obedient servant,
Fitzroy-square, Aug. 14th, 1875. H. Nelson Hardy.

Injurious Effects of Vegetable Decomposition.

To the Editor of The Lancet.

Sir,—I should feel most grateful to any of your numerous readers who could indicate to me where I am to find information on the injurious effects of vegetable decomposition in the production of fevers and disease generally in any part of the world. Your obedient servant,
Great Marlborough-street, Aug. 6th, 1875. Medicus.

OVERCROWDING IN IRELAND.

A SANITARY officer in the county of Clare reports that he lately found ten human beings in a tottering mud edifice 13 ft. by 7 ft. Seven slept in one bed, and a younger member of the family in a hen-coop. The roof was decayed and riddled with holes, and a dunghill of putrefied matter outside emitted a terrible stench. One child was quite naked. The family are receiving out-door relief. Although the foregoing account depicts a most extreme case of overcrowding, we have no doubt that metropolitan medical officers of health not unfrequently come across parallel cases in some of the courts and alleys which we hope to see improved away in a few months.

EXPENSES OF WITNESSES IN VACCINATION PROSECUTIONS.

THE *Local Government Chronicle* states as follows:—

> "In a case which recently came before the justices at Taunton, a question of some importance was raised with reference to the expenses of prosecutions under the Vaccination Acts. Mr. Goodman was summoned for not having his child vaccinated; and Mr. Trenchard, the clerk to the guardians, conducted the case for the vaccination officer. After submitting evidence as to the failure to comply with the requirements of the statute, Mr. Trenchard said that it was the second time that they had had to bring Mr. Goodman before the justices. On the first occasion they had to issue a process to obtain the fine, and he asked for the full penalty to be imposed. As he considered it hard for the ratepayers to have to pay the costs of himself and the vaccination officer for attending there, he must also ask the Bench to make an order for the professional expenses in the case.—The defendant said that Mr. Trenchard and Mr. Cornish, the vaccination officer, were paid officers of the union, and attended in the discharge of their duties.—Mr. Trenchard replied that he appeared there, not as clerk to the guardians, but as the professional adviser of Mr. Cornish, who would receive what the guardians thought fit for his attendance. Whatever the guardians gave him would come out of the ratepayers' pockets. Their attendance did not come within their ordinary duties; he was simply there as solicitor to the vaccination officer.—Captain Doveton said the Bench had decided to convict in the case, and to inflict the full penalty—20*s.*, 6*s.* costs, and 10*s.* 6*d.* each for the attendance of Mr. Trenchard and the vaccination officer—in all, £2 7*s.*"

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. H. Tuke, London; Dr. Bell Taylor, Nottingham; Rev. W. H. Rothery, Cheltenham; Mr. Higgins, London; Dr. Lloyd Owen, Birmingham; Mr. Brown Sim, Nottingham; Mr. T. Woods, Gillingham; Mr. R. Lawson, Wakefield; Mr. Hardy, London; Mr. Meadows, Hastings; Mr. Withington, Doncaster; Dr. Kitchener, Derby; Dr. R. Farquharson; Mr. Archer, Diss; Mr. Robinson, London; Mr. J. H. Barnes, London; Mr. Webster, Lynn; Dr. Clapham, London; Mr. R. H. Hunter, London; Mr. Plumbe, London; Mr. Richardson, Liverpool; Mr. Ingpen, London; Mr. Merriman, London; Mr. Richardson, Bryngwy; Dr. Ryott, Newbury; Mr. Owens, East Farleigh; Dr. Wyllie, Edinburgh; Mr. Swinson, Leamington; Mr. Jeaffreson, Framlingham; Mr. Arminson, Preston; Mr. Ker, Birmingham; Dr. Rayner, Southport; Dr. Neale, London; Mr. Hogg, London; Messrs. Barclay, Falmouth; Dr. Madden, Dublin; Dr. Hunter, Pontypridd; Dr. Chatterton, Hayfield; Mr. Murray, London; Mr. Lyle, Dalston; Dr. Dunlop, Woodbridge; Dr. Muscroft, Pontefract; Mr. Wyer, Earlswood; Dr. Aitken, Inverness; Dr. Humble, Corfe Castle; Mr. M'Rae, Penicuick; Mr. Hatchard, St. Leonard's; Messrs. Wright and Co., Birmingham; Mr. Williams, Bangor; Mr. Munro, Cupar; Dr. Pritchard, Aspatria; Mr. Eddison, Leeds; Dr. Burder, Bristol; Dr. Speedy, Dublin; Messrs. Salmon and Ody, London; Mr. Bellamy, Rotherhithe; Dr. Brett, Watford; Mr. Edwards, Furneaux Pelham; Dr. Kennedy, Kirkdale; Mr. T. Chambers, London; Dr. Dale, Patterdale; Dr. Acland, Oxford; Mrs. Duckett, Green Hill; Mr. Barber, Sheffield; Dr. Mitchinson, Lincoln; Messrs. Burgess and Co., London; Mr. Pelton, Tunbridge Wells; Mr. Brierley, Macclesfield; Mr. Whitton, Blackburn; A. M. D.; A. B. B.; R. R.; Justitia; Sigma; Ipswich; A. R. M.; Phos; Potestas; &c. &c.

LETTERS, *each with enclosure,* are also acknowledged from — Mr. Morris, Birmingham; Mr. Jackson, Huddersfield; Mr. Kerr, London; Mr. Clare, Seaford; Mr. Thomas, Swansea; Mrs. Butler, London; Mr. Cresswell, Norwood; Dr. Inglis, Worcester; Mr. Smith, Bridgend; Mr. Tucker, Owston Ferry; Mr. Ferguson, Ardwick; Mr. Megleston, Plymouth; Mr. Forsyth, Torphins; Mr. Miller, Brixton; Mr. Moore, Brackley; Dr. Ball, Blaenavon; Mr. Fox, London; Mr. Allen, Manchester; Mr. Nicholson, Leeds; Dr. Buckell, London; Dr. Booth, Oswaldtwistle; Mr. Weir, Birmingham; Mr. Southam, Wolverhampton; Mr. Moxon, Northampton; Mr. Lowes, Sedgefield; Mr. Macfarlane, Milford Haven; Mr. Fielding, Alfreton; Mr. Morris, Iver; Messrs. Southall and Co., Birmingham; Mr. Grote, Silverdale; Mr. Nowell, Halifax; Dr. Waller, Peterborough; Mr. Manby, Sierre Leone; Messrs. Denning and Co., Bristol; Mr. Izod; Mr. Silverlock, London; Dr. Campbell, Liverpool; Mr. Coxe, Whithill; Mr. Lambert, Edinburgh; Rev. W. B. Maxfield; Mr. Douglas, Wymondham; Mr. Crook, Keynsham; Dr. Waters, Liverpool; Mr. Lawrence, Towcester; Mr. Coles, Oldham; Mr. Capel, London; Mr. Vevers, Hereford; Mr. Hensley, Broadway; Mr. Thomas, Brockley; Dr. Ward, Twickenham; Mr. Bosworth, Sutton; Mr. Stuckey, London; Mr. Morris, Iver; Mr. Phillips, St. Albans; Mr. Robinson, Maidstone; Mr. Elliot, Leinster; Mr. Long, Parkgate; Mr. Roberts, Coningsby; L. S. A., Hythe; A. B., Chorley; F. E.; A. B., London; W. T. W., Edinburgh; Medicus, Bristol; E. M. D., Liverpool; J. A. P., Merton.

Liverpool Post, Western Daily News, Yorkshire Post, Manchester Guardian, Huddersfield Chronicle, East London Observer, South Wales Daily News, Cork Constitution, Surrey Advertiser, Leeds Mercury, Newcastle Critic, Glasgow Herald, Welshman, Record, Irish Times, Dublin Express, Lynn Advertiser, and *Keighley News* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, AUG. 19TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Aug. 13	29·72	W.	62	64	105	76	61	0·04	Raining
" 14	30·06	W.	61	63	109	79	61	0·06	Overcast
" 15	30·22	W.	65	72	115	79	60	...	Cloudy
" 16	30·10	S.	66	72	119	87	62	...	Bright
" 17	29·99	W.	62	70	116	85	65	...	Bright
" 18	30·11	W.	61	67	113	77	63	...	Cloudy
" 19	30·19	N.W.	59	62	...	...	58	...	Overcast

Medical Diary for the ensuing Week.

Monday, Aug. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Aug. 24.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Aug. 25.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Aug. 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Aug. 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. — Mr. W. Cole: "Remarks on a Parasite of the Humble Bee (*Sphærularia bombi*)."

Saturday, Aug. 28.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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ABSTRACT

OF A

Clinical Lecture

ON

A CASE OF SYPHILITIC DISEASE OF THE LIVER,

WITH PECULIAR PHYSICAL SIGNS IN THE ABDOMEN.

BY HENRY THOMPSON, M.D., F.R.C.P.,
PHYSICIAN TO THE MIDDLESEX HOSPITAL.

THE following case, as it is recorded in my note-book, possesses features of multifarious interest; it is here immensely abridged, and only those points are enlarged upon which stand in immediate relation to the liver.

W. H——, aged forty, a hawker and a hard drinker, was admitted originally on the 17th February, 1874. He had always been a strong man, and for the most part able to do the work of a professional pedestrian—walking at the rate of six miles an hour for two hours together—until four years before the date of admission. He then suffered from pain in the left side of the abdomen, much increased by the ingestion of food. In the course of half a year he entered the Brompton Hospital, and remained under treatment there for nine months, with enlargement of the liver accompanied by severe pain. At the close of that period his liver, so he was told, had become smaller. He himself assigned six weeks as the duration of his present illness, and latterly, it is true, he had vomited from time to time; but his abdomen had always been large, and his pains had continued on and off in a slight degree without increasing severity at any time during the whole interval of three years and a half preceding admission. His disease, then, must have been of long standing, and his own reckoning must be set aside altogether.

On admission he presented the physical signs of ascites, along with a trace of jaundice in the complexion. Dulness over the liver region enormously extended in every direction, below over half the abdomen as far as the level of the umbilicus, and above as far as the second rib, but here the extension is obviously owing to an abundant effusion into the pleural cavity, occupying the lower two-thirds or four-fifths of the chest on the right side. The dulness, however, fails to represent the full measurement of the organ, whose inferior margin may be traced an inch further downwards by palpation than by percussion. Everywhere over the abdominal area of the liver-dulness a sense of displacement is experienced when the fingers are pressed sharply home on the subjacent mass, and everywhere the surface of the organ underneath appears to be broken into ridges and hollows. In the region of the spleen there is dulness reaching as far as the transverse umbilical line, and, on long inspiration, even below that level. The hand may be easily inserted into a narrow gap between the opposing margins of the liver and spleen. Heart's impulse undulating and widely diffused, yielding a very extensive thrill. First sound loud and clear, especially at the left apex, where it is slowly evolved, hesitates, and, as it were, hangs fire. Ordered a powder consisting of tartarated iron and cream of tartar every six hours, and a draught containing copaiva three times daily.

Feb. 19th.—Girth of abdomen rapidly diminishing; fluctuation subsiding; urine double the normal quantity.

24th.—Jaundice disappearing. Patient wandered slightly during the night, and in the morning vomited a porringerful of greyish black muco-puriform matter.

28th.—To the left of the umbilicus there is a delicate purring sensation or fremitus plainly felt when the palm of the hand is laid lightly on the surface, but at once destroyed when the pressure is increased. At the same spot a humming sound may be heard on auscultation if the experiment be gently made, but the sound is at once abolished when the ear is applied firmly to the surface.

March 9th.—The fauces, and in particular the mucous membranes of the hard and soft palate, are intensely injected, and in many places pitted with hæmorrhagic erosions. Derived apparently from this source, large quantities of glairy-looking blood-stained sputa are expelled daily.

23rd.—The level of the percussion-dulness over the right back of the chest is now lower by three inches than on the date of admission, and all trace of fluid in the abdomen has disappeared. This day the patient received his discharge.

On the 18th of June, 1874, he was readmitted with signs of augmented effusion into the right pleural cavity. Thoracocentesis was proposed to him, but he resolutely refused to undergo the operation. He was again discharged on the 2nd of July.

On the 29th of December in the same year he was again readmitted in the following state:—There is dulness over the lower half of the chest on the right back, but free resonance from clavicle to nipple. No thrill can be felt at the heart's apex now, but the first sound is long, lagging, and briefly prefaced. The sputa continue to present the characters before described, and the membranes of the soft and hard palate are as vividly injected as ever. There are no physical signs of ascites. The left lower ribs beneath the mamma are much enlarged and rougher than natural, and in the same situation there is a prominent fluctuating mass, unaltered by position or pressure. The old purring and humming sensations may be elicited, as before, on the left of the umbilicus, but the seat of their production is no longer limited to that spot; they may be recognised just as clearly in the right hypochondrium under the same conditions.

On the 2nd of January, 1875, two ounces of laudable pus were withdrawn by aspiration from the abscess over the ribs. On the 26th occurred a sharp attack of fever, followed by commencing erysipelas on the face. At the same time a greyish-black, sloughing, superficial ulcer was seen to occupy a large portion of the velum and fauces. On the 31st hæmatemesis supervened on three several occasions, the blood lost amounting on the whole to about five or six pints. From this time forth to the close of life nothing of any moment ensued, with the exception of an attack of jaundice. The erysipelas, the hæmatemesis, and the ulceration of the fauces all disappeared entirely, and the man simply sank and died on the 15th of February.

Autopsy, condensed from Dr. COUPLAND'S *Report.*—Glands of groin enlarged; no scar on penis. Seated mainly beneath the periosteum of the tenth rib on the left side were the remains of an abscess occupying the two adjacent interspaces, and containing inspissated cheesy material, in which was found imbedded a fragment of the rib lying bare and detached from the rest of the bone. The left superficial epigastric vein was seen within the sheath of the rectus muscle to be greatly dilated; it was about the size of the little finger, and was traced towards the left and above the umbilicus, where it became very varicose; its further course was not followed, but a vein was observed on the ligamentum teres nearly the size of a crow-quill. The internal mammary veins were also enlarged and full of blood.—Thorax: On the right side the pleural sac was filled brimful with a clear dark-yellow fluid, showing a sediment of paler colour and creamy puriform appearance at the back near the spinal column. The lung, collapsed and carnified throughout, was dragged away from the spine by bands of adhesion attached to the extremities, but allowing the organ to hang free at the sides in the mid-cavity of the pleura. The left lung was unadherent, non-crepitant, intensely engorged, and dripping with blood. The inferior margin of the lower lobe was compressed by the adjoining spleen and collapsed in its whole extent. The mitral valve was competent to a stream of water projected through the aortic orifice, but the cusps and the chordæ tendineæ were greatly thickened.—Abdomen: The peritoneal cavity contained barely a pint of bile-stained fluid. The liver was displaced downwards; bands of adhesion passed from its surface to the parietal peritoneum; they were most plentifully supplied with bloodvessels, which were fully injected, and all running from the liver to the walls of the abdomen. The liver itself was strangely misshapen, its lobes being broken up by deep furrows into a multitude of irregular knobs, while the whole surface was more or less granular. The capsule presented numerous thickenings unevenly distributed. There was also well-marked fibrous thickening at the bottom of the furrows and along the course of the larger portal canals, and here and there were seen small tracts of caseous character in the midst of the denser material. The liver substance was throughout permeated and toughened by this fibrous change, so that it was nearly impossible to distinguish any individual lobules, the general appearance being that of fine granules, of various sizes and shades of colour, interspersed with larger masses of a dark-green tint. The weight of the organ was 56½ oz. There was no dilatation of the interstitial bile-ducts; in fact, their presence could hardly be ascertained. The hepatic and common bile-ducts were also free. The spleen was immensely enlarged. It was adherent to the parietal peritoneum; the capsule was dense, opaque, and puckered; the parenchyma firm, fibrous, dark-red, and liver-like. The mesenteric veins were fully engorged. The stomach was the seat of partial hour-glass contraction. The lining membrane was thick and firm, and everywhere of a deep slate-black colour. In the region of the fundus were numerous punctiform erosions, all surrounded by a zone of pigmentation, and some of their number filled with a black-coloured plug of altered blood. The entire mucous membrane of the intestines was exceedingly vascular and thick, while in the ileum the patches of Peyer were brought plainly into view on the red ground by their uniform slaty discoloration. The kidneys were enlarged, congested, and indurated. The testes were nearly normal. None of the viscera showed any trace of lardaceous degeneration.—Head: There was a clot found in the longitudinal sinus, and the vessels of the pia mater were full of blood. The dura mater and the brain-substance were healthy.

On a review of the foregoing case, it is impossible not to recognise that the root of all the mischief lay in the inflammatory attack that occurred four years and a half ago. Inflammation, however, does not exclude syphilis; and, if we are to accept the pathology of the present day, to syphilis we must refer the strange disfigurement of the liver described in the notes, in spite of many and grave misgivings, on the score of the following antagonistic facts:—The man himself stoutly repudiated the charge of syphilis, although he freely confessed to gonorrhœa; there were no manifestations of the disease in question on the surface of the body; there were no unequivocal gum-like formations anywhere; above all there was no evidence of amyloid degeneration. On the other hand, the round-topped eminences, flanked on each side by a deep cleft, at the bottom of which runs a stream of fibrous tissue, for the most part along the channels of the larger portal passages,—these are the very features which are held to be pre-eminently distinctive of the syphilitic liver in its outward configuration. They are, indeed, rough representations on the massive scale of what appears in the finer form and in miniature when the liver is simply cirrhosed. Not that cirrhosis is incompatible with syphilis; far from it, they are often associated. In our own case there was cirrhosis characteristically displayed in its truest colours.

Again, the caries of the rib and the abscess developed originally between the bone and the periosteum strike the balance in favour of syphilis, and far outweigh all presumptions to the contrary on the ground of the absence of gum-like formations or amyloid change. After all, the former may have had a real existence within the fibrous septa, and then disappeared, the caseous material remaining as the débris of their disintegration. In reference to the latter, it is, indeed, passing strange that syphilis should fracture a rib, and, while leaving its mark so strongly impressed upon the liver, should yet leave no trace of amyloid degeneration anywhere.

Clinically regarded, the following are the prominent points in the history of the case. Under the influence of copaiva the ascites passed away, at least so far as to be no longer discoverable during life. Other remedies were administered at the same time, but to copaiva I am convinced must be awarded the priority of place in the accomplishment of the cure. I have met with more than one marvellous illustration of the power of this medicine in dispersing ascites and restoring life where death appeared to be staring the sufferer in the face. It is, indeed, inconceivable that copaiva can in any degree modify the primary condition of the ascites—the disease in the liver itself. It is only a diuretic, but in many cases it is one of the surest and steadiest of its class, free and uniform in operation, allowing fair play to the overtasked veins, and giving them full leisure to recover tone and power to bear the strain of the exaggerated blood-pressure. In this way, by a course of strong diuretics, aided in the first instance by paracentesis, by hydragogues, and vapour baths from time to time, and by tonics throughout, we may indulge the hope of achieving a speedy cure of ascites in a minority of cases. In the majority the great point is to sustain the strength; the method of evacuation, though still indispensable, is now of less moment, and in the main we trust to the great physician Time, who works in a wholly different way, by the construction of new vessels or by the expansion of anastomoses already in existence, thus establishing what is known as the collateral circulation. In this point of view our own case becomes intensely interesting. I am not here called upon to enumerate all the by-paths in the circulation that conduct the portal blood to the right side of the heart when it is denied a free passage by its own high road through the liver. These are all well given by Dr. Goodeve in the article on Cirrhosis in "Reynolds's System of Medicine," and they were all beautifully illustrated by the disclosures of the deadhouse above recorded. I would, however, lay particular stress on the series of new vessels that pervaded the false membrane, on the enlarged superficial epigastric vein within the sheath of the rectus muscle, and on the enlarged vein coursing along the ligamentum teres; whether with Rokitansky we look upon the last-named vessel as the unobliterated and engorged umbilical vein, or with Sappey we regard it as one of the accessory portal veins. Be that as it may, it is a matter of the deepest moment, in cases of cirrhosis, to ascertain, if possible, during life, whether the collateral circulation be fairly well established or not. What evidence, then, have we bearing on this point? Of course in a large proportion of cases we see the uppermost vessels conspicuously streaking the surface of the abdomen. Below the surface there runs an unseen auxiliary circulation, whether conveyed by channels nominally superficial or nominally deep-seated. Have we any evidence of this drainage that is going on underground and out of sight? With regard to the deeper strata of bloodvessels, I cannot say with absolute certainty that we have, but with reference to those which, though invisible, are yet immediately underneath the surface, our own case is conclusive as far as itself is concerned. We had the clearest evidence on this score in the purring sensation and in the humming sound perceived exactly over the spot corresponding to the enlarged superficial epigastric vein, and again towards the right hypochondrium over the seat of the vascular false membrane, and not far from the neighbourhood of the ligamentum teres. I dare not, however, presume to apportion precisely to the respective vessels their several shares in the production of the aforesaid phenomena, beyond simply saying that the superficial epigastric vein must have been one of the sources of origin, if not the exclusive one. Let that pass. The sign, if it can be verified by repetition hereafter, will possess some value with a view to forecasting the future of a case. I need not say that it will be a sign of good omen, for it signifies a free collateral circulation. This freedom of the circulation it will be our duty to develop and maintain—principally by tonics, in order to strengthen the reconstructive energies of the system; in a minor degree by the method of evacuation, in order to lessen the amount of fluid within the abdomen, and to relieve tension, which, over and above other evil agencies, would choke the bloodvessels and preclude their development. Well, we cured the ascites, and in all likelihood the collateral circulation prevented its recurrence in any degree appreciable during life. It did not, however, prevent the recurrence of that hæmorrhage into the stomach which was the main element in the multitude of causes that led to the man's death, and perhaps for this reason. In cirrhosis of the liver it is quite true that hæmorrhage into the alimentary canal is in great measure determined by mechanical congestion; but there are secondary processes at work. The blood or the bloodvessels, or both together, must have undergone degradation; for hæmorrhages occur in other regions far away from the portal system, not only in cirrhosis but in a variety of liver diseases. This point also has been well laid down by Dr. Goodeve, and it is amply illustrated in our case by the blood-stained sputa and the prolonged engorgement of the mucous membranes of the palate and fauces. In truth, the hæmorrhagic erosions of those membranes so conspicuous during life were the very counterpart of the appearances revealed after death in the membrane of the stomach. We thus arrive at the melancholy truth that in removing ascites even for a permanency, we do not remove all the dangers of cirrhosis: the danger from hæmorrhage still remains.

I have not dwelt upon the use of iodide of potassium. Of course, in cases like the foregoing, it must be tried by way of a preventive measure in order to stop the ulterior progress of advancing syphilis. Beyond this it will be of no avail. When once the characteristic changes in the liver are well pronounced, when once ascites and hæmorrhage have supervened, iodide of potassium will no more undo the mischief that has been done already than it will abolish a cicatrix. I gave it a fair trial, and found it utterly useless.

RELIGIOUS INSANITY AND RELIGIOUS REVIVALS.

EFFECTS OF THE "MOODY AND SANKEY SERVICES."

By GEORGE H. SAVAGE, M.D.,
ASSISTANT MEDICAL OFFICER, BETHLEM HOSPITAL.

We see the periodical return of mercantile and political storms, and likewise we see the religious atmosphere agitated if not cleared by recurring revivals. These agitations are of interest to all, but especially to the student of insanity; for in them we have a widespread cause acting on a large number of persons of different temperaments. It behoves us to see how far the recent religious revivals have caused or precipitated insanity. In the following remarks I must be understood merely to contribute my limited experience in the hope that others will add other facts that may enable us to weigh the effects of the disturbance. I purpose examining the cases of insanity associated with religious delusions as symptoms, and those distinctly associated by a history of attendance on the services as a cause. Probably in many cases religious excitement, if it produce insanity, produces it of a type that may be considered religious; but though a general truth, this is not a necessary one. We shall examine the cases that have been admitted into Bethlem Hospital during the past four months—from April to August,—and compare these with the admissions during the same months in 1874 and 1873. We shall more particularly compare the cases that may be called those of religious insanity.

I do not look upon religious insanity as a special well-defined class. It seems to me to be almost an accident of education, temperament, or sex, whether certain subjective feelings develop themselves into a morbid religious idea, or one of some form of persecution or annoyance by others. It is false sometimes to attribute an outburst of insanity to attendance on some exciting kind of religious service. Many persons verging on insanity—in fact, in the melancholy stage of the disease—seek religious consolation, and notwithstanding this go mad; they would probably have gone mad in any case, and the most that can be said against the service is that it precipitated the attack.

In confirmation of my statement that there is no such disease as religious insanity apart and separate, I may say that among our cases we have some of general paralysis with religious delusions. One patient, who sank rapidly, was a Wesleyan, who was going to reform the world and build churches and chapels and save all sinners; another general paralytic had his ideas for ever running on the fate of Sodom and Gomorrah. On the other hand, we had cases of the most acute mania, in which religious delusions were the chief ones. Thus, one man, aged fifty-one, who had had previous attacks, was admitted in a state of great excitement. He came, he said, as "God the Father," for he found that though he had come to earth as "God the Son," that was of no good; man sinned as much as ever; so now he had come to empty hospitals and asylums in his real character.

Melancholia in some form or other was, however, the more common condition of our patients labouring under religious delusions. Some fancied they were possessed by the Devil, others that they had lost their souls or had committed the unpardonable sin.

We were quite unable to find any cause that was common. In some cases age seemed the predisposing cause, and in others exhaustion, that form of exhaustion due to masturbation being rather common in both sexes.

I have taken as cases of religious insanity those whose delusions or hallucinations referred to subjects which are considered as questions of religion. Thus a woman who considered herself the Bride of Christ would fall into the same class as the woman who thought herself the "Red Whore of Babylon."

Most of the cases of religious insanity were of slow growth; some associated with gradual physical enfeeblement; and there were odd associations in the symptoms, one person not only believing that he had lost his soul, but also the passage through his bowels. I cannot say that I see grounds for supposing many cases were rendered insane by the recent revivals. Many persons were no doubt upset for a few hours, rendered very wretched, and for a time determined to lead a different life. The good done is not for me to discuss; it may have been small or great, temporary or permanent; in the majority of cases the storm was of short duration and did little harm. No doubt we shall have objectors. Some will say the time has not yet come to weigh the effects of the revival; yet I would reply that this may be true, but let us be ready to collect and observe from the first. Again, a general cause may result in an increase of all sorts of insanity, and therefore one would be judging more safely by taking all cases of mental disturbance into consideration. I have tried to do this as well as I could.

We now proceed to examine the lists of cases admitted during the four months named of 1875, '74, '73. We take 1875 first as the year we are most interested in.

In 1875, from April till August, 42 male patients were admitted; of these 9 suffered from religious insanity. During the same time 55 women were admitted, and of these 8 had religious delusions. That was 21·4 per cent. of the men, and 14·5 per cent. of the women.

During 1874, in the same period, 30 male admissions gave 6 religious cases, and 47 female cases gave 16 religious; that was 16·6 and 34 per cent. respectively.

In 1873, 28 male admissions gave 4 religious cases, or 14·2 per cent.; and 28 female admissions gave 8 religious, or 28·4 per cent.

The only striking thing in these numbers is the increased number of admissions during 1875, and this is only in part brought out, for on the female side we became completely full, so that many were refused. On the male side we have had more admissions than for very many years.

Religious revivals, as I said just now, do not always, after unhinging the mind, leave a religious débris. A strong feeling may stop or interfere with sleep, so that the person dreams in his disturbed sleep, and yet the perturbing idea is often absent from the dream.

I can find nothing noteworthy either in the ages or social conditions of the patients admitted; the ages were the same in general in 1875 as in the other years.

Cases are more common in my experience in young middle-age than earlier. Cases are seen under twenty, but usually the shock is slight, and passes more rapidly than after thirty-five. Singleness, both in men and women, predisposes to religious insanity; no doubt masturbation is one of the causes of trouble, the intense feeling of degradation, associated with physical exhaustion, causing the patients to think they are utterly undone. I believe most of the patients who think they have sinned against the Holy Ghost have sinned in this way.

During 1875 we had more admissions from among members of the Church of England than from Dissenters; this was true of both the male and female admissions. Generally, in cases with marked religious delusions, we found among the women an excess of Dissenters. A woman's religion, especially if a Dissenter, is a very great power. Among the men the majority have been born Churchmen, and remain such, though rather indifferent.

During the three years the religious persuasion of the patients under consideration was as follows. Among the men, there were 9 members of the Church of England, 3 Dissenters, 1 Roman Catholic, 4 vaguely Protestants, and 2 unknown. Among the women, 14 were of the Church of England, 11 Dissenters, 6 Protestants, 1 unknown.

The hereditary predisposition was rather well marked in our cases during 1875, but in the other years we had only the ordinary percentage of hereditary taint.

And now, to particularise, we have several cases in which the "Moody and Sankey services" were given as the one cause of the insanity.

Case 1.—H. W——, a male, single, a clerk, aged twenty, Congregationalist; no hereditary taint. He heard several of the revival services. No marked change at the time, but he began to be moody and desponding, and to be careless in his dress and inaccurate in his work. The earliest symptoms were about May 1st. On admission he was pale and anæmic, suspicious, and melancholy. He has made but slight progress, and still keeps to himself. Requires feeding and dressing. He is said to have been a masturbator.

Case 2.—Thomas K——, single, aged twenty-seven, a draper's assistant. There is a history of insanity on the maternal side, but this is distant. He belongs to the Church of England. His earliest symptoms followed hearing Moody and Sankey early in May. He had hallucinations of hearing, and was easily induced to believe anything that was said; thus he acquiesced in being Christ. He said the Devil prompted him to do evil; that he fought the Devil and kicked him three inches. He, too, hears God's voice, which tells him to abstain from food. He has remained in much the same state, and has to be fed forcibly twice daily.

Refusal to take food is a common symptom with these patients, and we have had examples of the many delusions that may each induce the refusal to take food: one because God claims the patient as his Son, and tells him not to eat in an asylum; another because of the text about not "living on bread alone"; others because they are either too wicked to live or have compacted with God or the Devil never to eat again.

Case 3 was that of a woman, Mary A. H——, single, aged thirty-five, a dressmaker, Congregationalist, admitted in April. She had had a disappointment in love. She had heard Moody and Sankey, but did not seem to have been affected much. She gradually developed various delusions. Said she had lived in America. She also considered herself an evangelist, and called herself "Moody and Sankey." She would sing or preach on request, though her voice was unmusical and her oratory nonsense. She was noisy, boisterous, and untidy. A few days' residence in Bethlem produced a great change, and she rapidly got well, and was discharged three months after her admission.

These are the only cases that are distinctly traced to this revival among our patients. We have to admit a serious increase during the past four months of general cases, and these may represent in some part the results of the moral commotion.

A person of weak mind may change his creed, and finally become a religious lunatic. We have at present two cases of men who have changed from Protestantism to Roman Catholicism just on the eve of an outbreak of insanity. The history of one is interesting, as it is that of many similar cases. A. T——, the son of a Church of England clergyman, single, aged twenty-five, whose mother is insane. He was precocious, and had the vices of a man before he was seventeen. He wasted his own money and that of his friends, and was a "black sheep." He becomes contrite, or I would say melancholy, becomes a Romanist, and wants to be a priest. He is emaciated with fasting and self-abuse, and restless, constantly repeating some such word as "immaculate." He may be considered in an ecstasy by some. We look on him as an acute maniac.

So, in conclusion, I would say that my experience is that religious revivals do but small harm to the able-minded, but to those who are weak there is danger. But there will always be sufficient sources of religious excitement without revivals to provide a flame for the fluttering moth.

Bethlem Hospital.

Patent Medicine.—In the year ending the 31st of March last the stamp duty on patent medicines, as appears from a Parliamentary document just issued, amounted to £114,322 15*s.* 7½*d.*

CASE OF

PERINEAL SECTION, FOLLOWED BY THE OPERATION OF DR. OTIS, FOR THE CURE OF FISTULA IN THE PERINEUM.

By WALTER COULSON, F.R.C.S.,
SURGEON TO THE LOCK AND ST. PETER'S HOSPITALS.

The following case, considerably abridged, may serve as an introduction to some remarks on perineal fistula, and on the operation for stricture proposed by Dr. Otis of New York, and recently performed in this country.

The case is that of Robert D——, aged forty-four, seaman. About five years previous to his admission for the second time into hospital he had been treated for stricture, as an in-patient, by dilatation, at Guy's Hospital.

Two years ago (1873) he was admitted with extravasation of urine following retention. This condition was relieved by free incision of the perineum. The patient made a good recovery, but a perineal fistula remained, which it was hoped might be closed by continuing dilatation of the stricture. At the time of his leaving the hospital a No. 5 silver catheter (English scale) could be passed into the bladder; but the man neglected to attend as an out-patient, and when readmitted, in May, 1875, he was unable to pass any urine naturally, the whole of it escaping in a small stream through the perineal fistula. The passage of the urine now causes great pain and scalding, which continue for some time after micturition; he suffers from a constant desire to micturate, the urethra is excessively sensitive, the urine loaded with mucus and pus, and no instrument can be passed into the bladder. Up to the 17th of May several attempts had been made to pass elastic instruments into the bladder by the penis and through the perineal opening, but they failed. He has been taking fifteen minims of sandalwood oil three times daily, which has materially diminished the muco-purulent deposit in the urine, but has had no effect in diminishing the scalding. On two occasions he had retention of urine, which was relieved, after some difficulty, by insinuating a small elastic instrument through the fistulous opening into the bladder, but all attempts to pass an instrument along the penis from the meatus were unavailing. However, an extremely fine elastic bougie could be passed along the penis and out at the perineal opening.

On May 17th I performed the following operation:—A No. 8 steel bougie was passed down along the urethra, as near to the fistula as the thickened structures surrounding it would permit. A free incision was then made through the fistulous opening, and the adjacent strictured portion of the urethra was freely divided. A straight-grooved director was then passed through the wound into the bladder, the edges of the fistula were pared, and a No. 16 French elastic catheter was introduced into the bladder, the straight director acting as a guide. The catheter was tied into the bladder, and there retained until the following evening. No bad symptoms followed the operation, and the temperature of the patient remained unchanged. From this date until July 19th, both continuous and occasional dilatation was employed, and the edges of the wound were from time to time touched with caustic. The perineal wound became merely a fissured opening, but still it would not quite heal, and on every occasion that the patient passed water, some portion of the urine escaped through the fistula. The question then presented itself whether the fistula might not possibly be kept patent by some constriction in the penile portion of the urethra. With the assistance of Dr. Otis an examination was made with the urethrometer, and the existence of three distinct points of constriction was demonstrated. It was therefore resolved that resort should be had to his operation. The patient was placed under the influence of ether administered by Mr. Knott, and the urethrotome of Dr. Otis was passed down as far as the fistula. The instrument was then made to indicate a dilatation corresponding to 32, French scale, and the three points of contraction were freely divided. The last-mentioned result was verified by the introduction of the bulbous sound (Fig. 1), which was passed down as far as the fistulous opening, and withdrawn without a catch. A cylinder (Fig. 2), open at both ends, and about five inches long, was tied into the urethra after the operation, and was allowed to remain in for six hours. This was done at the suggestion of Dr. Otis, but the cylinder was removed at the patient's request, as there was no sign of bleeding; the loss of blood after the operation was also slight. From the date of the operation, July 19th, to the 24th, no unfavourable symptom manifested itself. A No. 32 bougie was daily passed along the urethra to prevent adhesion, and the patient left the hospital cured. When he reported himself to me, Aug. 16th, the fistula was completely healed.

FIG. 1.

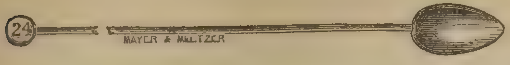
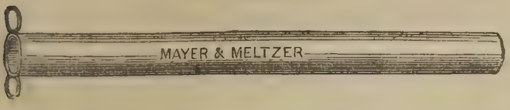


FIG. 2.



Before making any observations on this case, it may be well to notice the principal features of Dr. Otis's new operation.

The method of Dr. Otis is based on the simple proposition "that in all contractions of the urethra the contractile points must be reduced to the normal calibre of the urethra in its healthy state." This applies to all deviations, and, in Dr. Otis's view, especially to "comparatively slight contractions," which are not usually considered as requiring operative treatment. The term "slight contractions" refers to strictures which only admit 8 or 9 of the English scale. Dr. Otis maintains, as I have said, that any deviation from the normal standard, however slight, should become the subject of operative interference. The urethra must be brought back to its "normal calibre." But what is this normal calibre? According to Dr. Otis, "the capacity of the urethra always bears a constant relation to the size of the individual penis, which latter varies greatly in different individuals."*

Thus, in the past year alone, Dr. Otis examined more than one hundred urethræ carefully. His conclusions are that the flaccid penis varies from three to four and a half inches in circumference, according to the individual, and that the circumference (or capacity) of the urethral canal varies from 30 to 40 of the French scale. Also, if we reduce the tables, every increase of one quarter of an inch in the circumference of the flaccid penis implies two degrees increase (as French scale) for the capacity of its urethral canal. Besides this, the urethrometer devised by Dr. Otis (Fig. 3) furnishes, according to him, in all cases, the exact normal calibre of the urethra; and to this calibre the diseased urethra must be brought in order to ensure a cure.

From what precedes, it follows that the surgeon must begin by ascertaining the normal calibre of the individual urethra. This ascertained, we have various methods of "sundering" the stricture at some point. The selection must rest on the judgment of the operator; but whatever method may be selected—whether rupture, dilatation, or division—*every* fibre of the constricting tissue must be completely severed, or subsequent recontraction is cèrtain.

FIG. 3.

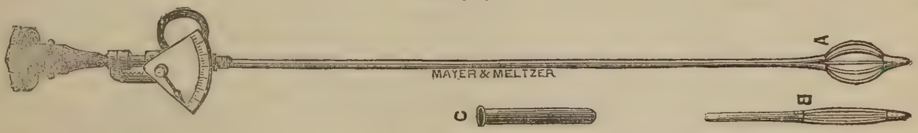
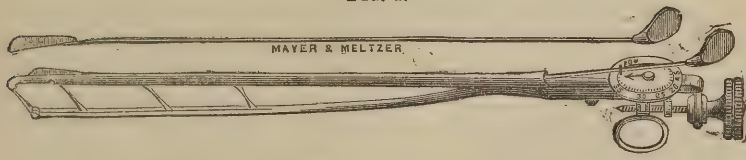


FIG. 4.



To ensure the attainment of these objects, Dr. Otis has devised a new form of urethrotome, which combines dilatation with division, though the object of dilatation is chiefly to enable us to apply the edge of the blade more surely to the structures which we intend to divide, and thus to protect, or nearly so, the healthy portions of the canal (Fig. 4). All the bands which obstruct the canal must be divided one after another, if not detected at first. Dr. Otis never practises dilatation after the healing of the wound made during the operation. The incision, it may be observed, is along the superior wall of the canal, against which the dilating portion of the instrument forcibly presses the blade. The use of the sound after the operation is simply to separate the divided surfaces, not to dilate. The after-treatment consists merely in separating the wound throughout its extent by the easy passage of a full-sized steel sound daily, or every other day, until healing is complete. Finally, as recontraction of stricture after operation is simply due to incomplete division, and as the latter, as a rule, will be detected within one or two weeks, the cure may be considered complete after the expiration of that time if no change of calibre be detected. For a second operation, however, Dr. Otis frequently employs one of his earlier urethrotomes, which cut only at a single predetermined point, and the blades of which are not protected by a guard. He also maintains that in all long-standing cases of gleet contraction exists in some point of the urethral canal, and that such cases are cured by his operation. I am collecting twelve such cases myself, of not less than two years' duration, in which the operation has been performed. The results of these I hope to make known at some future time. Meanwhile a few observations may not be out of place here.

The operation just described, and the instruments employed, seem to present advantages over any other operative methods with which I am acquainted for the internal division of strictures in the penile portion of the urethra, and, so far as the mere division of the strictured part is concerned, it fairly fulfils all which the author claims for it. Another advantage which Dr. Otis attributes to his method of operating is that recontraction does not take place after cicatrisation of the divided tissues. If this be fully confirmed by subsequent experience, we must admit that the new operation effects what no other operative proceeding has effected—viz., a radical cure of stricture; that is to say, a condition of the urethra which shall require no future introduction of instruments.

Amongst the complications arising from stricture, extravasation of urine, and injury to the urethra, there are few which occasion more inconvenience to the patient and trouble to the surgeon than perineal fistula. In D——'s case the complication resulted from an operation performed for the relief of extravasation, and, dilatation having been tried and failing to close the fistula, perineal section was for a second time resorted to; but, in spite of this operation and subsequent dilatation, the fistula remained open.

The result of Dr. Otis's operation certainly proved that slight contractions which are not usually recognised as strictures may offer obstruction to the passage of the urine sufficient to prevent a urinary fistula from healing. The result of the internal division of the strictures and the daily introduction of full-sized instruments left the mucous wall of the canal, after complete cicatrisation had taken place, as supple and non-resisting to the passage of the full-sized sound as a perfectly healthy urethra. Dr. Otis finds that this condition has continued for three years after the operation, and believes this result to be due—(1st) to complete division of every fibre of the stricture, and (2nd) to the prevention of contraction of the internal wound during the process of cicatrisation.

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* It appears to me that this proposition involves the assumption that, in the healthy state, the calibres of the penis and of the urethra remain respectively unvaried from the meatus to the prostate.

The ultimate success of the operation must depend on the permanency of this result, and at present it is impossible to express any positive opinion on this point until we have ascertained by pathological investigation what the precise nature of the cicatricial connective tissue may be. Up to the present time I have performed this operation for stricture in the penile portion only. But change of position may require a change of practice. In the sub-pubic portion of the urethra we often meet with old strictures which are dense in structure and resist dilatation. Forcible dilatation and incision employed in such cases might readily give rise to local or general accidents of a very severe nature; and hence subcutaneous division of the contracted tissues should probably be preferred as less liable to be followed by the evil consequences just mentioned.

St. James's-place, S.W.

BRAINS AND INTELLECT.

By ROBERT LAWSON, M.B.,

PATHOLOGIST TO THE WEST RIDING LUNATIC ASYLUM.

IT is surprising, after the amount of labour that has been spent upon the subject, how little definite information has been acquired about the relation between weight of brain and extent of intellectual capacity. It is true that Cuvier, Abercrombie, Dupuytren, Goodsir, Simpson, and others whose brain-weights were accurately ascertained, were found to have cerebral centres of considerably more than the average weight; but even these did not attain to the known maximum. The 64 oz. brain of Cuvier is in some respects balanced by the 65 oz. brain observed by Tiedemann and the 61 to 62·75 oz. brains commented on by Dr. Peacock, the living representatives of which seem to have possessed no corresponding superiority over their smaller-brained contemporaries. Perhaps, indeed, if all the elements of the case were to be considered, the heaviest adult brain on record might be found to be that of a senile dement who died in the West Riding Asylum at the age of seventy. His brain was found to weigh 61 oz. Following the generally accepted principle that the brain loses weight to the extent of an ounce in each decennial period, this man's brain, after allowance has been made for physiological diminution, may be presumed to have weighed, when he was at the age of forty, no less than 64 oz. But in his case pathological supplemented physiological changes, and the more rapid atrophy which accompanies senile dementia justifies the conclusion that at the time of his maturity this man's brain may have outweighed that of the great Cuvier.

Investigations prosecuted at the West Riding Asylum by Mr. W. C. S. Clapham, and commented upon by Professor Turner,[*] show how fallacious any general principle would be which tended to establish a direct and exclusive relation between mere weight of brain on the one hand and capacity of intellect on the other. By a compilation of the brain-weights of 705 patients who died in this asylum, Mr. Clapham showed that the average weight of brains in the insane was little if anything below the commonly accepted average of 49 oz. in sane males and 44 oz. in adult females. And if the average brain of the resident lunatic and the obscure dispensary and hospital patient can reach a satisfactory average weight, the heavy brains of the same classes of the community also contrast well with the brains of sages and the members of sane society of the general type. There is the 61 oz. brain of the aged dement who died in this asylum; the 60 oz. brain of a boy of fifteen, as cited by Professor Turner; the brains referred to by Dr. Peacock and mentioned above, ranging in weight from 61 to 62·75 oz.; and the numerous instances in the records of the West Riding and other lunatic asylums in which male brains are noted as weighing from 58 to 61 oz., and female brains from 50 to 56 oz. When the brain-weights of men who have earned fame in science, philosophy, or politics are directly compared or contrasted with those of men whose lives have been mute and inglorious, and even despicable, they are by no means so striking as when quoted by themselves. Thus—

Brain-weight of	Dr. Chalmers,	53 oz.	...	Lunatic,	58 oz.
,,	Daniel Webster,	53 5	...	,,	58
,,	Sir J. Y. Simpson,	54	...	,,	58·5
,,	Goodsir,	57·5	...	,,	59·5
,,	Abercrombie,	63	...	,,	60·5
,,	Cuvier,	64	...	,,	61

The weights of brain in Abercrombie and Cuvier cannot be directly balanced by any West Riding Asylum brains, but could be fairly contrasted with the 63 and 65 oz. brains observed respectively by Reid and Tiedemann. The brains also of female lunatic patients, when placed in the balance, are not necessarily found wanting. Mr. Clapham's figures show that amongst rather more than 300 insane women, brains were found weighing from 50 to 56 oz., and which, in acknowledged proportion, were equal to male brains of 55, 58, 60, and 61 oz. Relatively speaking, these insane women had more brains than Chalmers, Webster, Simpson, Goodsir, Lord Campbell, and many others adduced as illustrations of the statement that great size of brain usually accompanies great intellectual capacity. Similarly with regard to criminal lunatics: though the average weight of brain amongst a single dozen of these, examined by Dr. Orange of Broadmoor,[*] is an ounce and a half under the general male average, there are in that limited number two brains which exceed that of Chalmers in weight, and one which outweighs those of Chalmers, Daniel Webster, and Simpson, and is within half an ounce of being equal to that of John Goodsir.

But if the occasional occurrence of very heavy brains amongst men of great ability is no proof of the general proposition that all men of great intellectual capacity have heavy brains, neither is the fact that very heavy brains are found amongst lunatics proof that large brains are not, *cæteris paribus*, characteristic of the capability or existence of great mental power. The occurrence amongst men of great ability, or even genius, of instances in which lunacy may be regarded as having tinged the products of their minds, and in some instances impregnated their works with the impassioned fervour which alone ennobles them, shows that such an assumption would be altogether gratuitous. Such men, for instance, as Byron, Shelley, Poe, Lamb, Cowper, and, in some degree, Dean Swift, have given evidence in their writings and their lives of such a taint. From the time of St. Paul the fervid apostle, Lucretius the philosophic and Dante the melancholic poet, down to that of Dr. Johnson, the apostle of common sense, the men are numerous who have had ascribed to them the combination of much learning and more or less madness; and even in more recent times a veil lies over the lives of many of our great men and great women, which, if it were to be removed, would show that some of those who have charmed us with their brilliancy and helped to mould us by their power have not been exempt from the occasional or constant workings of the genius of insanity. Every day the observation of the poet that great wit is nearly allied to madness gains a wider and more practical acceptance. So much is this the case that Dr. Wilks, in a very thoughtful and suggestive paper in a recent number of the *Journal of Mental Science*, ventures to make the statement that probably "it is the insane element which imparts what we call genius to the human race, the true celestial fire; and thus it is that the madman has been called inspired and thought to have in him a touch of the divinity."[†] Though it is fearful to think of the propagation of a race tainted with insanity, yet, says Dr. Wilks, "it does not follow that an infusion of the insane blood may not be desirable. I think it might easily be shown that such infusion has given genius to a whole family; it has leavened the whole mass." Dr. Maudsley holds the same opinion; and, however painful the observation may be, there can be little doubt that it is marvellously true.

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[*] West Riding Asylum Medical Reports, vol. iii., 1873.

[*] Annual Report, Broadmoor Criminal Lunatic Asylum, 1873, p. 57.

[†] The Study of the Human Mind. By Samuel Wilks, M.D. (Journal of Mental Science, Jan. 1875.)

A pauper lunatic asylum is a very unfavourable field for judging of the relation between brain-weight and intellectual capacity. Imperfections of education in the patients with which one has to deal prevent the manifestation of intellectual capacity. The commonplace and the potentially superior mind meet on the common standpoint of mediocrity. The reiteration of uneventful and almost stereotyped histories frustrates the scientific observer in his endeavour to detect in the recorded lives of large-brained pauper lunatics any prior evidences of superior power in developing or utilising the circumstances of a healthy social existence. Still, it sometimes does happen that one can determine, by an inquiry into the history of the insane, that men with unusually large brain-weights were during the sane period of their existence characterised by greater mental vigour and higher intellectual capacity than their station in life would have led one to expect. Such a case occurred in this asylum shortly after the compilation of the statistics of Mr. Clapham and the observations of Professor Turner.

A. B——, a weaver aged forty-five, was admitted last year on account of a first attack of mania. In the form of admission it was stated that the patient had been talking incoherently upon religious subjects and the making of wills; that he was restless, and, when restrained, violent; and that he was indecent in his acts. He was not epileptic.

About six weeks before admission the patient became depressed. This depression lasted for about a month, and was succeeded by excitement. He became incoherent and at times obscene in his conversation, and violent to those about him. He attempted to bite those who were guarding him, and during the night left his bed and caused annoyance to his neighbours. Having become quite unmanageable, he was certified for removal.

Two cousins had been insane, and one of them had been treated in an asylum. It was satisfactorily determined that the patient had been an unusually sober and steady man, even though his symptoms on admission resembled in some particulars those characteristic of the prostration following upon excessive drinking.

A searching examination into his history led to the determination that he had been regarded by his fellow-townsmen as a very intelligent man. He was very fond of reading, and devoted special attention to the study of religious subjects. He had written a good deal, mainly on religious topics; and showed a remarkable memory, which was chiefly manifested by the repetition of large portions of any sermon which he had heard. He had an ambition to qualify himself as a preacher and engage in missionary work. He was also a recognised leader in politics, was regarded as the leading man in the agitation relating to the establishment of the School Board in the town where he resided, and during all political contests was relied upon as an influential agitator in the Liberal interest. He appears to have been much addicted to controversy, and the excitement of argument is said to have induced frequently a violent pain on the top of the head, which compelled him to abandon for a few minutes his share in the discussion. For eight or nine years he had suffered from headaches, which were much intensified by reading.

On admission he was very restless and excited. He talked incoherently, and was very anxious to make a long statement about some conveyance of property, payment of succession duty, and indemnification for losses. He refused food, and at night lost sleep under the influence of delusions; he also had hallucinations of smell, delusions of a prurient nature, and a further delusion that his head or body had been changed during the progress of some surgical operation which he had undergone. His tongue and all his muscular movements were tremulous. With the exception of incontinence of urine and disorder of the alimentary system, he had no bodily ailment. His temperament was sanguineous. When admitted, his weight was 168 lb., and his height 5 ft. 9 in. A fortnight afterwards he showed signs of inflammatory action affecting the right side of the chest, and in another week succumbed to an attack of double pleurisy with effusion.

On post-mortem examination, it was found that the body was well nourished, but the limbs were somewhat œdematous. The skull-cap was capacious, but normal in thickness and density, and symmetrical. During the removal of the brain little or no fluid escaped. Beyond the existence of a limited amount of subarachnoid extravasation of blood into the sulci, the brain appeared to present nothing abnormal; at the same time the sulci were narrow. The pia mater was thin, and on that account stripped with difficulty; but there were no adhesions. *The weight of the whole brain was 61 oz.* The convolutions were plump and well differentiated, especially in the second frontal tier, and showed no sign of having been compressed. The measurements of the head were: from root of nose to occipital protuberance, 15 in.; from meatus auditorius, left to right, 15½ in.; circumference round middle of forehead and over occipital protuberance, 23½ in.; diameter of cranial *cavity* from before backwards, 6⅞ in.; ditto across, 5⅜ in. A large quantity of serous fluid was found in each pleural cavity, and a patch of grey hepatisation occupied part of the lower lobe of the right lung posteriorly.

Observations.—The patient in this case was known by his associates to have been a man of superior intellect. His brain-weight after death proved to be greater than the external measurements of the head might have led one to anticipate. Amidst the evidences of more than ordinary mental capacity, he occasionally showed signs of the existence of some unhealthy intra-cranial condition. Occupations involving a congestive state of the cerebrum induced violent coronal pain, which was alleviated only by his desisting from the study or the discussion which had induced it. Ultimately he fell into a short depressed condition, which was followed by an attack of acute mania and the development of fatal physical lesions. On post-mortem examination his brain was found to be 12 oz. more than the average weight in adult males. That the large size of the brain was not due to effusion into the ventricles was shown by the very limited quantity of fluid which escaped on removal and section. That it was not due to any recent condition of hypertrophy was evident by the plump appearance of the convolutions and the absence of all signs of compression. On the other hand, the plumpness and the complexity of the gyri, and the previous definite history of the patient's proclivities and accomplishments, go to show that he had normally a heavy brain, which, in his limited sphere, he exercised in such a manner as to secure a character for intellectual superiority.

Similar cases are of not infrequent occurrence.

M. W——, aged thirty-six, was admitted into the Durham County Asylum* in July, 1873. His mind had been deranged for about four years previous to that date. On admission he was epileptic. He was incoherent in his talk, showed great loss of memory, and was very inconsistent in his statements, affirming that he had children of the age of thirty-five, though he himself was only thirty-six years old. He was restless at night, left his bed, roamed about the house, and was unable to return to where he started from. He had attacks of excitement. During his residence his condition was that of dementia. He had occasional epileptic fits and several attacks of syncope. Before and after the fits he was very stupid. On admission his physical condition was fairly good. He died in June, 1874, and the cause of death was fatty degeneration of the heart and bronchitis. *The weight of his brain was 60 oz.*

This patient had had little early training, and in his youth was a steady, hard worker, who devoted his leisure hours to the acquirement of elementary education. He was born in the very lowest ranks of society, and by perseverance and industry advanced himself to a condition of comfort. He commenced life as a labourer, but soon raised himself to the position of a rag and bone merchant, with a horse and cart of his own; and finally, by industry, economy, and ability, was able to start in business as a marine store dealer. He saved £600, and brought up his family comfortably. It appears that he retained his mental acuteness till he discovered almost simultaneously that his wife had become a drunkard and squandered all his hard-earned savings, and that his daughter had abandoned herself to public prostitution. These discoveries threw him into a state of excitement, and at that time he had his first epileptic fit. The fits recurred at rare intervals, and were isolated. They were preceded by stupor and giddiness.

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* For the particulars of this and the following case I am indebted to the kindness of Dr. Smith, medical superintendent, and Dr. Wallis, late assistant medical officer, Durham County Asylum.

While at the Durham Asylum he was quiet and demented. He died after a few days' illness.

J. H—— was for the second time admitted into Durham County Asylum in July, 1862. He was suffering from recurrent mania. The patient was a member of a family characterised by good physical and mental development. He gradually sank into a condition of consecutive dementia, but continued to manifest considerable ability, especially in making calculations. He wrought out complex arithmetical problems mentally, and with great readiness and correctness. In early life he was an agricultural labourer, and pushed his way on so steadily and showed such special capabilities for the work that he secured the appointment of road surveyor of a district. He was regarded by all who knew him as a man of great original ability. He never reached any great amount of dementia, and within three months of his death gave clear evidence regarding an assault of which he had been a witness. He died on the 25th of June, 1870. *His brain weighed between* 60 *and* 61 *oz.* The condition was one of atrophy, associated with atheroma of the cerebral arteries.

It is worthy of renewed notice that, in the brain referred to in the first case recorded in this paper, the complexity of the convolutions is quite as characteristic as the unusual weight. As I have not seen the brains referred to in the last two instances, I am unable to say what was the extent of the differentiation of their gyri; but the general principle that multiplicity of gyri is more characteristic than large size as a gauge of intellectual capacity may readily be accepted as a safe one.

West-Riding Lunatic Asylum, Wakefield.

DEATH FROM THORACIC ANEURISM.

REPORTED BY

SURGEON HENRY C. WOODS, M.D., R.N.

(*Communicated by the* Director-General of the Medical Department of the Navy.)

The previous history of this most instructive case has been already fully reported, and further published in The Lancet of July 5th, 1873; a brief *résumé* is, therefore, only given.

J. F——, aged thirty-five, a private in the Royal Marine Light Infantry, with now fourteen years' service, was admitted on the 3rd of June, 1872, with a small left femoral aneurism immediately below Poupart's ligament. He was a spare, rather aged-looking man, with dark hair, sallow complexion, and slight arcus senilis. He had on the 20th of May first noticed pulsation in the groin, no cause being traceable. Intermitting digital pressure, and subsequently persistent for forty-eight hours, and acute flexion, failed to procure consolidation. On the 20th of August the anterior iliac was secured by Fleet-Surgeon John Elliott, R.N. (then in charge of the hospital), a carbolic-gut ligature being used, and the ends cut short off. The wound was dressed with carbolic solutions, &c. On the 23rd, a slight erysipelatous blush appearing, the dressings were removed. The wound appeared to be healing by the first intention. Free suppuration was, however, afterwards set up. On the 25th a faint pulsation was detected, and soon became confirmed; the sac then steadily and slowly enlarging. The gut had evidently absorbed and permitted the circulation to be re-established. Pressure with a Carte's tourniquet (which proved successful in a similar case at the same time under treatment), flexion, and distal pressure were again tried, and failed. On the 26th of November the artery was a second time secured by Fleet-Surgeon Elliott, who this time made use of a double well-carbolised hempen ligature, leaving one end hanging out of the wound. The operation was tedious, the tissues being firmly matted together. The peritoneum was with difficulty detached, and twice unavoidably opened into; vomiting occurring, with escape of small intestine and omentum. The ligature did not separate until the 4th of January, and the wound then closed. For a few days from the 19th of December there were grave typhoid symptoms, with local erysipelatous action. The pulsation ceased from the date of operation, and the sac became consolidated, being firm and of the size of a walnut when discharged to light duty on the 2nd of April. There was, however, great weakness and bulging of the abdominal wall over the site of the cicatrices.

He was employed as a cook in the provost cells, and remained at duty until the 11th March of this year, when he was admitted, and remained under treatment until the 27th March, for bronchitis; no further symptoms being noted by Staff-Surgeon Fisher, R.N., under whose care he more particularly was.

On the 23rd June he again applied for relief, having, as it has been subsequently ascertained, suffered from pain in the left shoulder and arm, with gradually increasing dyspnœa. On admission, this was urgent; the respiration loudly crepitant, with sonorous rhonchus over the whole chest, particularly over the upper portions; the heart-sounds were scarcely audible, and there was loud churning over the upper portion of the sternum; the pulse was excessively feeble and frequent; the face livid, with coldness of the extremities. No pulsation was visible over the sternum or the neck; the venous system was, however, engorged. Decubitus was found to be most comfortable on the side in a semi-recumbent position. Beef-tea, port wine, brandy, mixtures of ammonia (carbonate and chloride), squill, ether, ipecacuanha, &c., were given to arrest expectoration; the sputa being viscid frothy mucus, and latterly slightly purulent. Locally, turpentine and simple fomentations, poultices, and a blister to the left side. The radials were synchronous. On the 24th a gritty pericardiac friction was detected over the heart's apex. The dyspnœa became increasingly urgent until death, on the 29th June, at 1.50 A.M. Pain was never complained of, but to another patient he said that "he could almost reach something in his throat with his finger which seemed to prevent his breathing." There was never any dysphagia.

Post-mortem examination, June 30th, 11 A.M. — Body attenuated; rigor mortis present. On removing the sternum a large aneurism of the ascending aorta was disclosed, the anterior wall being closely adherent to, and in part formed by, the sternum, from a point level with the lower border of the first to midway between the third and fourth cartilages, the bone being in part eroded. The aneurism was 4½ in. + 4 in. in diameter, extending to and involving ¾ in. of the innominate artery anteriorly, and inferiorly overlapping the base of the heart. On opening it up, a large yellow fibrinous clot was found nearly filling it, and lying in black coagula, which further extended through a small valve-like rupture at the left base of ⅓ in. into the pericardium, the heart being also encased in it. On the right side the sac was found to be thickened to ½ in. by layers of fibrin, but on the left was thin; at the back of the aneurism, and apparently almost lying in it, from the walls overlapping on either side, was the aorta, with an oval opening of 1½ in. in length by ⅝ in. transverse diameter, the edges rounded and indurated, giving almost the idea of the upper open end of the larynx. The heart was contracted and healthy, with a thin covering of fat, and the valves normal; about 4 oz. of sanious serum escaped from the pericardium on opening it up, and the clot there weighed 8 oz. The lungs were congested, but healthy in structure, abundant sanious frothy mucus welling out on section. The left division of the trachea appeared rather small. The aorta from the heart to the cœliac axis was unduly dilated, particularly at the latter point; and, on section, patches of atheromatous change were found, but no ossific deposit.—Abdomen: Viscera healthy; the liver slightly nutmeg in character, weighing 3 lb. 10 oz. A portion of the small intestine and two loops of omentum were found firmly adherent to the abdominal wall at the seat of operation. The left internal iliac was considerably smaller than the right, and obliterated about 2 in. from Poupart's ligament. The internal iliac correspondingly increased in size, the collateral circulation being carried on by it. From the point of ligature the artery could be traced as a cord to the aneurismal sac in the groin, which was firm, of the size of a small walnut, and filled by a firm, dark, fibrinous clot, which was readily enucleated, the artery becoming pervious almost immediately below. The aneurism involved and occluded the "profunda" at its origin; the circumflex was enlarged, and carried on the circulation with it.

Walmer.

OXALURIA.

BY JAMES REOCH, M.A., M.B.

ONE of the most important questions connected with oxaluria is whether oxalate of lime may originate in the urine some time after emission, by decomposition of one of the urinary constituents. The importance of this view is evident, for if oxalates can form *de novo* in the urine itself, it will be difficult to regard them as of any pathological significance. In some preliminary experiments on this subject, some urines were kept for three or four days before filtration, and then allowed to stand for a few days longer. In many of these cases beautiful envelope-shaped crystals were seen, which, from their size, could not possibly have passed through the filter; but oxalates were not always present—indeed in not more than half the cases; while the urine invariably decomposes, and always contains uric acid and mucus. This difficulty appearing to form an insuperable objection to the decomposition theory, it was only left to suppose that oxalates were present in some of these urines, but were very slowly deposited, while in others they were absent; and this seemed the more probable, because in some of these cases the oxalates were accompanied with uric acid, which no one supposes to be formed in the urine itself, and which must therefore have been formed by slow deposition. To test directly between the slow deposition and decomposition theories of the formation of oxalates, it seemed probable that if a series of urines were kept for some time without filtration, oxalates might be found in a certain proportion of cases which may be called the normal proportion; but if the urines were kept for one, two, or more days before filtration, and then allowed to stand for the same period as before, oxalates would be found in a less proportion of cases if they were originally present but only slowly deposited, while they would be found in a larger proportion if due to decomposition, partly because they were kept much longer, and partly because the decomposition of urine is much more rapid during the second week than during the first. Accordingly, 48 specimens of "urina sanguinis," approximately consecutive from the same individual, were divided into eight series of six each. The first series was allowed to stand for seven days without filtration; the remaining seven series were filtered at periods varying from one day to seven after emission, but all were allowed to stand for seven days after filtration like the first series. Each urine was then examined microscopically; nine or ten preparations were made of the scum at the top, three of the body of the urine itself, and twenty to forty of the precipitate at the bottom; where oxalates were not readily found the examination was much more prolonged. The results are expressed in the following table:—

No. of urines.	No. of days kept before filtration.	No. of days kept after filtration.	No. of times oxalates were found.
6	0	7	6
6	1	7	5
6	2	7	5
6	3	7	4
6	4	7	3
6	5	7	2
6	6	7	2
6	7	7	2

It appears, then, that with increasing the time that a urine is kept before filtration, the probability of finding oxalates afterwards is much diminished, and not only so, but the number of crystals found is also much diminished, for while in every specimen of the first series hundreds of crystals were found, in the last series only two gave oxalates, one giving three crystals in about fifty-five preparations, and in the other eight crystals were the outcome of seventy-one examinations. The same thing holds good, as a general rule, of the other series; so that it may be laid down as a law that while oxalates may appear in urine as long as a week after emission, yet in their formation they follow the course of slow deposition, and not that of decomposition. Moreover, in none of the above cases was there noticed under the microscope any association between the oxalates and epithelial cells or mucus-corpuscles, the two most constant constituents of mucus; scores of oxalates might be seen in the field at once, but never any imbedded in an epithelial cell or mucus-corpuscle; nor was there any relation between the oxalates and uric acid observed, for while often present together, as often one only was to be found.

Again, some urines were examined which had been kept for a long time; they had been filtered on the day of emission, and then allowed to stand, three of them for two years, and four of them for nine months. Nine or more examinations of the precipitate from each of these were made, and yet no trace of oxalates was found in any. In some further experiments where oxalates were produced in large quantity by adding some oxalic acid to urine, many crystals were noticed at first, but after six weeks they appeared to be much fewer in number, at least in some of the specimens. It appears probable, therefore, that oxalate of lime, so far from being a product of decomposition in the urine, is itself decomposed.

It is often urged in favour of the view that oxalate of lime must arise by decomposition, that it is a salt which is insoluble in water and in urine. More exact experiments, however, show that this is not the case. Storer, in his "Dictionary of Chemical Solubilities," gives its solubility in water as $\frac{1}{500000}$. No doubt this appears small, but oxalates are never recognisable without the microscope, and seldom appear much larger than a blood-corpuscle. Supposing, therefore, that the specific gravity of an average crystal is equal to that of a cube of water $\frac{1}{3000}$ of an inch in the side, then, since cubes are to one another as the cubes of their sides, it follows that a cubic inch of water would be equal to 27,000,000,000 of these crystals, and would therefore, according to Storer, dissolve 54,000 crystals; 10 oz. of water would therefore dissolve 1,000,000 of these crystals; while we do not often find in urine a much larger proportion than this. And further, some direct experiments show that urine can dissolve a certain quantity of oxalate of lime, for some urine being put into a series of test-tubes, a small quantity of oxalic acid was added to all but one. After three days they were filtered through a double filter, and allowed to stand for seven days longer. Large and well-shaped crystals were noticed in nine out of eleven of these cases, while none were observed in the original urine. Again, where some urines had stood over oxalic acid for a week, and were then filtered through a double filter, after another week no oxalates were found in the original urine, but were found in four out of the lower six of the oxalic series, though not at all in four to which a large excess of oxalic acid had been added. From these experiments it appears that the urine had dissolved some of the oxalate of lime, which it had been compelled afterwards to deposit, most probably from the advancing alkalinity. In discussing the solubility of oxalate of lime, however, the greatest attention must be given to alcohol, which is by far the most important substance in this connexion. Alcohol and water differ very widely in their mutual relations to bodies dissolved by either; thus, while both alcohol and water readily dissolve the salts of the alkalies, water dissolves the salts of the alkaline earths in less proportion, but alcohol scarcely at all. This is readily shown by rubbing up some phosphate of lime in a mortar with some water and a few drops of H Cl. On filtering, there results a clear solution of the acid phosphate of lime, but on adding alcohol or rectified spirit to this there is an immediate precipitate. Now, if oxalic acid or oxalate of ammonia is added to chloride of calcium, we have in either case an immediate precipitate of oxalate of lime, because oxalic acid has a greater affinity for lime than hydrochloric acid, and the resulting salt is very little soluble in water; but if either of the reagents be gradually diluted, we arrive at a point when the precipitate does not appear at once, but takes some minutes to form, and is only faint at the best; and if just at this point we step in with alcohol we shall find the precipitate much more quickly formed. The most striking way of proving this is to add one or more drops of a 1 per cent. solution of oxalic acid to a test-tube containing ordinary drinking-water; this generally contains enough of lime salts to give a faint precipitate with oxalic acid after some time, but on adding a drachm of rectified spirit the precipitate appears at once. Again, if these various oxalate of lime precipitates be examined microscopically, it will be found that where the solutions are concentrated the precipitate is finely molecular, but with greater dilution it is granular, and with still greater its various forms may be ranged under the envelope shape; the latter is therefore the result of greater dilution, and consequently takes more time to be arranged in a crystalline form. Therefore, when $CaCl_2$ is added to a watery solution of oxalic acid, you pass quickly by dilution from the molecular to the crystalline condition; but if spirit has been added, the precipitate is much more commonly molecular because much quicker in appearing. Applying these facts to the urine, let a little rectified spirit be added to some urine in a test-tube, and an immediate white precipitate appears at the place where the two liquids meet. According to the views above enunciated, this precipitate consists mainly of earthy salts soluble in the urine, but much less soluble in alcohol; and, if the test-tube be well shaken, a permanent turbidity results.

(*To be concluded.*)

CASE OF
POISONING BY LIQ. STRYCHNIÆ (P.B.); RECOVERY.

By J. BROWN SIM, M.B., L.R.C.S. EDIN.

ABOUT 10.30 on the night of the 1st of March I was summoned by Dr. Huthwaite's assistant to see a nursemaid in their service, who had been seized with symptoms of poisoning by strychnia. He informed me that she had shortly before come into the surgery and complained to him of feeling ill, and asking to be made sick. Knowing she was hysterical, and supposing this to be an attack coming on, he administered a dose of ipecacuanha wine. He then noticed her jaws becoming fixed, suspected the cause, and at once sought for help. Hastily calling in a woman to be with her, he then found her on the floor, with the body arched (opisthotonos).

On arriving, I found the whole body rigid, the jaws firmly fixed, the head jerked backwards, the face of a dark-purple hue, and the pupils dilated. I at once proceeded to use the stomach-pump, but found it impossible to pass the tube through the teeth, which no amount of force could separate. She was then rapidly put under the influence of chloroform, which exerted so beneficial an action upon the spasms that we were very soon able to pass the tube into the stomach. This organ was then thoroughly washed out several times with tepid water, and brandy and strong coffee injected. As symptoms of depression frequently showed themselves, the pulse was closely watched, and whenever depression appeared brandy was freely given through the stomach-pump. The temperature in the axilla was 95·2°. The spasms came on at intervals varying from two to five minutes, but always ceased on the administration of a little more chloroform. We were joined in the course of the night by Dr. Huthwaite; and, as he agreed with the treatment adopted, it was continued. The spasms were confined, after the administration of the chloroform, to the face, trunk of the body, and the upper extremities; only once did the lower limbs show any sign of spasm. They became gradually milder in intensity until about 4 A.M., when we ceased the administration of the chloroform.

On recovering consciousness she was at once questioned as to what she had taken, when she replied "strychnia." On being asked where she had got it, she said "from the surgery"; and she knew it was strychnia because there was "liq. strych." on the bottle.

The story obtained from her afterwards was that, thinking herself in the way, she had determined to commit suicide. At a quarter past 10 she had taken about a mouthful of the liq. strychniæ, and almost directly afterwards felt oppression at the chest and difficulty of breathing. She then got the draught already mentioned, but could not be sick. She suffered acute pain throughout her body, and in the intervals of the spasms wanted to speak, but could not. Her intellect must have remained clear up to the time she was put under the influence of chloroform, as she could tell all that had been said and done up to that time.

From her statement, and from the quantity missing from the bottle, it is calculated that she must have taken a dose of not less than six drachms of the liq. strychniæ of the British Pharmacopœia—equal to three grains of the alkaloid. She made a good recovery, and is now quite well.

A fact worthy of record in connexion with the case is the necessity of using *pure* chloroform. We had unfortunately run out of our supply of chloroform, and, having obtained some from a neighbouring druggist, to our consternation, found that we could not subdue the spasms, and that they were gaining in intensity. Another specimen, made by Duncan and Flockhart of Edinburgh, having been obtained, the spasms were at once brought under complete control. The patient was thus under the influence of chloroform for five hours, and about eight ounces of that agent were used.

Nottingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

ST. BARTHOLOMEW'S HOSPITAL.

VESICAL CALCULUS IN A BOY EIGHT YEARS OF AGE, WITH SYMPTOMS ALL HIS LIFE; LATERAL LITHOTOMY.

(Under the care of Mr. HOLDEN.)

For the notes of the following case we are indebted to Dr. James Shuter, house-surgeon.

W. H. H——, a boy aged eight years, was admitted June 14th, to Pitcairn ward. He was a small, dark-haired, badly-nourished child, with Jewish features, large tonsils, and left internal strabismus; and was somewhat deaf and decidedly *non compos mentis*. He was the survivor of twins, and had never been quite rational. He appeared to have always had pain in his penis on passing water, and had been in the habit of compressing his glans penis antero-posteriorly between his finger and thumb during micturition. The stream had occasionally been seen to stop suddenly and then to recommence. No blood had ever been noticed. He strained very much at stool and during micturition.

On admission, though he strained very much on passing water, the passage of it did not seem to cause him much pain. His urine was thick with mucus, feebly acid, and contained no albumen. The appetite was good.

June 23rd.—He was sounded, and a stone was both felt and heard. It appeared to be stationed at the left of the pubes, and could be felt through the rectum.

30th.—Since admission patient has much improved in general health. He still strains at stool, and grasps the end of the penis during micturition. He passes water more freely during the day than the night. Pulse 104; temperature 99·1°; tongue moist and white. At 1.30 P.M., when under the influence of chloroform, Mr. Holden performed the left lateral operation for lithotomy, and removed an ellipsoidal calculus, crystallised on its surface, composed of phosphate of lime, weighing 67 grains, and measuring three-quarters of an inch in its long and five-eighths of an inch in its short axis. It was lying in a small cul-de-sac of mucous membrane just to the left of the median line and close to the pubic arch. There was very little hæmorrhage. No plug was used. During the operation prolapsus ani occurred, and the patient vomited before leaving the theatre. After being put to bed respiration almost ceased. An hour after the operation the pulse was 120, the temperature 99·4°.

July 1st.—Slept well; has taken some milk and bread-and-butter. Water passes freely through the wound, none through urethra. Tongue moist and clean; pulse 120; temperature 99·4°.

2nd.—Slept well and takes nourishment. Since yesterday at mid-day there has been no water through the wound, but it has been seen coming through the urethra. The wound is clean, and there is no inflammation around. Tongue moist and clean; pulse 104; temperature 98·8°.

From this time the patient progressed favourably in every way. For a day or two he had considerable pain in the penis immediately before passing water. The wound healed gradually, and was completely healed by July 12th. No water through wound since July 1st.

19th.—Discharged quite well.

MIDDLESEX HOSPITAL.

CASES OF FISSURE OF THE ANUS.

(Under the care of Dr. Arthur Edis.)

Fissure of the anus; supposed uterine disease; division; complete recovery.—S. W——, aged twenty one, married two years; one child, aged seven months. Ever since her confinement the bowels have been very confined, often going a whole week without acting. For the last five months she has taken two to three teaspoonfuls of castor oil every morning. She experienced severe agonising pain on defecation, the pain lasting the greater part of the day, and quite unfitting her for her household duties. A medical man had been in attendance for several months, and had treated her for an affection of the womb, only lately having had any suspicion that something was wrong with the bowel, when two leeches were applied to the anus, but no examination made. The patient had been confined to bed for nearly three months. Having heard the above history, the lower bowel was carefully examined, and on passing the left forefinger a hard, exquisitely sensitive fissure on the posterior aspect was detected. As the patient was exceedingly nervous, and the examination caused much pain, a small quantity of chloroform was given, and the fissure divided by means of a blunt-pointed bistoury. Oiled lint and opium suppository were inserted, and the bowels relieved on the third day without any pain whatever. Attention to the state of the bowels caused great improvement in the general health. After the first few days the patient had no return of the symptoms, and recovered perfectly.

Fissure of rectum; supposed piles; operation; recovery.—E. E——, aged twenty-five, single, presented herself, complaining of certain uterine symptoms, together with severe pain in defecation, which had been present during the last two years. The bowels were habitually constipated, the patient frequently allowing a whole week to elapse without their acting—in fact, the pain was so severe "she never went unless she was absolutely obliged," as "the agony was so excruciating," becoming worse and worse an hour or so after the bowels acted, the pain often lasting for twenty-four hours, and the motion being streaked with blood.

On examination, a small condylomatous growth at the anterior margin of the anus was detected, which the patient stated she had regarded as a pile, and had had ointment prescribed for it, though she had never been examined. On inserting the finger per anum, a fissure was found extending up an inch or more into the bowel from the growth externally; considerable pain was complained of at the time, and the finger on withdrawal was streaked with blood.

The growth was at once removed by the aid of curved scissors, and the fissure divided along the base by means of a bistoury. Oiled lint was inserted, and a mixture of sulphate of magnesia and sulphate of iron prescribed, to ensure regular action of the bowels, a soothing lead lotion being also ordered. The pain on defecation gradually disappeared, and the patient recovered perfectly within a few weeks.

The case is of interest, as the patient had been seen by several practitioners, who treated her for piles on her own representation, without ever confirming or upsetting the patient's own diagnosis by means of an examination. She had been doctoring, on and off, for nearly the whole of the two years during which she had been suffering.

In place of confining the bowels by means of opium subsequently to the operation, as usually advised, a tonic aperient mixture was prescribed, and regularity of the bowels thus ensured.

ROYAL INFIRMARY, EDINBURGH.

LOOSE CARTILAGE REMOVED FROM THE KNEE-JOINT, ANTISEPTICALLY; CURE.

(Under the care of Mr. Joseph Bell.)

For the notes of the following case, which we had the opportunity of seeing several times during the week that the British Medical Association held its meetings in Edinburgh, we are indebted to Mr. A. J. Vanse, M.B., C.M., house-surgeon:—

William C——, aged thirty-nine, foreman in an iron-foundry, was admitted July 14th, 1875. For the last nineteen years the patient has felt a hard body in his left knee-joint, and has from time to time experienced sudden severe pain in that region. About nine months ago the joint began to swell, and since then he has on several occasions fallen to the ground from the sudden accession of pain in connexion with the knee. On July 28th Mr. Bell made an incision into the joint, with the ordinary antiseptic precautions, and removed a smooth, hard body about the size of a filbert, and at the same time a quantity of opalescent fluid escaped. The joint at the time of the operation was in a state of inflammation. A drainage-tube was placed in the wound, the lips of which were closed by catgut sutures, and the usual gauze dressings applied.

The wound was dressed every twenty-four hours for the first six days; subsequently with an interval, first of two, and then of three days, and on no occasion did the wound present the slightest trace of inflammation. The temperature never rose above 99·5°. The drainage-tube was removed on the fourth, and the sutures on the tenth day, and the wound was quite healed on the twelfth day after the operation, without the patient having experienced any pain. He was allowed to walk on the 8th, and left the hospital on the 12th of August quite well.

DEVON AND EXETER HOSPITAL.

THREE CASES OF ANEURISM SUCCESSFULLY TREATED BY DIGITAL COMPRESSION.

For the notes of the following cases we are indebted to Mr. Edward J. Domville, late house-surgeon.

Case 1. *Aneurism of femoral artery; digital compression; cure.* (Under the care of Mr. A. J. Cumming.)—John C——, aged thirty-eight, in receipt of an army pension, but working as a day labourer, was admitted into hospital on Oct. 30th, 1873, having a pulsating tumour on the front and inner side of the left thigh, over the position of the femoral artery as it passes through Hunter's canal. The patient could not account for its existence, and could not remember any blow or strain. He had only noticed the swelling for five or six weeks, and only quite recently had felt the pain in it, for which he now sought relief.

Digital compression was applied to the femoral artery in the groin by relays of students on the day after admission, and kept up for twenty-four hours without producing any permanent effect, although as long as the pressure was applied the pulsation ceased entirely, and the tumour decreased in size.

After a week's interval of rest in bed, the same plan of treatment was again carried out for seventy-two hours, and complete success was the result. The patient was discharged cured on Dec. 2nd, 1873, and has since been continuously able to follow his occupation.

Case 2. *Popliteal aneurism; failure of flexion; cure by digital compression.* (Under the care of Mr. A. J. Cumming.)—George G——, aged forty-nine, was injured in the wrist twenty years ago, and was in consequence invalided from the army with a pension, but was not sufficiently ill to prevent him working as a gardener. In September, 1874, while at work he felt a sudden pain under his left knee, which continued, and was in a few days followed by a "beating sensation," but he could not perceive any swelling. In November, the leg began to swell by day, resuming its size after a night's rest. He could give no history of a blow, and was not subject to any strain when he first felt the pain. No palliative treatment had been adopted before his admission into hospital in January, 1875.

On admission, the left popliteal space was found to be occupied by a pulsating tumour, over which the skin was very tense, but not discoloured, although the superficial veins were enlarged. The pulsation was distinct, both laterally and eccentrally, but was readily controlled by pressure on the femoral artery. The circumference of the limb over the centre of the patella was 15½ in.; and of the right limb, 13¾ in. There was a systolic aortic bruit heard also in the tumour, but otherwise the patient was in good health.

On the 16th January digital pressure was applied to the femoral artery in the groin for fifteen hours, when it was found that pulsation had ceased. After an interval of two hours, as it was supposed that a return of pulsation threatened, pressure was reapplied for three hours, making a total of eighteen hours.

Extreme flexion was at first tried for this case, but the pain caused was so great that the patient was unable to bear it for any length of time. To relieve the pain caused by the pressure chloral hydrate was used, the injection of a sixth of a grain of morphia having previously caused intense headache, with great depression.

The patient was kept under observation for three weeks, and then discharged cured, no further treatment having been required.

Case 3. *Popliteal aneurism; digital compression; cure.* (Under the care of Mr. Bankart.)—William H——, aged twenty-eight, labourer, retired from the army in 1870, after seven and a half years' service, and is now in the militia reserve. In February, 1875, while carrying a heavy bag of manure on his back, his leg gave way suddenly, causing him great pain, and putting his hand down he felt a "beating" under his left knee. The pain went away on his walking about, but returned when he lay down.

On admission in April there was found to be a pulsating tumour in the left popliteal space, pulsation being distinct in all directions. The skin was not tense, nor were the superficial veins enlarged. The leg below the swelling was of its natural size, but over the tumour the difference between the circumference of the two limbs was one inch.

On April 24th digital pressure was applied over the femoral artery and kept up by the house-surgeon and relays of students for sixty hours, and at the end of this time, although the tumour appeared smaller and more firm, the pulsation was scarcely lessened.

After a week's interval of rest in bed, the patient insisted on going home to see his wife, who was ill, but returned after two days' absence, having suffered a good deal of pain, but the tumour had not perceptibly increased in size.

Digital pressure was again applied as before, and after six hours pulsation ceased. The pressure was, however, kept up for thirty hours more, and subsequently applied for short periods as a precautionary measure, but there was no return of the pulsation, and the man was discharged cured at the end of a fortnight.

It is worthy of note, as a coincidence, if nothing more, that all three cases were army pensioners; although in the first case the amount of actual service was limited to a two years' preparation for the review at which he was injured.

The plan adopted in all three cases was to set two students at a time on duty for two or four hours, each to apply pressure on the artery for ten minutes at a time, while the other, keeping watch with his hand on the tumour, gave warning of a return of pulsation due to any slackening of effort. As the staff of helpers was limited, these efforts were supplemented by the occasional application of the horse-shoe tourniquet. If it is fair to judge from the numerous cries of warning given by the students on watch in almost every instance, it may be that some share in the cause of failures to cure after many hours' application, in cases where each person was expected to keep up pressure for an hour or more at a time, must be considered as due to a relaxation of effort on the part of the individuals compressing.

In conclusion, it may be added that both patient and compressor found considerable relief from the occasional use of a small tourniquet pad instead of direct pressure with the thumb or fingers. Its use also avoided the irksomeness caused by a nervous search for the artery by first-year students, and which the patients are not slow to observe.

NORTH RIDING INFIRMARY, MIDDLESBOROUGH.

CASE OF LOOSE CARTILAGE IN KNEE-JOINT; REMOVAL ON ANTISEPTIC SYSTEM; RECOVERY.

(Under the care of Dr. W. J. Williams.)

For the following notes we are indebted to Mr. W. Stirling Anderson, house-surgeon.

Patrick L——, aged twenty-two, was admitted into the North Riding Infirmary, on 11th August, 1874, with a loose cartilage in right knee-joint. About four years ago patient was working on a night shift, and having occasion to be on his knees, found on rising to the erect posture that he could not straighten his right leg. The leg was perfectly free of pain as long as it remained in the semiflexed position, but any attempt to straighten the limb was attended with great pain. Some swelling of the joint took place, but subsided in some little time, leaving him the perfect use of the limb. Eighteen months afterwards he became subject to excruciating pain in the joint when walking, resulting after complete extension of the limb. The pain continued for nearly ten minutes, during which he could not attempt to straighten the limb without suffering great pain. Shortly afterwards he found a little lump on the inside of the joint, at the lower and inner border of the patella, which disappeared on pressure. He continued in this state till the end of last month, but was then forced to put himself under treatment as the sudden seizure of the pain when working (at a blast furnace) placed him in jeopardy of some accident from the consequent inability to use his right leg. After an ineffective trial to remove the loose body, he applied for admission to this hospital.

At noon on August 26th, Dr. Williams proceeded to remove the loose body.

The joint was quite natural in appearance except below the patella, where there was some little thickening, which, patient says, was the result of an accident he met with when a child. On examination, no loose body could be found; but after patient had walked once or twice across the floor, a small body, of the apparent size of a sixpence, was detected on the outer and anterior part of the capsule.

The leg was bent on the thigh to assist the operation in keeping the loose body in its place, as it had a tendency to glide in between the articular surfaces of the tibia and femur. Chloroform was dispensed with. The skin over the joint and vicinity was thoroughly washed with an oily solution of carbolic acid (1 to 10). The knee, as noted above, was flexed; the fingers of an assistant pressing from below kept the loose body in position. Under a spray of carbolic-acid lotion (1 to 40), Dr. Williams made an incision two inches in length, its lowest point being an inch higher than the position in which the loose body was felt. The part of the capsule over the body was reached by the finger through the wound; the body was seized with a tenaculum and pulled out after the capsule had been opened. This part of the operation was somewhat protracted by the tendency of the loose body to shift about, even though pressed upon from below. On examination, the loose body proved to be a flat piece of cartilage, about the size of a large bean.

All the steps of the operation were conducted under the spray, the fingers of the operator and assistant, as well as the instruments used, being washed in carbolic acid lotion (1 to 40). The limb was extended, and the wound (the lips of which were not brought together by sutures) dressed with a small piece of protective oiled silk, overlapped very freely in all directions by a piece of antiseptic gauze folded (8 plies) according to Professor Lister's directions. The limb was kept in the extended position by a piece of Gooch splint applied posteriorly.

August 26th.—9 p.m.: Patient is very well. Indeed there is no difference in him, when contrasted with his state before the operation, save that he is confined to bed. Finds the extended position of limb very irksome. He has taken his dinner, tea, and supper as usual, and relished them. Does not complain of the least pain in the joint. Says there is a little soreness at the wound. Temperature 98·4°; pulse 60.

27th.—10.30 a.m.: Had a good night. Has taken his breakfast as usual. At present he does not feel the slightest uneasiness in any part of the limb. Temperature

98°; pulse 56; tongue natural.—Noon: The wound dressed under the spray. There has been some little sanguineous discharge, but the wound itself is perfectly free from the slightest irritation. Dressed as before.—9 P.M.: Patient says there is not the least uneasiness in any part of the limb. Has suffered from diarrhœa this afternoon. To have pill of lead with opium. Temperature 97·8°; pulse 52.

28th.—9.10 P.M.: Patient's temperature this morning was 98·4°; pulse 52. He had quite recovered from the diarrhœa. The bandage over the Gooch splint was taken off to see if there was any discharge, but there being none, the dressing was not proceeded with. To-night he is, as in the morning, perfectly well. Temperature 97·4°; pulse 52.

29th.—9 P.M.: This morning patient continued as at last note. In the afternoon the dressing was changed under the spray. There was some slight sanguineous discharge staining the gauze, but nothing more. The wound was filled up with clot, and its edges were quite natural, being free from the slightest irritation.

Sept. 1st.—Wound dressed to-day. No appearance of granulations; the original clot undergoing organisation, filling the gap. Slight lympho-sanguineous discharge, but not more than ten drops. General health all that could be desired.

5th.—Wound dressed as before. No granulations, and no purulent discharge. Cicatrisation going on well.

10th.—Wound almost healed. Still no granulations.

15th.—Wound healed and cicatrix strong.

After the last dressing patient was allowed to walk about, which he could do perfectly, there being no stiffness nor uneasiness in the joint. He returned to his heavy labour, finding himself fit to engage in it.

Reviews and Notices of Books.

The Management of Infancy and Childhood in Health and Disease. By HOWARD BARRETT, M.R.C.S., late Surgeon to the Poplar Hospital. London: Routledge and Sons.—This is a sensible book, and may be safely recommended to those who desire information on the subject of which it treats. It does much to supply the lack of education in physiological and medical matters which is so painfully apparent in most parents. Not the least merit of it is that several chapters are occupied in discussing, in a general way, the hygienic management of children. The author gives, in the latter half of the book, good clear accounts of particular diseases, medical and surgical, and their treatment, which will be found very useful for people out of the reach of doctors; but the first half of the book is devoted to such questions as Nursing, Diet, Ventilation, the Influence of Light, Vaccination, Disinfection, &c.—a careful study of which on the part of parents will be rewarded with healthy children and the infrequent need of doctors' help.

Italian Alps. Sketches in the Mountains of Ticino, Lombardy, the Trentino, and Venetia. By DOUGLAS W. FRESHFIELD. London: Longmans, Green, and Co. 1875.—The author in his preface apologises to the public and to his friends for this work; but he need not have done so. It fills up a gap in the descriptive history of Alpine scenery, about which English readers have hitherto found no information in their own language except in guide books. The Italian Alps are very little known to the ordinary British tourist, and though we have had enough and to spare about mountaineering adventures, described cleverly, badly, and indifferently, the reader will find here a pleasant account of "fresh fields and pastures new." The exquisite valleys round the head of Lago Maggiore, the mountains of Val Masino and Val Livigno, the Punta Trubinesca and the highlands of Lombardy, and the Trentino are not as yet overrun by Mr. Cook and his satellites. This book is admirably got-up, with maps by Stanford, and some pleasing engravings. Some of the subject-matter has already, in a fragmentary way, appeared in *Fraser's Magazine* and the *Alpine Journal.*

Snioland or Iceland. Its Jokulls and Fjalls. By WILLIAM LORD WATTS. London: Longmans and Co. 1875.—This is evidently a book of the period, though a far less ambitious production than that last noticed. Mr. Watts has published, in the form of a daily journal, particulars of an excursion to Iceland, commenced in June of last year. It is not, perhaps, generally known that that island is well within the limits of a six weeks' holiday; the voyage is short (about six days, including a stop at Faroe), and the climate very healthy. The author does not aim at elaborate descriptive writing, and is often prolix, giving particulars that few would care to read, but the book would be useful to any intending excursionists northwards, and is illustrated with some middling photographs.

The Wines of the World Characterised and Classed. By HENRY VIZETELLY. London: Ward, Lock, and Tyler. 1875.—This is the cheapest shillingsworth that we have seen for a long time. Mr. Vizetelly was one of the wine jurors at the Vienna Exhibition of 1873, and the book before us is, in fact, a revised and amplified version of the reports on wines and beers drawn up for the Commissioners. The wines of France and Algeria, Germany, Switzerland, Austria, Hungary, Russia, Spain, Italy, and, indeed, those of all other countries, including our colonies, are here described *seriatim,* and there is a concluding critical chapter on the beers of Europe, which we recommend as a practical guide to those of our readers who patronise malt and hops in preference to more luxurious beverages.

Sex in Industry: a Plea for the Working Girl. By AZEL AMES, jun., M.D., Special Commissioner of Investigation, Massachusetts Bureau of Statistics of Labour, &c. Boston: James R. Osgood and Co. London: Trübner. 1875.—This little book is the outcome of an inquiry made by order of the Massachusetts Statistical Bureau on the influence of homes and employments upon health. The marvellous rapidity with which digital operations are performed by girls in factories led to special inquiries as to how far the sexual status was affected, and detailed facts are given in this book as the result of these inquiries that must be very interesting to those of us (and they are many) in this country who want to solve satisfactorily the vexed question as to the proper field for feminine labour. Standing for many hours, counting, telegraphing, and many other mechanical operations in which women are now employed in England, but far more extensively in the States, are all declared, and, according to the author, proved, to be positively injurious, and in many cases utterly fatal to the health of the girls engaged therein. Many of the deductions drawn are, however, as we think, much exaggerated; but the book is thoughtfully written, is short, and worthy the attention of all who are collecting opinions, facts, and statistics on this important subject.

A Primer of the English Constitution and Government. By SHELDON AMOS, M.A., Professor of Jurisprudence, University College, London, &c. Second Edition. London: Longmans, Green, & Co. 1875.—This small work is intended, as we suppose, to be called "legislation made easy," inasmuch as it professes to teach the law to the laity in the same sort of way as popular medical handbooks attempt to teach to non-professional persons the science of the prevention and cure of disease. We do not profess to review a book so entirely out of our field of work; but there is a great amount of interesting information in this volume, although we are disposed to think that, with regard to both law and physic, a little knowledge is a dangerous thing. Law is never likely to become, in any sense, a popular science.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

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MARLBOROUGH.

Of the schools as yet visited by The Lancet Commission, Marlborough decidedly takes the lead with regard to the excellence of its sanitary arrangements. We have therefore selected this school for our first report, as it so nearly approaches the standard we laid down in our introductory articles as to what a school should be. The excellence of Marlborough in this respect is chiefly owing to the medical officer, Dr. Fergus, who for twenty-six years has been attached to the school, and who has devoted his whole time to the duties of the post; he has moreover been admirably seconded by the school authorities. Marlborough is a proprietary college, and at the present time contains about 560 boarders—viz., 380 in the school buildings and 180 in the out-boarding houses. The pupils are chiefly drawn from the professional classes. The school buildings consist of an old brick mansion, formerly the famous Castle Inn, and some more recent buildings, which together form a somewhat irregular mass, but well open on all sides to the air. It is situate on the old Bath road, and the town terminates abruptly at the college entrance. The out-boarding houses are some little distance from the college, on the Bath road, and consequently are still further separated from the town. The college, the town, and the boarding-houses drain into the river Kennet, but all have a distinct system of sewers; the town outlet being a considerable distance down the stream, below the outlets of the college and the boarding-houses. The college drains unite, at a point some hundred yards distant from the college buildings, to form a main sewer, which, about two hundred yards further, opens into three large tanks, which collect the solid excreta, the liquid overflow alone passing into the river. These tanks are cleaned out during the holidays, and they are more than sufficient for the requirements of the school. They are well ventilated, and no unpleasant smell can be perceived when standing over them. The advantage gained by intercepting the solid excreta is that no deposit takes place in the bed of the river opposite the college, which might silt up and become exposed and offensive during the dry months of the year. The means of flushing the college drains are very perfect. An immense volume of water can be poured into them by means of hydrants provided in all parts of the building for the purpose of extinguishing fire. During term time the medical superintendent personally superintends the process, and sees that it is regularly and efficiently carried out. The drainage of the boarding-houses is equally complete and entirely separate from that of the town. The college has a water-supply of its own. Its source is a deep well sunk in the chalk; the water, though somewhat hard, is excellent in quality and abundant in supply, and there is no possible chance of its becoming contaminated either at its source or in the course of its distribution. The service is constant, and carried to all parts of the building, and cisterns are attached to all the waterclosets.

At Marlborough the general plan is to have sitting-rooms for the preparation of studies; in some of the new boarding-houses there are single studies for the senior boys, and dormitories. The size of some of these dormitories is the one objection we have to find with the Marlborough system. In our introductory remarks, whilst giving preference to the dormitory over the double system—i.e., union of study and bedroom,—we stated that the number in the dormitory should be limited, certainly not exceeding fourteen. Our reason for this was, that while the numbers in a dormitory are a protection against immoral practices being carried on, yet an increase of numbers is dangerous in a sanitary point of view, as giving greater scope to the introduction of zymotic disease. In small dormitories the case is otherwise; in a ward of fourteen, if a case, say of scarlet fever, is introduced, it is easy to procure effectual isolation without materially interfering with the school work, but in a large chamber this is impossible. We believe this to be the secret of the outbreaks of scarlet fever that attacked Marlborough some few years ago, and our opinion is strengthened by the report of Dr. Bristowe. That gentleman found the dormitories in question, at the time of his visit, overcrowded, and he advised a diminution of the numbers. In all other respects his report of the school was most satisfactory, and we think it right, in justice to the authorities, to quote some of it at length:—

"From the statistics of the sanitary state of the boys which were placed before me, it seems that, but for outbreaks of scarlet fever, which have been exceptionally frequent during the last few years, their health has been remarkably good. There is no evidence, so far as I can learn, of the occurrence of disease traceable either to emanations from the soil, or to defective drainage, or to impure water, or directly to overcrowding or imperfect ventilation. The occasional introduction of the poison of scarlet fever into a large establishment is an accident which no precautions can wholly avert, and I do not see how you can prevent it. The spreading of the disease, however, is promoted by various adverse conditions, some of which it may be in our power to obviate. Thus it is promoted by overcrowding and insufficient ventilation, by incomplete isolation of the sick, and by the concourse of a large number of persons who are not protected by having previously suffered from the disease. The first two of these conditions, so far at least as in your case they seem to me defective, I have already criticised; the last condition is obviously a very important one, but it is of course entirely beyond your control. But I must acknowledge that the marvellously low mortality which your statistics show, and the complete immunity which there has been from consecutive dropsy, are high testimonials in favour of your general sanitary state, and of the excellent care you take of the sick. I do not presume to give you any advice in regard to the hygienic, or other treatment, of your scarlatinal cases, for the simple reason that in every respect their treatment appears to me to be perfect; and I cannot resist this opportunity of saying how much I was struck with the numerous niceties of hygienic arrangements which prevail, not only in the infirmary and sanatorium, but throughout the college."

Since Dr. Bristowe's report (1868) the bedroom accommodation has been considerably increased by the erection of new buildings and boarding-houses; the new sleeping rooms approximate more nearly to the standard laid down by ourselves, and the school has not experienced any fresh outbreak since that time. The senior forms are allowed to go into the town on all days except Sundays; the remainder are limited to the High-street; and, in case of any epidemic occurring in the town, the privilege is forbidden on the representation of the medical officer.

The dietary is sufficient and abundant; half an hour is allowed for breakfast and tea, and forty minutes for dinner. No boy is allowed to leave the hall till *licet* has been called, thus preventing fags been sent off before the meal is completed. On days when "big game" or "house matches" are played, extra refreshment is supplied to such members as have been playing. All the boys dine in the common hall, and the house master sits at the head of each table, and the head master presides over the whole; an excellent arrangement, which allows any defect of service to come under immediate observation.

With regard to the sanitary arrangements of each house, the waste pipes from the baths, lavatories, &c., are thoroughly trapped, and no communication with the drain is possible, and in nearly every instance separate pipes convey the waste water away, and the wastes do not enter the soil pipes of the waterclosets whenever it is possible to have a separate conveyance for them. The rule of having every pipe carefully trapped has been enforced throughout the college, and when there is any fear of the traps being dried in hot weather means are adopted for refilling them. The closets are separate; those out of doors arranged in sheds, whilst a sufficient number are provided on each staircase for night use; they are all well ventilated, and free from smell. The urinals are of slate, and flushed with water.

The sanatorium for the reception of infectious cases is situate some little distance from the school; it is commodious and well ventilated. The apparatus for baking the clothes and bedding of the patients is admirable and convenient, any quantity of clothes and bedding being heated in a remarkably short space of time. The ordinary sick-house is quite distinct from the sanatorium.

Medical supervision is carried out to its fullest extent. The medical officer devotes his whole time to the interests of the school; he is constantly mixing with the boys. On entrance each boy is required to fill up a form, signed by the parent, stating age, date of admission, school number, specifying what contagious disease he has had, together with any peculiarity of constitution that should be noted by the medical officer, such as liability to colds, if born in India or within the tropics, hernia, headache, rheumatism, &c. It is a rule that every boy who is not in school must be in the sick-house, or have leave to be elsewhere, so that all boys who complain even of the most trivial ailment are at once seen by the medical officer, and prompt treatment and isolation secured in case of infectious disease manifesting itself. Moreover, all malingering is thus checked. Marlborough has the reputation of being a working school; indeed, nearly all the boys are dependent on their own exertions for their future prospects in life, consequently the amount of work required is above the standard. Dr. Fergus assures us, however, that cases of breakdown are exceptional, and this must be attributed to his constant supervision, any apparent overtask coming at once under his eye, and a check being placed on the studies. The same wholesome supervision is exercised in the playground. At the time of our visit we entered the gymnasium, and Dr. Fergus at once recognised a boy who was, in his opinion, taking too much out of himself, and said, "I shall have to give him a caution." This frequent contact of the medical officer with the boys is most beneficial, for it teaches him to recognise at a glance the particular strain injurious in a given individual, and to check at once the mischief that may arise from too long or severe continuance of the same. Only a medical officer entirely and devotedly attached to the work could acquire such knowledge, and we are sure that our large public schools would not only be doing their simple and obvious duty, but also consulting their own interests, by making it worth the while of cultivated medical men to undertake this special branch. One other judicious regulation we must notice. In case any boy is found unfit for school life, the house master and the head master are consulted, and the boy sent away for a term or so until his health or strength allows him to return. Dr. Fergus has found that many delicate boys suffer during the spring months, a time trying to the health at all schools; in these cases he allows them only to keep the summer and autumn terms. This, while causing no real loss of time, promotes the general health, and permits the boy, who otherwise might have broken down altogether, to go successfully through his school career. It has been suggested to us that Marlborough, lying as it does in the hollow of the chalk downs, is damp. At the time of our visit we saw no indications that that was the case, though from its situation it might be somewhat flooded in wet seasons, when the water from the hills drained rapidly down into the valley; this water would, however, speedily run off. If any dampness was experienced during the autumn and winter months it might easily be remedied by increasing the surface drainage, with little expense, as far as the college is concerned.

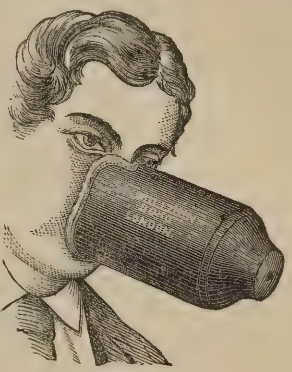
EXAMINATION IN STATE MEDICINE AT CAMBRIDGE. This examination will commence on October 5th. Candidates who pass it satisfactorily will receive certificates testifying to their competent knowledge of what is required for the duties of an officer of health. Any person whose name is on the Medical Register may present himself for the examination provided he is twenty-four years of age. Candidates for the examination are required to send their names before September 15th to Professor Liveing, Cambridge.

New Inventions.

NEW ETHER INHALER,

AS SUGGESTED BY MR. GOLDING BIRD.

THE advantages claimed for this inhaler are its simplicity and cheapness as compared with the usual ether inhalers. The waste of the anæsthetic by evaporation is reduced to a minimum by the fact that the inspired air enters by the aperture at the apex, guarded by a valve opening inwards, and the expired air passes out by that just above the nose, where there is a valve opening outwards. The mouthpiece includes all from the bridge of the nose to the chin, and is so arranged as to be practically air-tight to all faces. The instrument is light; it is lined with a waterproof material, and its edge is bound with soft leather, either of which will wash; but, if desired, a thin flannel bag carrying the sponge can be inserted, and its mouth be turned up all round outside the mouthpiece of the inhaler, and so each patient can have the advantage of a clean instrument. It is used not only for ether, but also for the mixture of alcohol (1 pt.), ether (2 pts.), and chloroform (3 pts.), for which it is admirably adapted. It is designed to embrace some of the advantages of the more elaborate inhalers, and to do away with the waste of the anæsthetic that is always caused where a sponge and towel or felt inhaler are employed.



This inhaler is manufactured by Mr. J. Millikin, of St. Thomas's-street, Borough.

MYCOSIS OF THE SKIN.

To the Editor of THE LANCET.

SIR,—During a recent examination of specimens of the "Bouton de Biskra," which Dr. E. Weber was good enough to send me—none being procurable during my visit to Biskra in October last,—I have found, in addition to the ordinary "granulation" tissue, very clear evidence of the presence of a true fungous growth. Thus, in canals which have the appearance of "lymphatics," and one of which runs alongside a "sweat-duct," there may be seen masses resembling the well-known groups of "micrococci," and, in addition, a transition from the characteristic granular substance to filaments and felted masses, which are clearly of veritable fungous character. "Conidia" seem to be given off at the ends of some filaments.

My examination has yet to be completed in other respects, and I hope to submit the results inclusive to one of our medical societies in due time; meanwhile, in order to record the present observation without loss of time—and I think it is one of considerable significance,—these few lines are forwarded for early insertion in THE LANCET, should you be able to find a place for them.

I am, Sir, your obedient servant,

H. VANDYKE CARTER, M.D.,
H.M. Indian Army.

Bombay, July 30th, 1875.

THE LANCET.

LONDON: SATURDAY, AUGUST 28, 1875.

SIR ROBERT CHRISTISON tried hard to reverse public opinion on the questions on which he discoursed so affluently at Edinburgh. But he will not succeed. We are not insensible—it is impossible to be so—to the charms of his powerful advocacy of the existing state of things. He can appeal to a long and rich experience; he has been personally identified for fifty years with the history of an illustrious University; he possesses a mind so apt and able as to be independent of particular systems, and to gather about itself all that is of the best either in systems or in men. It is natural that Sir ROBERT should be enamoured of the order of things in which he has played so honourable a part, and which to him is so rich in pleasant associations. And we are ready to admit that, if he were a fair representative of all students and all teachers, the system which he supports would do well enough, or as well as any other. But this is just what, we have to remember, is not the case. And in a clear perception of this difference lies the secret of the main answer to Sir ROBERT'S address, which, despite the length of it, is agreeable reading.

Sir ROBERT CHRISTISON goes in boldly for two things in the existing system of medical education and examination which have of late been much spoken against, as we think justly. The first of these, which alone we notice to-day, is the system of lecturing—that mode of education which addresses itself for hours together in the day over a period of three or five months to the minds of students through their mere ears. We are not persuaded by Sir ROBERT'S arguments in favour of lecturing, nor can we think that others will be so, especially those who are familiar with the way in which the courses of lectures are treated by students in Edinburgh. Sir ROBERT was famous, not only for his lectures, but for the discipline of his class-room. The most unruly student put in an appearance, with proper frequency, at Sir ROBERT'S lectures. Not only so. While he was there he was kept in order. But this result was personal, and was by no means achieved in the case of all the professors, even of those scientifically and personally respected. All sorts of different results from these were to be seen, including sleep, various games, skilful escapes from the class-room after leaving a card or answering to one's name; or that state of mental inactivity which is the complex result of sitting listening and of knowing that you will find the essence of all that the lecturer is saying in his own book. But let us note Sir ROBERT'S arguments in favour of lecturing and his illustrations in support of them. He says that systematic instruction is an essential preparation for practical study. There is some truth in this proposition. But it by no means follows that systematic statements should take the form of lectures of an hour's duration. You may have too much of a good thing, and you may easily have too much of systematic statement. And the strong set of opinion at present is in favour of the view that the lecturing system gives too much systematic statement and too little objective teaching. Sir ROBERT alluded, but not by name, to one "late eminent authority" who used to sneer at the regulation requiring the poor student to attend a hundred lectures in the session. He might have quoted others. Mr. GLADSTONE not long ago greatly astonished Mr. LYON PLAYFAIR by telling him that he never attended one academic lecture in his life. Medicine, either in its fundamental sciences or in its practical parts, is unfitted for much systematic statement apart from practical and palpable facts. It will be found that those lecturers command the largest audiences and the deepest attention who contrive to introduce into their lectures the greatest amount of facts and instances—in other words, who make their lectures more practical and less systematic. It is well to remember that science begins with the careful observation of facts, and ends with the systematic statement of what is observed; and this is the order and the way in which the student is most likely to be allured into studious habits and into a scientific frame of mind. Long systematic discourses are still more out of place now that the best books can be easily procured. Sir ROBERT'S illustrations, by which he would support the system of long lectures by the hundred, are, it seems to us, not more convincing than his arguments. He compares, or rather contrasts, the powers of the theatre, the pulpit, and the bar with the power of a book. But is it not true that the book is the growing power of the day, and that both the theatre and the pulpit are very much superseded by it? There is really not the difference between Professor CHRISTISON and ourselves which there may seem to be. He magnifies the power of lecturing. So do we when the lecturer is powerful. But what if he is prosy, and if the student is kept in dreary attendance, not by the instructiveness of the lecturer, but by the dry regulations of the University or the Medical Council? Most of his instances only confirm our main contention, that in medical teaching the systematic element must give place to the practical. Sir ROBERT CHRISTISON says Dr. HOPE, one of the most successful lecturers in the history of the Edinburgh University, gave no opportunity for practical study. But he tells the well-known secret of his great success when he informs us that Dr. HOPE'S course of 136 lectures was so complete and so fully illustrated "by never-failing experiments" that no diligent student ought to have found difficulty in taking up any branch of the subject practically. The case of Dr. JAMES GREGORY, the most captivating lecturer Sir ROBERT ever heard, proves too much. He was the apostle of bloodletting, which stood the test of half a century's experience. His mere eloquence gave a too long life to a bad practice. And who can doubt that if his descriptions of the virtues of bloodletting had been less systematic, more short and more clinical in character, more bound to square with cases and instances, medical practice would sooner have escaped from a false doctrine which has been at the root of much bad practice? We are not convinced, we repeat, that there is any necessity or advantage in students listening, or pretending to listen, to hundreds of dry systematic lectures. Lecturing may be the best mode of teaching; but the results of the present system are not flattering, and would justify a little more freedom both to teachers and students as to the way in which their work should be done.

* * *

UNLESS vigorous steps are taken to watch and compress the parliamentary results of sanitary legislation, we shall soon possess a mass of enactments to be rivaled only by those that relate to merchant shipping. The measure that it is now our duty to summarise—the Public Health Act—contains no less than 343 clauses, divisible into 10 so-called parts. It may be as well to remind our readers that nineteen measures are wholly and three partially repealed by this Act, which does not extend to Scotland or Ireland, nor, with some very few exceptions, to the metropolis; and so we propose to treat the measure as an original Act.

The second part of the Act is very important in that it describes the constitution, powers, and duties of urban and rural sanitary authorities, and is little more than a repetition of certain clauses of the Act of 1872. The third part, which really constitutes the backbone of the Act, embraces sanitary provisions as to sewerage and drainage, including clauses giving power to purchase, make, maintain, and cleanse sewers, and disallows the use of any natural stream or watercourse as an outfall until the sewage is freed from all excrementitious or hurtful matter. Drainage of undrained houses *must* be enforced by the local authority, and all persons are subject to penalties who build houses without drains, over sewers, or under streets, in urban districts. All the clauses relating to the disposal of sewage are permissive, and as such will require amendment at some future time, when the vexed question of sewage utilisation is practically settled. No house can be erected without a sufficient watercloset, earthcloset, or privy, and an ashpit properly covered. Orders on this score may be issued to the owners of factories, if special accommodation is required; and any urban authority *may* provide urinals, waterclosets, &c., for the public accommodation. Provisions for cleansing the streets and the removal of refuse are not made obligatory, except by order of the Local Government Board. The owner or occupier of any house that is in a filthy state may be made to whitewash, cleanse, and purify the same in accordance with the directions of the medical officer of health. Pigstyes, waste or stagnant water in a dwelling-house, and overflowing privies and cesspools, are classed as nuisances, and the owners subjected to a penalty. Foul ditches, collections of manure, or other filth, may be summarily condemned at the cost of the owners, and orders may be given for the periodical removal of manure from mews and other premises in urban districts. The clauses relating to water-supply, seventeen in number, are nearly all permissive in character; but the 64th clause vests all existing public cisterns, wells, &c., used for the gratuitous supply of water, in the local authority, who may close polluted wells and take measures to prevent the pollution of streams. Cellars may only be occupied under certain specified provisions; and common lodging-houses are subjected to rules which we need not here recapitulate, as they have undergone no material alteration. The question as to what constitutes a nuisance is so important that we quote the seven sections almost verbatim: (1) Any premises in such a state as to be injurious to health; (2) any pool, ditch, watercourse, privy, urinal, cesspool, drain, or ashpit so foul or in such a state as to be injurious to health; (3) any animal so kept as to be injurious to health; (4) any accumulation or deposit injurious to health; (5) any house so overcrowded as to be injurious to health; (6) any factory or workshop not kept in a cleanly state or insufficiently ventilated; (7) any fireplace or furnace not, as far as is practicable, consuming its own smoke. The 92nd clause makes an inspection of the district obligatory for the purpose of ascertaining what nuisances call for abatement; and notices may be served, and summary jurisdiction exercised, in respect of any nuisance. The 110th clause provides for the effectual work of Port Sanitary Authorities by classing all ships or vessels as houses, the master or other officer in charge being deemed to be the occupier; and a sub-section also includes in that provision school-ships and training-ships. Offensive trades are forbidden in urban districts without the consent of the local authority, who is empowered to make bye-laws with respect to them. The 115th clause also enables the authority of one district to take proceedings against any person creating a nuisance in an adjoining district—this section extending to the metropolis. Powers are granted to the medical officer of health or sanitary inspector to examine unsound meat or any other article intended for human food, and to apply to a magistrate for its destruction. The local authority is compelled, under the 120th clause, to see that houses are properly disinfected and cleansed, and that bedding or clothing which has been exposed to infection is disinfected or destroyed. It may provide a disinfecting apparatus, and maintain an ambulance for the removal of cases of infectious disease. Persons so suffering and without proper accommodation may be removed by order of a justice to a suitable hospital, as also persons found diseased on board ship. Persons labouring under contagious disease who expose themselves in the street, or travel in a public conveyance, are subject to penalties; and no one may expose or transmit infected clothing, or convey an infected person, without subsequently providing for the disinfection of the carriage, or let any room or house in which an infected person has lodged before such house has been disinfected, or make false replies to queries as to any such cases.

The Local Government Board reserves to itself the right, under the 130th section, of making any special regulations that may be deemed necessary with reference to cholera, both on land and water.

As regards hospitals, local authorities *may* provide them, and the patients (not being paupers) received into any such hospital are responsible for their own expenses during residence. Clauses relating to the prevalence of epidemic diseases enact that the Local Government Board may make regulations for the speedy interment of the dead; for house-to-house visitation; for the provision of medical aid and accommodation; the promotion of cleansing, ventilation, and disinfection; for guarding against the spread of disease; and for providing medical attendance. Mortuaries may be erected and maintained by the local authority.

We may omit all notice of Clauses 144 to 165 inclusive, which comprise provisions as to highways and streets, lighting streets, public pleasure-grounds, &c.; as also police regulations relative to public bathing, hackney carriages, &c. Parts 5, 6, and 7, relate to rating and borrowing powers, general provisions, and legal proceedings, which need not be particularised here. Part 8 relates to alteration of areas and union of districts; and Clause 286 provides for the appointment of a medical officer of health for two or more districts situated wholly or partially in the same county under the sanction of the Local Government Board, but no urban district containing a population of 25,000 and upwards can be included in such union. The Board may also assign to any parochial medical officer duties in way of rendering local assistance to the medical officer of health of any such union. The six following clauses are devoted to Port Sanitary Authorities, which may be temporarily or permanently constituted by order of the Local Government Board, who may entrust such authorities with any of the duties assigned to urban or rural authorities under the Act. Clause 291, which relates to the metropolis, constitutes permanently the City corporation the Sanitary Authority of the Port of London. Extensive powers are given to the Local Government Board as to directing and prosecuting inquiries relating to public health; and all inspectors of the Board are invested with powers similar to those of the inspectors under the Poor-law Acts. The miscellaneous provisions include compensation in certain cases to officers removed by the repeal of former sanitary Acts, and the making of bye-laws for the decent lodgment of hop-pickers. The saving clauses provide for the continuance of all sanitary authorities and officers as appointed under the Act of 1872, and for the protection of all outfalls or other works of the Metropolitan Board of Works. Special provisions are also made in the case of the local government district of Oxford.

We have endeavoured to give a brief summary of this very voluminous Act, as though it was an original enactment and not one of almost exclusive consolidation, omitting of course a great deal of matter with which medical officers have little or nothing to do. Critical comments upon the Act must be reserved for a future article. Meanwhile it is cheering to know that our sanitary laws are now at all events packed up in but one parcel.

The effect on the general system of suppression of the cutaneous secretion is a subject of very practical bearing. The process is supposed to be at the root of a large number of our common ailments, grave and trivial, and receives one of the highest places as a cause of disease on both the public and professional mind. A paper on the subject in the current number of Virchow's *Archiv* will therefore be perused with much interest. In it Dr. N. Sokoloff has described a series of careful experiments, the object of which was to determine the way in which the well-known effects are produced.

Two very different explanations have been given of the manner in which the application to the skin of a substance impermeable to water acts in leading, as it usually does, to the death of the animal. The old theory was that the arrest of secretion led to the retention in the blood and tissues of compounds which should have been excreted, and that these produced a poisonous effect. This explanation was accepted by Magendie, Gluge, Henle, Gerlach, and others. It has received a more definite form from the investigations of Edenhuizen, who believes that, in health, a small quantity of nitrogen is excreted in a gaseous form by the skin, or in indefinite chemical combination, as an ammonia, and not in a firm combination, as urea. If the excretion by the skin is hindered, the nitrogen appears as ammonia, or a similar compound, in the blood, and is in part deposited as triple phosphate in the subcutaneous cellular tissue and peritoneum. He believes that the retention of this compound in the blood is the source of all the morbid appearances observed during life and after death. On the other hand, Laschkewitsch concludes from his researches that the effects on animals are due solely to the increased loss of animal heat which the experiments entail. He found that by wrapping a varnished animal in cotton-wool its life, and even health, may be preserved. The effect of the artificial suppression of perspiration is dilatation of the cutaneous capillaries, the vaso-motor nerves being paralysed by the application to the skin. The result of the vascular dilatation is rapid loss of heat to such an extent as to be incompatible with life.

It was to ascertain to which of these causes, if to either, the results are to be ascribed which uniformly follow the arrest of the secretion of the skin that Dr. Sokoloff's experiments have been undertaken. They were made upon dogs and rabbits. A varying extent of the skin was bared and covered with a substance capable of preventing the transudation of moisture. Various varnishes were employed, but it was found that the most satisfactory application was a thick oil. A comparison of a considerable number of experiments showed that the effect on the internal temperature varied according to the area of the skin on which the application was made. If the application was a very partial one, during the first days there was either a slight elevation of temperature (in the dog), or a slight fall (in the rabbit); but the deviation from the normal was never considerable. Subsequently there was a slight rise, followed by a fall; and simultaneously a series of symptoms indicated the commencement of serious organic mischief—general weakness, loss of appetite, evidence of weakened heart, dyspnœa, &c.; and these symptoms continued till death. In a few cases death was sudden and unexpected. If the whole, or nearly the whole, skin was painted, a quick and considerable fall in temperature occurred, and the manifestations of general disorder were much more rapid and stormy, and appeared often simultaneously. If the theory of Laschkewitsch were correct, the observations should show a proportion between the loss of heat and the resulting symptoms; but this was far from being the case. Where the application was partial, there was at first no invariable fall; in some cases there was actual pyrexia; it was only at the last that a considerable fall occurred. Admitting the coincidence of lowered temperature and the gravest symptoms, the causal relationship between the two is, in Dr. Sokoloff's opinion, far from being proved. If varnishing an animal causes vaso-motor paralysis of its cutaneous vessels, the effects on the temperature should resemble those in paralysis of the sympathetic, or after section of the spinal cord. In the latter case the temperature, normally considerably higher in the rectum than on the skin, falls, and falls everywhere in a uniform degree. In the case of arrested perspiration, however, the internal temperature was uniformly warmer than the external, both on the day after the application and until death. May not the loss of heat be due to increased conductivity of the varnished or oiled skin? This is probable, for the mere removal of the hair is sufficient to reduce the animal's temperature; and some experiments showed that it might, indeed, be a sufficient cause to account for the total fall in the experiments. It was found that cotton-wool did not maintain the temperature, as was assumed by Laschkewitsch; and Valentin found that an artificial supply of heat, although it rendered the animals more lively, did not prevent or postpone for long the fatal result.

On what grounds does the theory of a blood-poisoning rest? The main symptoms are albumen in the urine, weakened cardiac and respiratory action, and certain nervous troubles. After death, an inflammation of the parenchymatous organs is always found, those which suffered the most severely being the heart, liver, kidneys, alimentary canal and muscles, with signs of general œdema. The analogy with the effects of some poisons is certainly very close; and the hypothesis affords a better explanation of the phenomena than any other. The relation between the symptoms and the organs affected, in the case of the kidneys, is very intimate. It is impossible to overlook the obvious significance of the general œdema of organs and tissues, and of the presence of albumen and formed elements in the urine. The albuminuria, indeed, appears early, and increases as the symptoms increase. This is, then, to be regarded as one of the gravest consequences of the suppression of the perspiration—a result which agrees well with every-day clinical observation. It is probable, indeed, as clinical observation would also suggest, that many of the later troubles from which the animals suffer are secondary to the renal mischief. Of this, however, no direct evidence was to be obtained.

Microscopical examination showed nothing abnormal in the blood of animals suffering from the more intense consequences of the application. A more severe test was applied to it by injecting a portion of blood taken from an animal in the act of dying into the blood of a healthy animal. The results of several such experiments indicated a slight poisoned quality in the injected blood. Albumen quickly appeared in the urine, soon lessening, and disappearing on the fourth or fifth day. No albuminuria followed the injection of healthy blood or of distilled water. Thus the consequences of the injection are not the same as those of the suppression of the perspiration. In the one case the symptoms are slight and transient; in the other, grave and persistent. But in each case the kidney appears to suffer the most severely. No depression of temperature follows the injection of the morbid blood—a fact relied on by Laschkewitsch as evidence that no blood-poison is present. In the opinion of Sokoloff, however, the fall in temperature is less uniform, less related to the constitutional symptoms, than is the evidence of kidney affection, and he thus concludes that the blood of the animals experimented on contains a substance capable of exciting the same symptoms, though in less intensity, in a healthy animal. It must not be forgotten, however, in estimating the value of this opinion, that the symptom relied upon is one common to a large number of blood-poisons, and as such is of perhaps less value than any other as indicating identity of action, much less unity of nature. The poison of scarlatina, of diphtheria, of a dissecting wound, may all cause the appearance of albumen in the urine in the same form as a violent chill to the surface; but no more inference can be drawn as to their common character than from the presence of pyrexia. However suppressed action of the skin acts in causing parenchymatous inflammation of organs, that inflammation once set up must lead to a state of blood quite capable of causing, if injected into a healthy animal, slight symptoms of blood-poisoning, and, among the rest, albumen in the urine, without there being any necessary identity in the initial process in the two cases. M. Sokoloff's experiments are of considerable interest and importance, and his conclusion may be correct; but we cannot think that it is adequately proven by the facts he adduces in its support.

Much, we had almost said everything, is left by the Artisans' Dwellings Act to medical officers of health. New duties are imposed upon them, a large responsibility rests with them, and it cannot be disguised that they must henceforth enjoy the most extended opportunities of urgent and useful work. That they will encounter serious opposition, and have to face difficulties and dangers hitherto unknown, in the discharge of their proper functions, is inevitable. The task entrusted to their care, and the confidence reposed in their public spirit and sagacity, will call for tact, wisdom, and, we fear, in not a few cases, self-sacrifice. It will conduce sensibly to success if, without delay, measures are taken to obtain a clear view and mastery of the new duties. The preamble of the Act (38 & 39 Vict., c. 36) states the need for legislation, and points to the objects which should be ever present to the medical officer, with significant perspicuity.

> "Whereas various portions of many cities and boroughs are so built, and the buildings thereon are so densely inhabited, as to be highly injurious to the moral and physical welfare of the inhabitants; and whereas there are in such portions of cities and boroughs as aforesaid a great number of houses, courts, and alleys, which, by reason of the want of light, air, ventilation, or of proper conveniences, or from other causes, are unfit for human habitation, and fevers and diseases are constantly generated there, causing death or loss of health, not only in the courts and alleys, but also in other parts of such cities or boroughs," &c.

The area of reform, it will be seen, comprises not only the removal of constructional nuisances, but the elimination of all "other causes" "injurious to the moral and physical welfare of the inhabitants" of a district, and which make it a source of danger to "*other parts* of such cities and boroughs." It is important to bear this last point clearly in mind. The business of applying the remedy provided by the Act rests with the "Local Authority," subject to the supreme jurisdiction of the "Confirming Authority"; but the medical officer of health is himself the authority which must set the work of reform in motion. He is to make an "official representation" to the Local Authority "whenever he sees cause to make the same" (Sect. 4). It will, therefore, be the duty of medical officers to search out and expose the sanitary conditions which lie at the root of epidemic and prevalent disease and impair the "moral and physical welfare" of the people. How much zeal and knowledge of sanitary affairs are indispensable for the efficient discharge of this onerous first duty it is not necessary to explain. Looking to the absolute requirements of the case, it is startling to find the Legislature has left the authorities to reward their officers "with what remuneration they think fit." After the medical officer has made his official representation, the Local Authority may pass "a resolution in favour of an improvement scheme," or they may fail to do this. In any case, a copy of the report of the medical officer is to be sent to the "Confirming Authority"—i. e., Her Majesty's Secretary of State for Home Affairs, for the metropolis, and the Local Government Board, elsewhere. The medical officer's report or representation is to state "the facts," and declare "whether, in his opinion, the area is an unhealthy area or not an unhealthy area for the purposes of this Act." These "purposes" are, as we have shown, set out broadly in the preamble; and by the evils and defects there indicated the medical opinion must be determined. Occasionally, no doubt, the Local Authority will neglect or decline to recommend a costly reconstruction, and the medical officer will then, practically, stand charged with the duties of a public prosecutor in the cause of moral and physical health. In this position he will be required to support his allegations "by such evidence as the Secretary of State or Local Government Board may from time to time require." It will save a world of trouble, and avoid the risk of failure and discredit, if medical officers at the outset take ample measures to complete the case on which their "representation" is based, and to collect the evidence by which it is to be supported. If a medical officer fails, or is supposed to fail, in his duty, two or more justices, or twelve ratepayers acting together, may "complain to him," and require his report on a particular area. If his report is questioned or disputed, or, indeed, in any case, an inquiry will be ordered by the Confirming Authority, and an officer, representing the latter, will be sent to the district to verify the correctness of the official representation made to the Local Authority, and to inquire into the sufficiency of the scheme provided for improving the area, and into any local objection to be made to such scheme. It does not appear that the medical officer is required to suggest a scheme of his own to the Local Authority. His representation is, by Section 3, defined to be a declaration "that any houses, courts, or alleys within a certain area under the jurisdiction of the Local Authority are unfit for human habitation, or that diseases indicating a generally low condition of health amongst the population have been from time to time prevalent in a certain area within the jurisdiction of the Local Authority, and that such prevalence may reasonably be attributed to the closeness, narrowness, and bad arrangement, or the bad condition of the streets and houses or groups of houses within such area, or to the want of light, air, ventilation, or proper conveniences, or to any other sanitary defect, or to one or more of such causes, and that the evils connected with such houses, courts, or alleys, and the sanitary defects in such area cannot be effectually remedied otherwise than by an improvement scheme for the rearrangement and reconstruction of the streets and houses within such area, or of some of such streets or houses." He is not required to say in what the rearrangement or reconstruction ought to consist, but he *is* required to discriminate between remediable and irremediable causes of unhealthiness, and in the process of making this clear the scheme will practically be evolved. We are not prepared, however, to recommend medical officers to wander beyond the limits of their duty, and it is probable that much personal difficulty and peril of unpleasantness will be spared if they are careful to avoid the espousal of particular plans in which special interests may be concerned or affected. The civil medical officer of health is not in the position of the military medical officer, who may be called upon to mark out the area of a new camp. He has simply, boldly, and scientifically to deal with the state of things which exists, with the immediate sanitary condition of the area and its remote consequences, and he will do wisely to confine his professional services within these bounds. The opinion of a medical officer as to what new works may be expedient or necessary should be pronounced *after* some scheme has been submitted to him by the Local or the Confirming Authority, not before. This is the more necessary, because, as regards the question of sanitary fitness and sufficiency, he will be called upon to act as adviser, and perhaps as witness. His opinion should, under no circumstances, be expressed upon a scheme unofficially laid before him, and to which he might unwittingly be made party.

Annotations.

"Ne quid nimis."

DISEASED CATTLE.

WE trust the Privy Council will not be induced to relax any regulation necessary to protect the public from the sale of diseased, or even possibly diseased, meat. There appears to be a combination of the importers of foreign cattle to force changes upon the Government which may be fraught with danger to the community. As a general principle, it must be maintained that an efficient quarantine is indispensable in the case of cattle coming from countries or ports recently infected, or known as the frequent centres of disease. It is also clear there can be no safety in allowing a herd, some members of which have exhibited symptoms of a malady, to enter the market without conclusive proof that it is not further contaminated. Whether it may be necessary at once to slaughter the whole cargo, or if it is even wise to resort to that summary measure, are questions which may fairly be discussed. Possibly a crucial test might be applied to the *bona fides* of an importer by allowing him to keep, if he will, the remainder of a herd, after the destruction of any affected animal, until such time as the proof of its health may be complete. If an importer were prepared, and preferred, to maintain his cattle in quarantine, under rigorous inspection, at his own cost, instead of having them slaughtered, it would go far to show that proper care had been exercised in their selection at the port of shipment, and to ensure the utmost precaution as to further imports. The public are primarily interested to secure healthy stock and fair prices. It is easy to understand that importers do not care to face the loss of value on a whole herd whenever a single animal may be affected. To reconcile the interests of the dealer with those of the consumer it may be necessary to make some sacrifice, but the concession must not involve any weakening of the barriers by which we keep out disease. Our home breeders and graziers have already lost so heavily by the importation of diseased cattle that, at all costs, they must be protected. If an importer is sure that the great body of his herd is not infected, he will probably find it to his advantage to keep it for a sufficient period, after the elimination of any individual case of disease, to convince the authorities that it is perfectly healthy. If he entertains a doubt on the subject commercial prudence will prompt him to submit to the inevitable loss consequent on immediate slaughter. Beyond this concession, with safe conditions, the Privy Council should not be persuaded to go. It is no argument against maintaining proper restrictions upon the importation of cattle and sheep that our own herds and flocks are unfortunately affected. If we hope to stamp out the disease we must not only isolate infected districts within these islands, but rigorously protect the whole United Kingdom from the new poison threatening us from without. The circumstance of our being already infected increases the urgency of this last precaution, instead of diminishing it, as popular writers suppose and insist. Nor is it unreasonable to impose more stringent regulations on cattle imported from abroad, even from our own colonies, than on those brought from places within the United Kingdom, such as Ireland and Scotland. The condition of districts under our own immediate inspection is better known, and they can be more readily subjected to special restrictions than those over which we have no control and for which we are not directly responsible. It is much to be regretted that the obvious fallacies involved in these specious contentions should be overlooked by the press, albeit we may hope the authorities will not be misled or mischievously influenced by the idle sophistries urged in the interests of a particular mercantile venture and in strange indifference to the public health.

DISTRICT NURSING.

IN continuation of the Special Report on the National Nursing Association that appeared on the 14th inst., we have to notice an important Appendix, compiled by Miss Nightingale, on district nursing. The training for this work must be of a kind that does not and cannot exist in a hospital, and district training is essential after the year's hospital training. If this be not accomplished, and in a systematic way, the nurse does not really nurse, but degenerates into a giver. She very rarely sees, or receives directions from, the medical attendant, but on her own responsibility applies lotions and dressings, or administers beef-tea, &c. "She goes her own way." The district nurse should be taught, among other things, to do without the appliances found ready to hand in a hospital; but inasmuch as there is nothing, so to speak, to keep the district nurse up to the work, she requires "retempering" in the hospital at least three months every two years. It is proposed in connexion with the work of the National Association, that the district staff should be supervised by a lady superintendent, having head-quarters in the training school, which latter should be contiguous to the hospital. Where small district homes are established the superintendent should reside occasionally at each of these institutions, but the nurses should be selected, appointed, dismissed, and paid by the hospital superintendent or matron, to whom also the district superintendent should be responsible. In order to avoid the inevitable tendency to become "givers" rather than nurses, it is proposed to institute a system of checks or tickets, or what the French call "bons," which may be given when nourishment, bedding, &c., are seen to be urgently required, which may be presented and exchanged at the district home in the immediate neighbourhood. Miss Nightingale, in conclusion, says:—"On the whole, it would seem to require a higher class of woman to be a district nurse than even to be a hospital nurse. If the district nurse is merely an ordinary sort of woman, she does not find enough to do, except in epidemic times, when she is overwhelmed. There is not enough to do in healthy times to occupy an inferior class of woman; but how much too much to do in teaching the poor cleanliness, care of children, how to obtain fresh air, how to prevent disease, &c." The forms and rules used in the District Nursing Association at Liverpool are very favourably reviewed. It cannot be too emphatically insisted upon that the governing bodies of these associations, whether in metropolitan or urban districts, should learn accurately the extent of powers relating to health granted by the Acts to the various local boards. Medical officers of health, parochial surgeons, and sanitary inspectors may aid and be aided also in the performance of their own duties very materially by an interchange of information with the members of a staff such as this Association is endeavouring to supply.

CERTIFICATION BY UNQUALIFIED PERSONS.

AT Hammersmith, according to the report of *The Times*, Mr. William Camley Smith, of Allen-terrace, Kensington, was summoned, at the instance of the Kensington Board of Guardians, for falsely pretending to be a registered medical practitioner by signing a medical certificate under the Vaccination Act, to the effect that a certain child was not in a fit state to be successfully vaccinated. Mr. Draper, clerk to the board, attended in support of the summons; Mr. Claydon defended. Two certificates were produced. One purported to be signed by Percy Leslie, M.D., 1. Allen-terrace, Kensington, and the other bore the signature, W. C. Smith, *pro* Percy Leslie, M.D., both in the same handwriting, and relating to two children of different parents. Mr. C. Shattock, the officer appointed under the Vaccination Act, said that there was a brass plate bearing the defendant's name on the gate where he resided. At one time Dr. Leslie's name was on the gate, but it had been down for months. Since the proceedings had been taken another plate had been put up. Dr. Leslie resided in Westminster. Dr. Percy Leslie said he was duly registered. It was a common practice for unqualified practitioners to be employed in hospitals and by general practitioners. He had known the defendant for four years. He studied and lived with him in Westminster. The defendant removed to Kensington, and for a year he had ceased to be his assistant. Since the defendant had been in Kensington witness had been there very often. No doubt the defendant was constantly in the habit of signing certificates for him. There was no other alternative, as he could not always be at home. The witness further stated that he did not see the child Green on the day mentioned. The father was not his patient. Mr. Bridge said it was absurd to say that the defendant was Dr. Leslie's assistant. He came down to Kensington, put up a brass plate, and acted as a doctor. It was not a case of an assistant signing a certificate for his master. He fined the defendant £10, and ordered him to pay two guineas costs additional, with the alternative of two months' imprisonment.

It is to be hoped that the above case will serve as a warning both to unqualified persons and to practitioners who co-operate with and countenance them. It would take a lawyer to say what were the varying degrees of relationship between Mr. Smith and Dr. Percy Leslie at different times. A letter elsewhere throws a little light on the subject. At one time they were so intimate that Dr. Leslie's name was on the defendant's brass plate. This had been discontinued, but from the evidence it would seem that there survived such a friendly understanding between him and Dr. Leslie, that the defendant was "constantly in the habit of signing certificates for Dr. Leslie." We agree with Mr. Bridge, that it is absurd to regard the defendant as Dr. Leslie's assistant. The distance, the perfectly distinct houses, the fact that the patients whose vaccination was formally certified by the use of Dr. Leslie's name had not been seen by Dr. Leslie, and the removal of his name from the brass plate, all make this theory untenable. We have always maintained that to put an unqualified assistant in a separate house, and at a distance, is an unjustifiable use of an unqualified assistant. To give him the use of one's name, even for the inevitable difficulty of certification, is not only unjustifiable but illegal. It is an attempt to put a man into practice without the qualifications required by the law, for which other men have to labour hard and pay much. It is unjust both to the public, who are misled, and to the profession, which has always little enough protection at the hands of the law. The case of Mr. William Camley Smith shows that such a system is not only illegal but costly, and we may hope for its entire discontinuance.

THE DUTY OF TAKING HOLIDAY.

The medical profession is a hardworking one. We "spurn delights and live laborious days" to a greater extent probably than any other men. And what is worst of all, we have often to follow up laborious days with equally laborious nights. Large portions of our time have often to be spent in attendance on patients who live in close rooms and in all sorts of unhealthy conditions. Yet, notwithstanding—perhaps partly in consequence of—all these peculiarities in our lot, we have, of all men probably, the least adequate idea of the necessity of a break in the monotony of our accustomed toil. We lately met a respected and still active member of our profession who said he had not spent two nights out of the town in which he practises for forty years excepting the time when he had the typhoid fever. Fancy forty years of country practice with no memory of a holiday but what is involved in having typhoid fever! There is much in such devotion to work to be greatly admired, and that is worthy of study in a time when younger men seem to think that half their life is to be given up to pleasure, or, as it is called, recreation—so much that we can scarcely find it in our hearts to blame it or to say that it should have been otherwise. Yet we think that life was not meant to be so full of labour as this. Doubtless it is possible to some men even at home and in harness to get such changes of occupation as give the sense of rest. But to most men holiday is only possible away from home and out of harness. Their tendency to work is so strong that they will work unless entirely removed from the sphere of work. Besides, the essence of a holiday, especially of a medical man's holiday, is irresponsibility—the feeling that nobody's life or health is depending on his action. It matters comparatively little where we go or what we do, so that we get somewhere—anywhere—out of the world of surrounding work into some solitude or some society where our calling will not be suspected and we shall be treated as useless functionless people. The medical man's holiday has this advantage, too, that it takes him away from the region of sickness and its associations. Though our familiarity with disease and the frequency with which it succumbs to our "lenient arts" make us to be less painfully affected by it than otherwise, there is still something grave and depressing in our work from which it is well to escape for a time. On all these grounds we urge our readers to remember, amongst other duties, the duty of taking a holiday. The winter was long and arduous; serious disease was prolonged far into the summer, and allowed medical men but scanty leisure. We should act on the advice we are so fond of giving—take a holiday. No doubt there are little difficulties in the way, but they can be overcome. Let us trust a little more to the magnanimity of our patients and the friendly kindness of our professional brethren. Let us also do all we can to smooth the way for our neighbour's holiday and to make it pleasant, so that winter may find us all with renewed powers, with fresh interest in our work, and with pleasant reminiscences of our own holiday and that of our brethren. Equal to the pleasure of getting a holiday is that of helping some hard-worked neighbour to get one.

CHEMISTS' PRESCRIBING.

We think the public should feel grateful to Dr. Diplock for lately directing attention to the evils of chemists' prescribing, and for enforcing his remarks by several illustrations of the absurd mistakes made by chemists who thus misunderstand their duties. He had known a mustard plaster ordered to the chest for the good of a fractured skull, and chalk-mixture prescribed for effusion on the brain. It is becoming quite common for chemists to go on prescribing for cases until they become serious, or until evidences of impecuniosity on the part of the patient appear. Perhaps the best remedy for this is the publicity of cases of the kind which called forth Dr. Diplock's remarks. In this case the little child was under the care of a local chemist, a medical man being called in only to find the patient dying of inflammation of the lungs. It is clearly right in such circumstances to withhold certificates. The action of the chemist should be investigated and exposed, and it can only be so satisfactorily by a jury. It is fair to assume that life might have been saved by early application to medical men; and for preventing this and possibly maltreating the case, the facts should be fully brought to light. There is the more reasonableness in medical men refusing to shield chemists who act the part of doctors, that medical advice and even medicines are now within the easy reach of all classes.

FALLACIES OF FIGURES.

We are each year becoming more statistical, and at the close of the Parliamentary session thoughtful people are especially prone to practise the virtue of faith in figures. There is no virtue which more easily runs into a vice. The false estimates formed of local healthfulness from mere numerical returns of local health, or of the public progress in morals and sobriety from the report of "drunk and disorderly persons arrested by the police," are gross instances of the folly of trusting wholly to figures. It needs no very acute reasoning to discover that if any locality enjoys so high a reputation for salubrity that numbers of sick people flock to it, diseases prevalent in the neighbourhood are likely to be numerous, and the death-rate will probably be large. In the same way the circumstance that only 26,155 "drunk and disorderly" cases have come under the official notice of police inspectors during the past year, as against 29,755 in the year before last, may be as easily accounted for by the possibility that the police fail, from some cause, to arrest so many persons falling under this technical description, as on the presumption that there are not so many cases of the kind to be arrested. There are, however, other and less apparent sources of fallacy to which the attention of social philosophers may be usefully directed. For example, although only 120 bakers have been proceeded against within the last year for commission of the "smoke nuisance," that may proceed from compliance with the wishes of inspectors in the matter of adopting specially recommended apparatus quite as much as from increased compliance with the law. We do not say this hypothetical explanation is the true one, but there clearly ought to be no room for question. It is of the last importance just now to see that all inspectorial work is discharged vigorously and impartially, with a single eye to the public advantage. If Acts conducing to the general health, comfort, and convenience are to be worked efficiently, they must be carried out in their integrity by an agency which is official and nothing more. It will sensibly help to bring about the reforms we so much desire if the reports of our administrative authorities are closely and carefully studied, but it is not enough to take the figures as they stand. Every possible error and misconception must be eliminated from the judgment deduced, and this requires a rigorous search for the fallacies with which almost every return of the kind abounds, and which being disregarded will too certainly mar its value.

THE CLINICAL THERMOSCOPE.

AN ingenious instrument for detecting variations in the temperature of the surface of the body has been invented by Dr. Edward Seguin, of New York. It is, as he describes it, "intended as a quicker and more delicate test of differential temperatures than the thermometer, and less to give the degrees of heat than the velocity of its radiation." It consists in a glass tube seven inches in length, and with a bore of one quarter of a line, closed at one end by a bulb nine lines in diameter, and open at the other end by slight enlargement of the tube. To prepare it for use the air in the instrument is rarefied by immersion of the bulb in hot water, and, this being effected, the open mouth of the tube is plunged an inch deep into cold water, and then quickly withdrawn. A "water-index" is thus formed, the only difficulty being that the air may not have been sufficiently heated or else overheated, so that the index either does not reach the bulb or else falls into it. A sliding scale of inches or centimetres is applied to the tube, so that its lowest figure corresponds to the level of the head of the index. Dr. Seguin claims for this little and simple instrument considerable value in detecting the amount of radiation from the surface of the body, and gives two instances in which he had found it of service, in the one in detecting local inflammation in the hypogastric region in a case at first mistaken for typhoid, and in the other in diagnosing fracture of the base of the skull. In the latter case the temperature in the axilla was 98·5° F., and the index of the thermoscope rising in the hand, axilla, and elsewhere, fell rapidly in the inner angle of the orbit. He also speaks of his thermoscope as being the best means to be employed for the proof of death, as evidenced by the index remaining stationary when applied to the body. Dr. Seguin calls the clinical thermoscope "an instrument of diagnosis in physic and surgery, a monitor in the nursery, a test in the physiological laboratory, also a necrometer in the dead chamber."

POOR-LAW MEDICAL RELIEF IN SCOTLAND.

DR. JOSEPH ROGERS, Ex-President of the Poor-law Medical Officers' Association of England, read a most important paper at the recent meeting in Edinburgh "On the Anomalies and Deficiencies of Poor-law Medical Relief in Scotland." He shows the absurd want of appreciation of medical service for the poor which obtains in that religious portion of the kingdom, and the inequality in the provision for such services in different parishes. Take New Deer and Old Deer in Aberdeenshire. New Deer had a population in 1871 of 4853, of which number 152 were registered poor and their dependants, 50 were casual poor and their dependants, and 7 lunatics. Medical relief cost £30, medicines being found by the medical officer. The total gross relief amounted to £803 9*s.* 2*d.* Of this number of paupers 7 died or were otherwise got rid of in the course of the year. Old Deer had a population in 1871 of 5085; there were 257 registered poor and dependants, 94 casual poor and dependants, and 24 lunatics. Of this number 30 died or otherwise disappeared. The total poor relief was £1624. Although the population, pauperism, gross relief, sickness, and mortality were so much greater than in New Deer, the stipend out of which everything had to be found was only £9 10*s.* 1*d.* more than in New Deer. A striking instance of the disparity between Scotland and Ireland, as regards the provision of medical relief, is shown by comparing the case of Aberdeen, with a population of 47,077, and the medical relief costing £246 6*s.* 10*d.*, and that of Dungannon, with a population of 45,990, and medical relief costing £1069. In Aberdeen the whole cost for poor relief is nearly three times what it is in Dungannon—that is, £12,512 16*s.*, instead of £4587. In the parish of Bourtie they give the medical gentleman a guinea a year as a retaining fee, and for every pauper he attends just according to what he may charge, or what may be considered a reasonable compensation. The population is 499. In 1869, the total cost of medical relief was £1 11*s.* 10*d.*; the total of paupers and dependants was 25, of whom 2 died. Fancy a medical man being required to attend 25 paupers for a year, 2 of them in fatal illnesses, for £1 11*s.* 10*d.*, including, we presume, the retaining fee. No wonder that Dr. Rogers finds ample illustration of his proposition, that inadequate medical relief always coincides with excessive pauperism and an excessive death-rate. Dr. Rogers has partially exposed a most unsatisfactory and discreditable system—bad for the poor and for the ratepayers, and very bad for medical men. It will be the fault of the Poor-law medical officers in Scotland if the exposure is not completed, and a remedy provided.

UNQUALIFIED ASSISTANCE.

AN inquest was held the other day in the neighbourhood of Durham, on the body of an agricultural labourer who died suddenly in the course of an acute illness, apparently rheumatic fever, he having been attended only by the unqualified son of an unqualified practitioner in the neighbourhood. Vomiting preceded death, but there was nothing, in the opinion of a surgeon who saw him just after he died, which might not be accounted for by the cardiac failure not uncommon in cases of acute rheumatism. An inquest was rightly called for, and a verdict was returned, founded on the opinion of the surgeon who listened to the evidence, that the deceased died from inflammation of the covering of the heart. It is a case, however, in which there certainly should have been a post-mortem examination. None was made, apparently because it would have been necessary to do it by candle-light, and the opinion was expressed by the surgeon to whom the examination was entrusted, that "it was not advisable to make a post-mortem by candle-light." An examination by candle-light is much better than no examination at all. When pericarditis, the supposed cause of death, is sufficiently intense to lead to a fatal issue, its pathological appearances are usually obvious enough. The extent to which the poor are still under the care of unqualified practitioners is much to be regretted. No doubt there are some good and well-informed practitioners who possess no qualifications, but the sick have no guarantee against the grossest ignorance, and often no choice but to commit themselves to the care of absolute incompetence. In this instance the "medical student" in charge of the case appears, from the report of the inquest, to have had no conception of the fact that the gravest complications may arise and lead to sudden death in the mildest case of rheumatic fever, and apparently judged of the state of the heart only by feeling the pulse.

DRUGGISTS AND THE NORWOOD POISONING CASE.

IT would be premature to comment on the remarkable facts which constitute what is known in the papers as the Norwood poisoning case. One incident in the case, however, may be noted without prejudice to the prisoner, as it illustrates an evil to which we have referred elsewhere, and which has lately been commented on by a metropolitan coroner. We refer to the prescribing practices of druggists, and the way in which they administer over their counters the strongest medicines. It is true that both the chemists examined on Tuesday as having been asked by the prisoner for strychnine were able to say that they had refused it. So far so good. But one of them, Mr. Windle, of Thomas-terrace, Lower Norwood, seemed to admit in his evidence that he had supplied the prisoner with two draughts containing nux vomica. We protest against such practices on the part of druggists. Notwithstanding the law against the sale of poisons, it is evidently possible for a person to go about from one chemist to another to get doses, perhaps fatal ones when multiplied, of deadly drugs. There is no excuse for such conduct, and the sooner it is made illegal, if it is not so already, the better in the interest of the public.

A NOVEL (!) VIEW OF TYPHOID FEVER.

WE have received a pamphlet by Dr. Morton, of Sydney, which purports to contain certain novel views as to the etiology of typhoid fever. The pamphlet is a peculiar one. It has the merit of brevity, and in great part consists of extracts from the writings of standard authors on the continued fevers, by which the pamphleteer endeavours to show that all the forms of fever, "febricula," "relapsing," "typhoid," and "typhus," are identical. Thus does he calmly assume that the labours of Jenner and Stewart are of no value. By no means a novel view this, but rather a reversion to the old days of incomplete clinical and pathological observation. The reason assigned by Dr. Morton for identity is that in all these diseases there is found after death fluidity of blood and congestion of internal organs. The rest of the pamphlet contains a statement of the writer's belief that typhoid fever is due to the absorption of gases from the alimentary canal of the patient, and on this he bases his treatment, upon which we need not dwell. In fact, we have already dwelt longer than necessary on this last contribution from the colonies. Happily all our brethren at the antipodes do not embrace the "novel" views of Dr. Morton.

HYDATID CYST OF THE LIVER.

THESE cases are very frequently seen in hospital practice, and generally yield to treatment, especially when tapping is had recourse to. In most instances such tapping is innocuous, but it should be remembered that sudden death may occur after this operation. This misfortune lately happened to M. Martineau, at the Lariboisière Hospital of Paris. The patient was thirty-one years of age, and presented at the epigastrium an indolent, dull-sounding tumour, with all the symptoms of a hydatid cyst. Tapping was resorted to with a capillary trocar. Very little clear fluid was obtained, and on removing the trocar it was found obstructed by a shred of membrane. The patient in the meantime turned pale and faint; he vomited some wine, and threw up much white mucus from the bronchi. In twenty minutes, in spite of the most active means, he breathed his last. Two cysts, the size of fists, were found on the under surface of the liver, one under the right, the other under the left lobe. No peritonitis. M. Martineau considers that the fatal issue was owing to reflex paralysis of the pneumogastric.

A fact worthy of note is the assertion of M. Guyot, made at the meeting of the Medical Society of the Hospitals of Paris, where this case was read, that he had been acquainted with seven or eight cases of death within twenty-four hours after tapping of the liver. Although many cases have been mentioned where, not hydatid cysts, but the liver itself was punctured without evil consequences, we should bear in mind the possibility of untoward results in this operation.

THE CORONER FOR CENTRAL MIDDLESEX.

DR. HARDWICKE is attempting to perform the difficult feat of serving two masters. He was elected a few months ago triumphantly, if not in spite of the Middlesex magistrates, at any rate in support of the principle that inquests should be made real by an actual ascertainment of the cause of death in doubtful or suspicious cases. During his candidature he intimated his intention to follow in the steps of his predecessor and of Mr. Wakley, who by judicious use of the power of ordering post-mortem examinations to be made, elucidated whole classes of otherwise mysterious deaths, and thus exposed sometimes carelessness and sometimes crime. No sooner was Dr. Hardwicke duly and most victoriously elected to continue the work of such predecessors, than he intimated his determination to consult, much more than his predecessors, the views of the Middlesex magistrates. And now he has his reward. Captain Morley is quite eloquent and happy over the reduction in Dr. Hardwicke's accounts — "less by £112 10*s.* 6*d.* than Dr. Lankester's, and the post-mortem examinations less by forty-two." All we shall say is, that the reputation attaching throughout the country to the coronership of Middlesex is associated with a regard, not to pounds, shillings, and pence, but to the value of human life and of any investigations which may show how it is lost or wasted.

THE HEALTH CLASS OF THE MIDLAND INSTITUTE.

THE Council of the Midland Institute has again invited Dr. Richardson to deliver the inaugural lecture. The invitation has been accepted, and the lecture, which will be delivered on Monday, September 13th, at 8 P.M., in the Masonic Hall, Birmingham, will be on the subject of "Tobacco in relation to Health." Last year the "introductory" was on Alcohol, and many thousands of the published abstract of it were sold.

The course will, as heretofore, be continued by Professor Corfield, whose labours in previous sessions have been eminently rewarded in the results obtained by his pupils. The name of the usefully liberal founder of these Health classes remains still unknown.

HOSPITAL MORTALITY.

THE Statistical Society has chosen, as the topic of its prize essay next year, the subject of hospital mortality. The question is undoubtedly one of the highest importance, and a careful and unbiased analysis of the facts and statistics at present available upon the subject cannot fail to be instructive. We are not very sanguine, however, that the question can be settled by statistics. One term of the comparison on which all depends may be ascertained with something like accuracy and completeness; the history of the grave occasional epidemics of disease with which hospitals are visited, and which no one disputes, may be detailed with effect; but the other term, the statistics of private practice, cannot be ascertained on a scale sufficiently extensive and reliable to make a statistical comparison of much value.

A NEW PROCESS OF STAINING TISSUES.

THE well-known histologist, M. Cornil, has recently introduced "violet of methylaniline" as a reagent for staining tissues in microscopical research. Its merit lies in the separation of its constituents into red and blue, each of which has affinities for different parts of the tissue. This is especially well seen when applied to organs in a state of lardaceous degeneration, the lardaceous parts taking a red tint, the normal a blue. By this method M. Cornil has ascertained that the first seat of the lardaceous process is in the interior of the small arteries, the endothelium of which, as well as the outer and middle coats, remaining intact for a considerable time. The objection to the process, which will certainly militate against its general adoption, lies in the fact that the colouration disappears in preparations mounted in the ordinary media, as glycerine, Canada balsam, &c.

THE SWIM ACROSS THE CHANNEL.

CAPTAIN WEBB has accomplished the great task which he had set himself without any rhodomontade or flourish of trumpets. The qualities requisite for such an unprecedented feat distinguish Webb as a phenomenally powerful man. The courage, endurance, and physical strength displayed will henceforth, no doubt, serve as an illustration of the amount of strain the human frame is capable of sustaining. It was to be expected that he would have shown some signs of exhaustion at the finish, but it does not appear that he is any the worse for his perilous trip. We understand that it is contemplated to present Webb with a practical expression of that admiration which plucky deeds never fail to arouse among Englishmen. If, as we are informed, he is the son of a medical man, the profession might well assist in rewarding the brave fellow.

THE PHARMACEUTICAL CONFERENCE.

THE Pharmaceutical Association of Great Britain held their twelfth annual conference at Bristol this week. Proceedings were commenced on Tuesday by the delivery of an excellent address by the President, Mr. T. B. Groves, who congratulated the members on meeting once more at the same time and place as the British Association. The address touched on all the points of interest which have claimed the attention of chemists and druggists during the past year. We are glad that the meeting has proved such a successful one. The Association now numbers over 3000 members, and is a powerful and respected body.

ETHER v. CHLOROFORM.

Apropos of the recent discussion on this subject, we find in the last annual report on the Marine Hospital Service of the United States, that, in operations requiring the use of anæsthetics, the relative frequency of the employment of chloroform was 52 per cent., of ether 35 per cent., and of chloroform and ether combined 13 per cent. So that, in spite of what has been recorded, ether is by no means exclusively used as an anæsthetic in the United States of America.

DR. MOUAT and Mr. Henley, Poor-law inspectors, recently held an inquiry regarding a complaint made by the Wimbledon Local Board, that certain paupers suffering from scarlet fever were discharged from the Kingston Workhouse before the danger of infection was over. The Local Government Board have now addressed a letter to the Kingston guardians, stating that the complaint of the local authority has been established. The medical officer is blamed for laxity of supervision, and is admonished to be more vigilant in the future. We would here caution medical officers of union houses against permitting scarlet fever patients to leave the institution until the desquamating stage of the disease is over.

IT is well known that a large number of the Rifle Volunteers were formed into "provisional battalions" to take part in the recent military manœuvres at Aldershot. Presumably all the men were of a stamina and training somewhat above the average of their brethren, so it will perhaps surprise many who have an exaggerated faith in the Volunteer force to learn that a great number of them suffered very severely from exposure to the sun and from the by no means excessive marching which they underwent. Swollen faces and sore eyes might be seen in the ranks, while a few ingenious men wore paper masks to protect themselves from the sun.

THE *Metropolitan* states that several cases of enteric fever have occurred lately among men exposed to sewer-gas. It may be remembered that some time back the Metropolitan Board of Works issued circulars to all the parishes in London, asking for a return of any cases of zymotic disease amongst workmen employed in the sewers. We have no doubt that patient and systematic investigation in this direction would reward anyone with the necessary time at his disposal, and result in the collection of valuable data.

THE remains of Mr. A. W. Gage, surgeon, who had been a Volunteer medical officer since the year 1860, were interred in Paddington cemetery on Saturday last, in the presence of about 400 members of his regiment (the 36th Middlesex Rifles), who accompanied the funeral *cortège* from the deceased gentleman's house in St. John's-wood. Such a demonstration is gratifying to the profession generally, and must be a source of consolation—albeit mournful—to Mr. Gage's friends.

IN London 1453 deaths were registered last week, including 1 from small-pox, 27 from measles, 59 from scarlet fever, 9 from diphtheria, 68 from whooping-cough, 18 from different forms of fever, and 181 from diarrhœa. Different forms of violence caused 64 deaths. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained 235 patients on the 21st inst., of whom 168 were under treatment for scarlet fever.

WE last week recorded in our "Obituary" column an instance of longevity. It related to the decease of Mr. James Snow, of Atherstone-place, Lincoln (Member 1802, Fellow 1844, Royal Coll. Surg. Eng.), in his ninety-fifth year. Mr. Snow was also a Justice of the Peace for Lincoln. The attainment of such an age in the profession, if not without precedent, is, to say the least, exceptional.

IT appears that the ship reported in THE LANCET as having arrived at San Francisco with a scurvy-stricken crew belongs to North Germany. An official inquiry was ordered last week as to an outbreak of scurvy that occurred on board a British vessel on the passage from Lagos to London.

The horses of the London General Omnibus Company are suffering from a strange and fatal malady. The disease appeared first among the horses employed in the Paddington district. It has been stated that in one stable alone twenty valuable animals lay dead on the same day, while at present there are over 200 affected. So far no explanation whatever has been given of the cause of the outbreak. A thorough inquiry into the whole matter should be made by experienced veterinary surgeons, and we might mention the name of Mr. G. Fleming as a gentleman whose services might prove valuable.

We publish this week an obituary notice of the late Dr. Toler Maunsell, of Dublin. The deceased gentleman was an indefatigable and successful advocate of the claims of the Irish Poor-law medical service, which body of men may now well show in some manner their sense of indebtedness to him, and record in a practical manner the estimation in which he was held. Dr. Maunsell was for some time the Dublin correspondent of The Lancet, and many of his letters dealing with the cause with which he had so long associated himself will now recur to our readers.

SANITARY NOTES AND REPORTS.

Mr. Alex. Winter Blyth, medical officer of health to the Okehampton Rural Sanitary Authority, has recently presented an annual report to his committee, which is chiefly noteworthy as containing some interesting particulars in connexion with epidemic pneumonia. This disease has been specially prevalent and very fatal in the Okehampton district, and the evidence adduced by Mr. Blyth goes to prove that the disease was in these cases undoubtedly infectious. Dr. Christian Budd reminds the author that he (Dr. Budd) many years ago recognised pneumonia as a blood disorder capable of being propagated by contagion. As one means of preventing this, Dr. Budd has always systematically disinfected the sputa, and relied also very much upon isolation and free ventilation, keeping bedroom windows open all the night. It is well that the attention of health officers should be directed to this subject, because it appears to have attracted little notice beyond the limits of the south-western counties. The report above quoted records nothing about water-supply, hospital accommodation, vaccination, and other subjects included in the routine work of a medical officer of health. It is right that the sanitary authority should be furnished with such particulars and short practical deductions drawn therefrom. These are even more important than a popular description of epidemic diseases.

Mr. Haviland, in presenting a special report to the Urban Sanitary Authority of Northampton for the years 1873–4, is able to offer congratulations on a decline in the average percentage of mortality. Deaths of children were exceptionally high in this town during the ten years 1861–70, those due to diarrhœa amounting to 10·9 per 1000, or nearly double the percentage for England and Wales. Small-pox was 2·4 per 1000 in excess, scarlet fever 2·6 in excess, measles 2 in excess, and diseases of the respiratory organs (including phthisis) 1·9 in excess, as compared with the whole country. During the years under consideration, the mortality has, as was remarked above, lessened considerably, and is accounted for by the fact "that during these later years the Northampton Water Company's deep well of 163 feet in the marlstone has supplied water to the inhabitants instead of the shallow wells, which for ages had frequently become polluted by their close proximity, in the porous ironstone, to filthy receptacles of sewage of every description." All supplies from superficial sources are now cut off, and during the past two years the mortality of Northampton from the seven principal zymotic diseases has, as compared with the preceding periods above quoted, declined considerably, the borough death-rate being below the average English death-rate, and considerably below the average for town districts. These records as to Northampton are specially noteworthy, as showing conclusively the important influences exercised by a good water-supply.

The second Report on the sanitary condition of certain districts in Oxfordshire, prepared by Dr. Gilbert W. Child, medical officer of health, has recently been issued. The author commences by recording that "sanitary statistics, as we are at present able to obtain them, are utterly useless for every scientific purpose, and, indeed, not only useless but misleading." Scarlatina and diphtheria, typhoid and diarrhœa, are mixed up together. "Slow fever," "general break-up," and "diuresis," are among the causes of death found in registers. The statement that a man died of "erysipelas (fourteen days), typhoid fever and exhaustion (seven days)," is somewhat puzzling; as also "diabetes, typhoid fever (fourteen days)," where no history of typhoid could in either case be obtained. The importance of obtaining early information as to the existence of epidemics is strongly insisted upon, and the author thinks that a legal obligation should be laid upon every householder to give notice within forty-eight hours of the occurrence of any case of infectious disease within his house. (This plan, by the way, is adopted, and very successfully, in Holland, and the house is then, as it were, quarantined, by placing a conspicuous card in the window.) Dr. Child inveighs against the practice of ventilating sewers by openings into the streets at the road level, conspicuous examples of which exist, as he says, at Oxford. It is argued, therefore, that a well-laid, open street gutter is, after all, in country villages, the best system of drainage "which our present knowledge enables us to devise." The Report, which is admirably compiled and unexceptionably got up, contains a variety of information and discursive matter well worthy the attention of urban and rural officers of health.

Correspondence.

"Audi alteram partem."

CHLOROFORM OR ETHER.

To the Editor of The Lancet.

Sir,—The statement contained in Dr. Hodges's letter, published in The Lancet of the 14th inst., to the effect that in March last I had abandoned ether as an anæsthetic, in consequence of having lost several patients from its use, requires to be modified.

It is true that at the time mentioned I had discontinued the employment of ether, my reasons being mainly as follows:—(1st) In my own practice I had observed in several instances after its use a bronchial attack extending over a variable number of days, which may, perhaps, be best described as one of suffocative catarrh; (2nd) my colleague, Mr. Wheelhouse, informed me that he, too, had met with similar effects, and that one patient under his care had died of acute bronchitis; and (3rd) in a few instances the administration of ether had been followed by violent maniacal excitement. One patient, upon whom an operation for strangulated hernia had been performed, in his frenzy tore the wound open and dragged out a large loop of intestine. Thus, because my comparatively small experience of ether had afforded such unfavourable testimony, I deemed it prudent to wait for further information, and meanwhile to fall back upon chloroform, from which in nearly twenty years I have met with but one death.

In administering ether our chief object had always been carefully to prevent any dilution of the vapour with air. The apparatus we used was a large sponge covered, except at its mouth, with impermeable cloth. Two or three ounces of ether having been poured into the hollow, the sponge was forcibly pressed over the nose and mouth of the patient, and there retained, with a momentary removal only when the ether required to be renewed until anæsthesia was complete.

After an interval of a few months we are now again using ether, but, by simply pouring it upon a folded towel held closely over the nose and mouth, air is admitted along with the vapour. As yet it is too early to speak of results. Two cases within the last few weeks have given me uneasiness.

On the 1st of this month I was asked by Dr. Allbutt and Mr. Holmes to perform lumbar colotomy upon a patient whom they were jointly attending. Ether was administered by Mr. M'Gill. Nothing could be more satisfactory than the patient's condition during the operation. As soon, however, as sensibility returned a sense of suffocation overpowered all other feelings, and it was not until the third or fourth day after operation that our anxiety on account of his breathing was removed. Even now, at the end of three weeks, he complains of wheezing and cough. Prior to the operation he had been absolutely free from all chest symptoms.

The other case, though perhaps open to exception, is worthy of mention. On the night of the 13th inst. I removed, at the Leeds Infirmary, an extra-uterine fœtus at about the eighth month, by abdominal section, the mother being under the influence of ether. The child, whose movements had previously been of the most lively order, was readily extracted, and separated in the usual manner. The mother did not suffer in any untoward way from the effect of the ether. The baby, well-formed and vigorous, had a desperate struggle for existence, extending over fully an hour, in consequence of imperfect respiration. Mr. Hey has since suggested that the ether was probably responsible for this, and I think the suggestion a reasonable one.

Notwithstanding these somewhat unfavourable beginnings, it is my intention, in deference to the experience of others, to give ether an extended and careful trial. As yet I am not prepared to say more than that I am not convinced of the superiority of ether over chloroform. I will only add that, after a large experience of its use, I entertain a great respect for chloroform, which has been in no wise lessened by the recent indiscreet utterance regarding it.

Although, unhappily, many deaths have occurred, some of which, indeed, have been as unavoidable as they were unforeseen, I am fully convinced that if proper care and competent knowledge be brought to bear in every case in which chloroform is given, fatal consequences will be few and far between.

I am, Sir, your obedient servant,

Leeds, August 24th, 1875. T. R. JESSOP.

To the Editor of THE LANCET.

SIR,—I trust that, in any future comprehensive estimate of the dangers of chloroform inhalation, the mode of its administration will be appended to the actual number of fatal cases. It will be interesting to know how far experience bears out Mr. Pollock's confident denunciation of the "rough and ready method," and the great comparative safety of certain special modes of procedure. For my own part, I am thoroughly convinced of the practical truth of Mr. Syme's teaching in this important department of surgery, and should always prefer to give chloroform very freely by means of towel or handkerchief, to press the inhalation boldly during the stage of violence, and to look specially to interference with respiration as the leading cause of danger. However retrograde these views may be considered in many quarters, they are amply borne out by Edinburgh experience, which can point to by far the most extended and satisfactory use of chloroform anæsthesia with which we are acquainted. Without in any way wishing to deny the admirable skill and tact possessed by Mr. Clover, I may venture to remind visitors to the Royal Infirmary of Edinburgh of the way in which chloroform is there given with great freedom by house-surgeons and dressers—who have in no measure devoted themselves specially to the subject; and the safety of its use there, as well as all over Scotland, can hardly be denied. Herein then lies one advantage of chloroform, that whilst its use may be entrusted to competent professional men who are not specially instructed in its administration, ether requires to be given by practised hands before efficiency can be secured and discomfort avoided.

You, Sir, are doing good service by endeavouring to check the somewhat dogmatic assertions of those who preach the absolute safety of ether. Experience is not sufficiently extended either to settle this point or the relative advantages of one anæsthetic over another; still less desirable would it be to encourage at this stage of the proceedings any attempt at interference on the part of superficially instructed public opinion.

Let us remember the remarkable way in which safety seems to attend the early history of any anæsthetic agent, of the vaunted immunity from danger of bichloride of methylene which experience has failed to confirm, of the remarkably few deaths which attended the first few years of chloroform. Ether, in our own country at least, has not yet emerged from this period, and American experience can hardly fail to be tinged with the prejudice of controversy; and, although Mr. Carter's friends have been so unfortunate in their practice, I may refer to the recorded experience of two surgeons of probably equal eminence, Professor Syme and Professor Gross, the former of whom caused the administration of chloroform in nearly 4000 cases, and the latter in 6000 cases, without inconvenient result.

I am, Sir, your obedient servant,

ROBERT FARQUHARSON, M.D.

Pinzean, Aboyne, Aberdeenshire, Aug. 1875.

To the Editor of THE LANCET.

SIR,—You will no doubt permit me to supplement your valuable remarks on the relative merits of ether and chloroform with a few further particulars, derived from personal knowledge, of the experiences of the late Mr. Robinson on this important question. You do not appear to be aware of the fact that a second death occurred from the administration of ether in Mr. Robinson's practice, and to this I attribute his relinquishment of it almost immediately on the introduction of chloroform. If my memory serves me rightly, it was about the beginning of the year 1850 that a middle-aged gentleman called upon Mr. Robinson one morning for the purpose of having a tooth extracted without pain. Ether was administered with an inhaler in his usual operating chair, and in the presence of an assistant. The patient was soon apparently under its influence, but just as Mr. Robinson was on the point of applying the forceps the under jaw dropped, and a deadly pallor came over the face. The gentleman was quickly removed to the floor, and the servants sent off for assistance. I, being then a next-door neighbour, was quickly on the spot, soon to be followed by the late Dr. Booth, also a neighbour. Every effort was made to restore animation, but without effect.

The death of this patient gave a great shock to my friend Mr. Robinson, who determined from that moment never again to administer ether or any other anæsthetic to a patient, except in the presence of a member of the profession. He also at once set himself to work to determine the relative merits of ether and chloroform, and, in conjunction with Dr. Booth and myself, a large number of experiments were tried on dogs, cats, rats, &c. Ultimately the conclusion was arrived at — so far as the lower animals could be taken as a safe guide and test — that chloroform was by far the safer anæsthetic of the two. The precise statistics of deaths I am at this period of time unable to furnish, but since then I have largely employed and administered chloroform as well as bichloride of methylene in eye operations on the most tender infants and adults of all ages, some exceeding fourscore years, without a single fatal result.

I remain, Sir, your most obedient servant,

Bedford-square, Aug. 17th, 1875. JABEZ HOGG.

To the Editor of THE LANCET.

SIR,—I have watched with considerable interest the controversy which has lately been going on in the columns of THE LANCET (and other journals) on the subject of anæsthetics.

I have, during the last two years and a half, had a somewhat considerable experience in the use of such agents. I usually perform from ten to twenty or more capital operations on the eye per week. For a large majority of these an anæsthetic is given. The administrator is always one of my dressers, who, as a rule, has had little or no previous experience in producing anæsthesia. I therefore have to take whatever responsibility there may be upon myself, and, as you may suppose, it has been my aim to find a safe and effectual agent.

I have, with the exception of nitrous oxide gas, tried all the anæsthetics that have ever come generally into use. These include chloroform, bichloride of methylene, methylene ether, ether, and a mixture of chloroform, alcohol, and ether. My experience has brought me to the conclusion that none are, or even approach to being, *absolutely* safe. Moreover, I do not see how any agent that at first partially asphyxiates a person, then renders him violent, and finally places him in a comatose condition, can be administered without some spice of danger.

I have seen patients apparently on the verge of dissolution from each of the anæsthetics I have mentioned, but only once has it been my lot to have one die under my hands. The anæsthetic used in this case was called methylene ether, but I believe its composition is somewhat doubtful. The patient was a fine young woman, aged twenty-eight. She suffered from exophthalmic goitre. The operation contemplated was for the diminution of the palpebral aperture in each eye; its object to prevent exposure of the corneæ, as the eyes were so prominent that they could not be kept closed except by an effort. The operation had been completed on one side, and was about to be commenced on the other, when the patient died as suddenly as if shot. The usual restorative measures were resorted to with the usual result. A post-mortem examination revealed (with the exception of enlargement of the thyroid gland) no disease whatever.

This case was the twenty-second that had taken the same anæsthetic on the same day, and in no other had any alarming symptoms occurred. Now, why some persons die from anæsthetics I do not know; that anyone may be killed by any of them I do not doubt; but I feel certain that there is in some an "idiosyncrasy" rendering them incapable of taking anæsthetics with safety. I believe that had my patient taken the reputedly harmless ether, or any other anæsthetic, the result would have been the same. I used the methylene ether for some time after without any bad results.

I then went back to what I had been in the habit of using previous to the methylene ether—viz., bichloride of methylene for short operations and chloroform for larger ones. Occasionally unpleasant symptoms occurred.

I next tried ether, with the result that I have made up my mind never to use it again if I can get anything else. To say nothing of its disagreeable smell, its action is most unsatisfactory, and unless given by an experienced administrator most uncertain; and, as far as the production of apparently dangerous symptoms goes, it equals, if it does not surpass, all other anæsthetics. I much doubt its safety, and, as far as I am concerned, it will have very little chance of asserting its superiority in this respect over other agents. For the last eight months I have used almost exclusively the mixture of chloroform, alcohol, and ether recommended by the Committee of the Royal Medico-Chirurgical Society. I am well satisfied with it—in fact, I like it better than any anæsthetic I have yet tried; but, as with the other agents, I have seen alarming symptoms occur more than once, and very probably I shall sooner or later meet with a patient who has the peculiar intolerance of anæsthetics, and he or she may die on the table. That that day may be far distant I sincerely trust. Deaths have occurred and may occur again from all the anæsthetics at present in use, in spite of all our care, and I think that their relative safety yet remains to be determined.

Yours faithfully,

CHARLES HIGGENS, F.R.C.S.E.,
Assistant Ophthalmic Surgeon, Guy's Hospital.

Brook-street, W., August 14th, 1875.

THE CASE OF GENERAL REECE, C.B.

To the Editor of THE LANCET.

SIR,—While fully concurring in the main facts as stated by Dr. Tuke in your journal of last week on the above subject, I should wish to correct a clerical error as to the date which he gives as that of General Reece's death. The General died on August 1st, not July 12th, as stated. Dr. Tuke does not mention, and perhaps does not know, that my attendance on General Reece was not through the instrumentality of his sons, as stated in your leading article of the 14th inst., as I was an utter stranger to them. Mr. Low called in Dr. Wilks, who suggested that I should be sent for, and accordingly Archdeacon Reece brought me at once to the house of my late patient. Mr. Low I then met for the first time, and he expressed a wish to me to take the General under my medical care, at the same time saying, "he would write to Dr. Sillifant a letter of explanation and send him a cheque for his attendance," as otherwise, I said, I could not take the patient under my charge. I must also remark that it was entirely through the General taking a bitter hatred to the nurses, notwithstanding their kindness and attentions to him were most unremitting, that they were discharged, and not from any wish on the part of the sons. In noticing the carpetless room of General Reece, Dr. Tuke was not probably aware that there had been some carpet down, but it was obliged to be destroyed, and was nailed down by numberless tacks, and was in almost as many pieces.

I am, Sir, your obedient servant,

FREDK. G. BROXHOLM.

Richmond-road, Barnsbury, N., August 24th, 1875.

THE PROPOSED MEETING OF THE BRITISH MEDICAL ASSOCIATION AT BRIGHTON IN 1876.

To the Editor of THE LANCET.

SIR,—The accompanying letter was sent last week to the *British Medical Journal*, but not inserted. Would you kindly give it publicity through your columns?

"With reference to the above object may I be allowed to ask, through the medium of your *Journal*, if the Council of the Association, and other parties concerned, are aware that the great majority of the medical men of the town are opposed, under present circumstances, to any such meeting? My impression is that if the opinion of the profession were now taken upon the question three-fourths would be found to give their votes against it. It is very true that a memorial was got up inviting the Association to hold their next meeting at Brighton, but it was not numerously signed; while there was also a counter-memorial containing the names of many of the leading medical men of the place. I have, moreover, strong grounds for stating that many of those who did sign the memorial in favour of the meeting, upon consideration, look upon the movement as ill-considered and hastily got up."

I am, Sir, your obedient servant,

WILLIAM KEBBELL, M.D.

Upper Brunswick-place, Brighton, Aug. 23rd, 1875.

MORTALITY AFTER PRIMARY AND SECONDARY OPERATIONS.

To the Editor of THE LANCET.

SIR,—Will you allow me to draw attention to a statement in Mr. Erichsen's "Science and Art of Surgery," on p. 35 of the fifth edition, which is as follows:—"In civil practice the mortality after primary amputations, as will be seen by the preceding table, somewhat exceeds that following secondary operations." Now, in the tables to which he refers, singularly enough, the mortality is decidedly *less* in primary than in secondary amputations. Thus, in the first table there are 475 cases of primary amputations, with 147 deaths, and 163 secondary amputations, with 84 deaths. These numbers give a mortality for primary amputations of 30 per cent., and for secondary amputations of 51 per cent. In the second table there are 48 primary amputations, with 18 deaths, and 43 secondary, with 19 deaths, or a mortality of 37 per cent. in primary and of 44 per cent. in secondary amputations. Both tables, therefore, pronounce in favour of *primary* amputations and not of *secondary*, as Mr. Erichsen asserts. Some explanation of this seems desirable, especially as he repeats his assertion on p. 128 of the same work.

I am, Sir, yours truly,

August 16th, 1875. R. R.

*** We doubt not that Mr. Erichsen will be glad to have his attention called to the mistake referred to. If our correspondent consult the last edition of Mr. Erichsen's work he will find the statement considerably modified.—ED. L.

"IMPERFECT MEDICAL QUALIFICATIONS."

To the Editor of The Lancet.

Sir,—In reading, in this week's Lancet, your paragraph on "Imperfect Medical Qualifications," I could not help noticing the one-sided and imperfect statements made on the subject. The form of registration is most important and necessary, and that point may be dismissed. I wish to refer to the apparently defective "one qualification" system, and to inquire what is the real difference between a man with one qualification and another with two? I am unable to find any. You are at liberty to bring forward any man with two qualifications and it will be found that my *medical* and *surgical* training have been almost identical with, if not more ample than, his. If the training of a physician and surgeon are alike, as they must necessarily be, why require two diplomas? It is quite farcical to require such, and delusive to the public, who fancy that a physician must be a more learned man than an ordinary surgeon, who perhaps went through the *same* school, class for class, with the former as his companion. The remedy is to unite the Colleges of Physicians and Surgeons, and, as they have one curriculum, let them have one diploma for both, instead of being opposition shops.

I am, Sir, yours, &c.,

Manchester, Aug. 21st, 1875. L.F.P.S.

⁂ Our correspondent's question is one we have often given the answer to in our articles on the one-portal system. What is the real difference between a man with one qualification and another with two? We answer, practically none. Both have been educated alike, and, what is more, both have been examined alike. The man with a medical qualification has been examined in surgery, and *vice versâ*. But after all there is a real difference. It is this:—That the man with two qualifications has paid double fees, and given support to two corporations; while the man with one has given support to only one. About a hundred years after this we shall have one College of Medicine, or some tantamount institution, giving a complete diploma after a fair examination. Meantime corporations must be maintained, and candidates who would be fully qualified must pass two identical examinations. And men of the eminence of Sir Robert Christison will defend the system.—Ed. L.

Obituary.

D. TOLER T. MAUNSELL, M.B., M.R.I.A., &c.

Daniel Toler Thomas Maunsell died on the 18th of August, after a short illness, at his residence, South Richmond-street, Dublin, at the comparatively early age of forty. He was the eldest son of the late Rev. Thomas Maunsell, of Fintona, Co. Tyrone. He graduated with distinction at Trinity College, Dublin, where he obtained the degree of Bachelor of Medicine. He held the licence of the Royal College of Surgeons in Ireland, and had also a licence in Midwifery. Dr. Maunsell was a member of the Royal Irish Academy, and successively held the posts of Demonstrator of Anatomy in the Carmichael School of Medicine, of lecturer on Materia Medica in the Ledwich School, and lastly that on Botany in the same school. He was for several years one of the medical officers of the South City Dispensary (Dublin), and since the beginning of October, 1874, was sanitary officer for his division of the South City District.

Dr. Maunsell was deservedly popular from his kindly, genial disposition. For several years he wrote much and effectively on the importance of the Poor-law medical service. He drew attention to the powerful effect of timely medical aid in the reduction of pauperism, and showed that much of the latter owed its origin to sickness. With other members of the Irish, as well as with many of his brethren on this side of the Channel, Dr. Maunsell laboured to obtain a better recognition of the important services of the Poor-law medical officers in both countries. He always maintained the necessity of providing a certain retirement for the medical officers when disabled from further service by age or ill-health, in lieu of that now dependent on the will or caprice of boards of guardians.

Dr. Maunsell leaves a widow and six young children to lament his loss.

WILLIAM HEY, F.R.C.S. Eng.

Mr. Hey belonged to a family celebrated in the history of surgery, his grandfather and his father having long practised in Leeds. He himself became M.R.C.S. Eng. as far back as 1818, and a Fellow in 1843, and was the oldest practitioner in the town, of which he was one of the celebrities. Like his grandfather and father, he was for a great number of years on the surgical staff of the Leeds Infirmary, which the first Hey was largely instrumental in founding. On his father dying, in 1844, he succeeded to the practice. He was associated with Mr. Samuel Smith, Mr. Joseph Prince Garlick, Mr. Wm. Price, and other well-known surgeons in the town, all now numbered with the dead, in founding the Leeds School of Medicine, and his was a familiar face in the lecture theatre. He was lecturer on surgery from the year 1831 to 1857, since which time he had been an honorary member of the Council. Amidst the cares of his profession, and although devoting much time to music and scientific pursuits, Mr. Hey in his early manhood took an interest in politics. On the passing of the Municipal Corporations Reform Act, he came forward as one of the Conservative candidates for the Mill-hill Ward, and was returned at the head of the poll. He was a Deputy Lieutenant and a Justice of the Peace for the West Riding of Yorkshire, and his name also appeared on the commission for Leeds, but he never qualified for the borough. He died on the 10th of May, aged seventy-eight.

Medical News.

University of London.—The following is a list of the candidates who have passed the recent 1st M.B. examination in Honours:—

Anatomy.

SECOND CLASS.

Miller, Richard Shalders, } University College.
Bury, Judson Sykes,
Benham, Frederick Lucas,

Physiology, Histology, and Comparative Anatomy.

FIRST CLASS.

Henderson, George Courtenay (Exhibition and Gold Medal), University College.

SECOND CLASS.

Benham, Frederick Lucas, University College.
Wilkinson, Arthur Thos., B.A., B.Sc., Owens College.
Pye, Walter, St. Bartholomew's Hospital.
Stevenson, Leader Henry, Guy's Hospital.
Miller, Richard Shalders, University College.

THIRD CLASS.

Sedgefield, Arthur Robert Wyatt, King's College. } Equal.
Willcocks, Frederick, King's College.
Hudson, James, University College. } Equal.
Wiglesworth, Joseph, Liverpool School of Medicine.

Organic Chemistry, and Materia Medica and Pharmaceutical Chemistry.

FIRST CLASS.

Wilkinson, A. T. (Exhibition and Gold Medal), Owens College.
*Henderson, G. Courtenay (Gold Medal), University College.

SECOND CLASS.

Goodchild, Francis, St. George's Hospital.

THIRD CLASS.

Miller, Richard Shalders, University College.

* Obtained the number of marks qualifying for the Exhibition.

British Medical Service.—The following is a list of gentlemen who competed successfully for appointments in the above Service at the examination held at the University of London on Aug. 9th:—

	Marks.		Marks.
Hewett, F. C. C. ...	2367	Daubeny, C. A. ...	1775 }
Taaffe, R.	2132	Ievers, P. G.	1775 }
Le Grand, W. J. ...	2050	Burges, W. A. ...	1720 }
Briggs, W. H. ...	1855	Fleming, H. B. ...	1720 }
Fenn, E. H.	1825 }	James, W. M.... ...	1618
Kellett, L. H.... ...	1825 }	Hayes, P. A.	1540
Thompson, T. W....	1785	Kirkwood, K. D. L.	1450
Findlay, J.	1780		

Indian Medical Service.—The following is a list of candidates who were successful at the competitive examination held at Burlington House on Aug. 9th:—

1. Freyer, P. J.
2. Weir, P. A.
3. Haig, P. de H.
4. Lewtas, John.
5. Ferrand, Edward.
6. O'Neill, John.
7. Pedrona, F. H.
8. Clarkson, J. W.
9. Day, C. H.
10. Parker, —.

Thirty candidates competed for ten appointments. All were reported qualified.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Aug. 19th:—

Bruce, Robert, Old-street, St. Luke's.
Chant, Thomas, Bridgewater.
Clark, William Theobald Blanton, Malmesbury, Wilts.
Joseph, Sidney Westbrook Jorwerth, St. Leonard's-on-Sea.
Willans, William Blundell, Singapore.

The following gentlemen passed the Primary Professional Examination on the same day:—

James, Thomas, Middlesex Hospital.
Morris, Clarke Kelly, St. Thomas's Hospital.

The Library of the Royal College of Surgeons will be closed as usual during the month of September, for the necessary repairs and cleaning.

The Local Government Board have awarded a vaccination gratuity to the representatives of the late Dr. Wilton Provis for his efficient performance of vaccination in the district of the Mere Union.

Coombe Lying-in Hospital, Dublin.—The annual report of this hospital for last year shows that 411 labour and chronic cases were attended to in the hospital, 1224 labour cases at their own homes, and 19,252 cases of diseases of females and children were visited at their own homes and supplied with medicine, making a total of 20,887. The new building is progressing favourably, and the institution received during the past year a bequest of £250 from the late Mr. Findlater, and upwards of £500 from the Hospital Sunday Fund. The total income from private and public sources was £2273 16*s.* 1*d.*, and the expenditure of the establishment £1138 17*s.* 10*d.* The total number of patients in hospital during the year was 17,210.

Bequests, &c., to Medical Charities.—Miss Susanna Garmston, of Grimley, has bequeathed £5000 to the Worcester Infirmary, and £1000 to the Worcester Dispensary. The Hereford General Infirmary has become entitled to £1000 under the will of the Rev. H. C. Morgan, of Goodrich. Mrs. Hitchman, of Fenton House, has given £700 (£400 as from her sister, the late Miss Baker, and £300 as from herself) to the North Staffordshire Infirmary, and £300 to the Longton Cottage Infirmary. The Brighton Hospital lately received a legacy of £500 and a large quantity of books. The Worcester Infirmary has received £500 under the will of Mrs. Jane Barton, of Weston-super-Mare. The Marchioness of Westminster has made a second donation of £200 in aid of the enlargement fund of the Royal Infirmary for Children and Women, Waterloo-bridge-road.

Medical Appointments.

Barham, H. F., M.R.C.S.E., has been appointed Assistant Visiting Surgeon for Maidstone, under the provisions of the Contagious Diseases Acts (Women), vice Broughton, resigned.

Bayliffe, A. M., M.R.C.S.E., has been reappointed Medical Officer of Health for the No. 4 Sub-district of the Axbridge Rural Sanitary District for two years.

Blackall, J. J., M.D., C.M., has been appointed Assistant to the Medical Superintendent of the Richmond District Lunatic Asylum, Dublin, vice Petit, appointed Resident Medical Superintendent of the Donegal Lunatic Asylum, Letterkenny.

Burness, A. G., M.B., C.M., has been appointed Physician to the North London Hospital for Consumption and Diseases of the Chest.

Caddy, H., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Southern Hospital, Liverpool, vice W. Williams, M.D., M.R.C.P., resigned.

Carter, F. H., M.R.C.S.E., has been appointed House-Surgeon to the Great Northern Hospital, vice Irving, resigned.

Collins, H. W., M.R.C.S.E., has been reappointed Medical Officer of Health for the No. 2 Sub-district of the Axbridge Rural Sanitary District for two years.

Corbet, D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Kidderminster Urban Sanitary District for two years.

Doran, A. H. G., F.R.C.S.E., has been elected Surgeon to the Westminster General Dispensary, vice W. Rose, F.R.C.S.E., resigned.

Doyle, C. W., M.B., C.M., has been appointed Resident Medical Officer to the Norfolk and Norwich Dispensary, vice Bagnall, resigned.

Ford, J., M.R.C.S.E., has been reappointed Medical Officer of Health for the No. 3 Sub-district of the Axbridge Rural Sanitary District for two years.

Fowler, G., M.R.C.P.Ed., has been appointed Physician to the North London Hospital for Diseases of the Chest.

Griffiths, J. T., L.R.C.S.Ed., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for the Llandwrog District of the Carnarvon Union, vice Williams, resigned.

Gwatkin, O., M.R.C.S.E., has been appointed Junior House-Surgen to the Royal Southern Hospital, Liverpool.

Hullah, R., M.R.C.S.E., has been appointed Surgeon-Superintendent of the Eastern Province Asylum for the Insane, Graham's Town, Cape of Good Hope.

Humphreys, J. H., M.D., M.R.C.S.E., has been appointed a Surgeon to the Hastings Dispensary, vice Allen, resigned.

Jones, A. E., M.B., C.M., has been appointed Resident Medical Officer to the Hulme Dispensary, Manchester, vice J. Walker, M.B., resigned.

Morris, D. W., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Kentchurch District, and Medical Officer to the Workhouse of the Dore Union, Herefordshire, vice Lane, resigned.

O'Honlon, W. P., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Ipstones Court No. 809 of the Ancient Order of Foresters, vice Hamilton, resigned.

Palmer, A. M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Whittington District of the Chesterfield Union, vice France, deceased.

Popham, S. L., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for No. 1 District and the Workhouse of the Daventry Union, vice Gibson, resigned.

Price, A., L.S.A.L., has been appointed House-Surgeon to the Westminster Hospital, vice Davies, whose appointment has expired.

Ralfe, C. H., M.D., M.R.C.P.L., M.R.C.S.E., has been appointed Teacher of Physiological Chemistry at St. George's Hospital Medical School, vice Moore, deceased.

Reid, D. A., M.D., M.R.C.S., has been appointed Consulting Surgeon to the Pembroke and Pembroke-dock Dispensary and Infirmary; also Admiralty Surgeon and Agent to the Tenby District, and Surgeon to the Trinity Board in the same district, vice Utterson, resigned.

Reoch, J., M.B., C.M., has been appointed Professor of Physiology at the University of Durham College of Medicine, Newcastle-on-Tyne, vice Nicholson, appointed Professor of Botany and Natural History at the University of St. Andrews.

Sherburn, J., M.B., C.M., has been appointed Resident Assistant-Surgeon to the Hull General Infirmary, vice Sinclair, resigned.

Smith, J. O., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the St. Chad District of the Atcham Union, Salop, vice Willett, deceased.

Wade, C., M.R.C.S.E., has been reappointed Medical Officer of Health for the No. 1 Sub-district of the Axbridge Rural Sanitary District for two years.

Walsh, T. W., F.R.C.S.E., has been reappointed a Surgeon to the Worcester General Infirmary, upon the expiration of his second term of office under the rules.

Wimpenny, J., M.R.C.S.E., has been reappointed Medical Officer of Health for the Upper-Thong Urban Sanitary District for two years.

Births, Marriages, and Deaths.

BIRTHS.

Harvey.—On the 19th inst., at Upper Merrion-street, Dublin, the wife of R. J. Harvey, M.D., of a daughter.

Menzies.—On the 13th inst., at Naples, the wife of J. A. Menzies, M.D., of a son.

Noad.—On the 16th inst., at Wokingham, the wife of G. W. Noad, M.D., of a daughter.

Page.—On the 16th inst., at Kendal, the wife of David Page, M.D., of a son.

Pullar.—On the 21st inst., at Kensington-park-gardens, the wife of Alfred Pullar, M.D., of a son.

Watson.—On the 17th inst., at Penistone, the wife of Alfred M. Watson, M.D., of a son.

MARRIAGES.

Hoops—Robinson.—On the 9th inst., at Trinity Church, Dublin, Samuel E. Hoops, L.K.Q.C.P.I., to Harriette, daughter of the late Thomas Robinson, Esq.

Wills—Watkins.—On the 17th inst., at the Parish Church, Brighton, Charles James Wills, M.D., to Alice Lucy Watkins, widow of D. R. Watkins, Esq.

DEATHS.

Cocks.—On the 19th inst., at Yew-bank, Broughty-ferry, Dundee, Robert Cocks, M.D., aged 64.

Cutliffe.—On the 22nd inst., at Lambeth-square, Chas. Newell Cutliffe, M.R.C.S.E., aged 70.

Finney.—On the 8th inst., at Ockbrook, Derbyshire, Charles White Finney, L.S.A.L., aged 61.

Fleming.—On the 21st inst., at Buxton, Alex. Fleming, M.D., of Birmingham, aged 51.

Jones.—On the 18th inst. (suddenly), at Orford House, St. John's-road, Brixton, S.W., Sydney Felix Orford (infant son of J. T. Jones, L.K.Q.C.P.I., L.M., M.R.C.S.E., of Llanfyllin, Montgomeryshire, and St. John's-road, Brixton, London), aged 9 months.

Naismith.—On the 18th inst., at Hamilton, Wm. Naismith, M.D., aged 50.

Parkinson.—On the 10th inst., at Wimborne-Minster, Dorsetshire, Chas. B. Parkinson, M.R.C.S.E., aged 63.

Pilkington.—On the 18th inst., at Chorley, Wm. Pilkington, L.R.C.P.Ed., aged 45.

Webb.—On the 10th inst., at Kilburn, Thos. E. Webb, M.R.C.S.E., aged 72.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Prejudice against Mortuaries.

The force of public opinion is strongly urging upon urban sanitary authorities the necessity of providing mortuaries for the use of the poor who occupy one or at most two rooms, more especially in cases of deaths from zymotic diseases in crowded neighbourhoods. It is, however, easier to furnish mortuaries than to get them used by those for whom they are principally intended. It is an unfortunate fact that an ignorant impatience on the part of the poor of any interference with the liberty of the subject is one of the most serious drawbacks to the more rapid improvement in the sanitary condition of urban districts. It is satisfactory to find from Dr. Whitmore's report on the Health of Marylebone in 1874, that the local prejudice against the use of the parish mortuary is subsiding. During the year 1874 the number of bodies received in this mortuary was 58, against 31 in the previous year. The majority of bodies admitted during the year were of persons aged upwards of sixty years. The sanitary value of mortuaries in cases of deaths in crowded tenements is too generally admitted to be worth dwelling upon, and it is only surprising that they are not more frequently used, if only on the ground of convenience. Dr. Whitmore says, "I have not unfrequently seen a coffin placed on chairs in the corner of a small room, in which the whole family, numbering five or six persons, were at dinner." The duty of educating the poor to overcome their prejudice against using mortuaries is as clear as is the duty of urban sanitary authorities to provide them.

Mr. H. E. Spencer is thanked for his communication. The matter shall be rectified.

A Medical Coroner's Inquest.

To the Editor of The Lancet.

Sir,—I would ask you in a spirit of fair play to give publicity to the following facts.

On Tuesday, August 3rd, I was called to see a woman, seven months pregnant, suffering from an intense and constant pain in the lower part of the abdomen. I could find nothing else the matter with her, and she was not weak. I told the husband not to be frightened, but I did not say his wife "would be all right directly." I went at once to my partner, Dr. Masters, and asked him to give me some opium pills, containing one grain in each pill. He gave me four, and I went immediately back to the house, and told the husband to give his wife three of the pills at intervals of three hours between each pill, and to come to the surgery at 7 p.m. to let me know how she was going on. The husband came accordingly, and said he thought his wife was worse. I then gave him a mixture containing some diffusible stimulants and anti-spasmodics. The husband came next morning at 7.50. I had been up nearly all night, and was then asleep. However, I was at his house before 9 a.m. I found the woman in a dying state. She was conscious, and still complained of pain. I gave her some brandy with ten minims of tincture of opium, and had hot bottles put to her feet. I also sent for Dr. Masters to come at once, and to bring some carbonate of ammonia. Just as he came the woman died.

The next day I met the village policeman. He told me he was about to go to Buxton to see the coroner (Dr. R. Bennett) about holding an inquest. I told him I had attended the case, and that I was willing to give a certificate of the woman's death. Notwithstanding this, an inquest was held on the following day. Before I proceeded to give my evidence at the inquest, I asked the coroner's leave to make a remark. He, however, told me to answer his questions, and nothing else. After I had just begun to give my evidence, he (the coroner) turned round sharply to me, and told me to keep my hands down, and to stand up properly; that this was a very serious matter for me, and that I was taking the affair a great deal too lightly. Whereupon I remarked that it was quite unintentional on my part if my posture offended him, and I also added that he had no right to say I was taking the affair too lightly, as I was very sorry indeed for what had occurred, but that I did not think it was my fault. I then asked him if I might have a chair, but he answered simply "No." After the jury had found their verdict, "Death from syncope," the coroner sent for me, and said I had narrowly escaped from being committed for manslaughter, as there were charges of great neglect against me. I then asked him what the charges were, and he said that—

1st. The husband had called three or four times for me on the morning the woman died before I would go to see her.

2ndly. That the first day when I saw the woman at noon I took at the time some pills out of my waistcoat pocket, and gave them to the husband to give his wife.

3rdly. That it was the opinion of the jury that, in the state the woman was in, I had no right to administer the medicine I did.

I then said to the coroner that as regards the first two charges I would call Dr. Masters to prove that they were both false; but he said he would not have Dr. Masters' evidence. As regards the latter charge, I said that a jury chosen from the working class were incapable of forming an opinion on a purely medical question.

If a coroner is justified in behaving to a medical man as Dr. R. Bennett has done to me, I will always have the fear of being committed for manslaughter when I attend to a serious case in this county.

Yours obediently,
W. Chatterton, A.B., M.B., C.M. Univ. Dub.
Hayfield, near Stockport, Aug. 1875.

⁂ We make no comment at present on the above statements, which, it must be remembered, are made by an interested party. It is only fair to say that they are supported in the main by a newspaper report of the proceedings which has reached us. It is most remarkable that no post-mortem examination was ordered by the coroner, who, nevertheless, reflected severely on the treatment of the patient by the medical man.—Ed. L.

Treatment of Eczema in Children.

Dr. Caspari (*Deut. Klin.*, No. 4, 1875) states that he has never seen any good effects result from the use of mercury or iodine in chronic eczema in children. On the other hand, in cases of eczema capitis, eczema faciei, and impetigo faciei in children, he has seen the most extraordinary effects, even in obstinate and old-standing cases, follow the simple administration of lime-water, given internally in doses of from five to ten ounces, according to the patient's age, and without any external treatment. It is only in cases where there exists abundant irritating secretion that he advocates sprinkling with carbonate of magnesia.

Ipswich.—Sir Henry Thompson's pamphlet on Cremation, published by King and Co., Cornhill, will give the information required.

The Indian Medical Service.

To the Editor of The Lancet.

Sir,—As a man of nine years' service, and having during that period served with both European and native infantry and cavalry, allow me to add a few remarks to the numerous letters which have appeared in your journal of late concerning the army medical service.

I have been waiting to see if anyone would call attention to the question, "purchase having been abolished in the combatant ranks," whether it would not have some influence in stopping a large source of supply of officers to our own ranks. Many men whose fathers are able to give them a few hundred pounds, perhaps sufficient to purchase a commission and pay for their outfits as ensigns, but who could not give them any further pecuniary assistance towards purchasing their steps &c.,—I have known many such men enter the medical ranks, their little fortune having gone in the expenses of their medical studies. Now it is very different. A boy only has to leave school, go to a crammer, and pass to get a commission, and enter the service as a sub-lieutenant about the age that he would be commencing his medical studies if he had taken that line; his small fortune still in hand as a nest-egg for exchanges &c. Now, Sir, at the present day would any young fellow of sense sink his money in a four years' course of study to enter the service as a surgeon, a sort of alien, belonging to no one, allowed to have his dinner on sufferance in the mess of the regiment with which he has the great honour of doing duty. After some twenty years' service, if in so-called medical charge of a regiment, he will be allowed as a great favour to pay heavy subscriptions and donations to band, mess, and other institutions during the five years he is attached to the regiment; but as for having any voice in the management of these things (except doing the butler's duty), why, in reality, he has less influence than the youngest boy sub-lieutenant. By-the-bye, I forgot to mention another privilege, that of wearing the Cardwell button and the facings of the regiment.

With regard to my Indian brethren, though, first, let me state that I myself have been very lucky, and got into a good regiment early in my service, therefore I am quite contented with my own lot; but I have seen so many men come out here, and get thoroughly disappointed and disgusted at once, and no wonder. They are led to expect that they will draw 450 r. per mensem directly they get charge of a regiment; whereas they can only draw 286 r., plus half the staff of the man for whom they officiate, which generally amounts to about 100 r., making a total of about 386 r. instead of 450 r. It is a very rare occurrence for a man to get a permanent appointment for some years, because appointments only become vacant by retirements or men getting higher appointments. At present the majority of men coming out here can only look forward to the officiating charge of some native infantry regiment, in which they can take no interest whatever either professionally or socially; for in most native infantry regiments, all, or nearly all, the officers are married, and their only object appears to be to pinch and screw to save rupees to enable them to get home. As for *esprit de corps*, there is no such thing in native infantry. Therefore if the "new doctor" happens to be a bachelor, the chances are that he will find himself the only dining member of a wretched mess. Then, again, extra appointments, such as charge of lock hospitals, divisional and brigade staff, &c., formerly always held by the Indian men, now are fast being given to the Queen's men, thereby losing to the Indian service in every station some 100 r. to 250 r. per mensem. I merely mention this fact to dissipate any idea any young fellow may have formed of coming into the service with the notion that he may get any of these little extra helps to his income. Not that we grudge the "Queen's men"; for, poor fellows, under the present undecided régime, their life must be more than a burden to them.

I noticed a letter in The Lancet some time ago. It spoke of medical officers' position and rank. Every man can make his own position individually, and may be the most popular officer in the regiment; but his department has no standing whatever, and is snubbed by every Jack in office, and much tact is required to keep out of quarrels in its behalf.

A surgeon is always expected (and quite right too) to address a field officer as major or colonel, as the case may be; but you never hear even the youngest joined cornet or sub-lieutenant address surgeon-majors, and sometimes even deputy surgeon-generals, as anything but plain "Smith," "Brown," &c. So much for rank. You really have none.

If a young fellow were to ask my advice as to whether he should come into the service as it now is, I should give him *Punch's* advice, "Don't."

I remain, Sir, yours truly,
Lahore, India, July, 1875. Lancer.

The Family of the late Mr. R. Thomas.

Mr. F. Wilkins (Burton-on-Trent) requests us to acknowledge the sum of 10*s.* from "A Friend" towards this Fund.

Subscriber.—1. There is no hard and fast line. Our correspondent should be guided by circumstances; but, as a general rule, we should be disposed to reply in the affirmative. The contrary course would have an ungracious appearance.—2. Through the Colonial Office.

Mackintosh's Swimming Collars.

To the Editor of The Lancet.

Sir,—Drowning accidents during bathing would be greatly diminished by the use of Mackintosh's swimming collars by ladies and children. These collars are approved by the Royal Humane Society, are not disagreeable to wear, and are effectual. Their cost is 3*s.* 6*d.*

Yours truly,
Rochester, August 21st, 1875. Fredk. J. Brown, M.D.

QUACK CIRCULARS.

A Father of a Family sends us a filthy circular by a quack, who styles himself "Dr. W. R. Godfrey, formerly of the Spermatorrhœa Hospital, New York," and pertinently asks whether the law cannot put a stop to the wholesale dissemination of such pernicious rubbish. As THE LANCET is read by a large number of lay readers, we would put such persons on their guard against this and other advertising charlatans. We would gladly see an enactment passed which would give the metropolitan magistrates power to deal summarily and mercilessly with these pests of modern society. Undoubtedly a large amount of mischief is caused by the wholesale publication of these circulars. The young and unwary are entrapped by the specious promises of cure held out into placing themselves under the care of ignorant men, whose only object is greed, and who fatten on their victims as long as they have money to pay for nostrums, which not unfrequently injure health to a serious degree. It is not unreasonable to ask that our large towns should be purged of this evil. The New World has given us an example of one way of dealing with these gentry. At San Francisco a black list is published weekly, containing the name and address of every person who practises medicine without a qualification, and the plan has been successful in stamping out quackery in its various complexions. It is rather humiliating to think that an evil interdicted in California should be allowed to flourish without let or hindrance in London.

CASE OF PLACENTA PRÆVIA.

To the Editor of THE LANCET.

SIR,—Cases of placenta prævia are not so common in country practice but what it appears to me advisable to chronicle in your pages any case that may occur, with its treatment and result.

On July 31st I was desired late in the evening to visit the wife of a labourer (under the charge of a midwife), who was stated to be suffering from sharp uterine hæmorrhage. I went, found a woman about forty years of age, pregnant with her fourth child, wanting seven weeks of her full time, who was the subject of bleeding, which had occurred for the first time that day. She was in no pain, but the discharge came at frequent intervals. Upon examination, there was no dilatation of the os uteri, and I was unable to determine whether it was a case of accidental or unavoidable hæmorrhage which I had to deal with. So I prescribed rest in the recumbent position, cold, unstimulating food, and a mixture of ergot and opium. On the next day (Sunday) the amount of bleeding had not lessened, and then a mixture of alum, dilute sulphuric acid, and tincture of opium was ordered. These mitigated the symptoms; but early in the morning of Tuesday, the 4th, I received a message, saying the bleeding was considerably increased, and the worst results were feared. I arrived at the house at about 8.30 A.M., and noticed that there were slight pains going on. Upon instituting an examination I found the vagina so blocked up with clots that their removal was necessary before an accurate state of affairs could be determined on. The patient was gently lifted on to the floor (in order that the bed might not be made wet), and the clots carefully washed away by the aid of a Higginson's syringe. The os was found to be dilated to about the circumference of a shilling, and nothing but placenta could be felt. The vagina was then plugged with a pocket-handkerchief, and soon after the pains became much more severe, and the bleeding proportionately increased at time of pain, escaping from the vagina pretty freely by the sides of the plug. In about three-quarters of an hour I removed the plug, and found the os dilated to an extent somewhat larger than a crown-piece. I then ran my index-finger round the inside of the uterus to separate the placenta as far as I could, and gave a dose of ergot. This operation diminished the bleeding. The pains increasing in violence, and the dilatation of the os continuing, I was shortly after able to feel the bag of waters round the edge of the placenta. I then guided the stilette of a male catheter up to and ruptured them. This proceeding entirely stopped the bleeding. Soon afterwards I felt a foot; as the legs descended they seemed surrounded by placenta, and, having drawn them down, soon was able to complete delivery, the after-birth coming away the same instant the child was born.

The woman made a good recovery, and felt neither faint nor exhausted during her anxious time. Yours &c.,

The Elms, Newbury, August, 1875. F. E. RYOTT, M.D., F.R.C.S.

Radius.—1. No, not necessarily.—2. We must refer our correspondent to Dr. Williams, of the Privy Council Office, or any skilled veterinary surgeon.

THE DEATH UNDER CHLOROFORM AT QUARRY BANK.

THE letter of *Mr. James Bradley* shall be published in our next issue.

AN ILLEGAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—In reference to the report of the above case in the daily papers on Saturday last, I think it is only right on my part to correct the wrong impression the report conveys to the general public and medical world.

Mr. Bridge, in passing sentence, stated that I came to Kensington, put up a brass-plate, and acted as a doctor. The facts of the case are as follows: I put my name up for the benefit of the different people residing in my house from time to time, and had no reference whatever to any medical practice. After being assistant to Dr. Leslie for more than a year at Westminster, I came to Kensington. He, still retaining me as his assistant, starts a provident dispensary at my house, which I managed, he and another medical man attending so many days a week. This is carried on till the end of last year, and did not cease a year ago, as stated in evidence. They then take their names down, and leave me for private reasons. I at once have the rules painted off the surgery door, and close the dispensary; but, being left with a number of patients on my hands, find it difficult to terminate our arrangement suddenly. Having had a private arrangement with Dr. Leslie, I considered I could continue to use his name, as I had been in the habit of doing, until I got qualified, or found some one else to take his place.

I also wish to state that the evening before my case was heard I was requested by Dr. Leslie to take charge of his practice at Westminster.

Hoping you will insert this explanation, as it is the only means I have of justifying myself, I am, Sir, yours obediently,

Allen-terrace, Kensington, Aug. 22nd, 1875. W. CAMLEY SMITH.

REGISTRATION OF DEATHS.

Potestas.—We should be glad to learn the true answer to our correspondent's question. Could not he ascertain it by inquiry? Registrars are much too easy in taking certificates from unqualified practitioners; but we are not prepared to charge them with registering deaths without something purporting to be a medical certificate or authority from a coroner.

ORIGIN OF THE PRESENT OUTBREAK OF CHOLERA IN SYRIA, AND ITS HISTORY UP TO THE PRESENT.

To the Editor of THE LANCET.

SIR,—The present epidemic of cholera originated in a manner so different from the previous outbreaks that an account of its origin will always be a part of the natural history of the disease.

Near the close of the past year, or the beginning of the present, a detachment of 400 or 500 Albanian recruits was brought into camp at Hamath. As Turkish recruits are apt to be, they were in a bad sanitary condition at the time of their arrival; but nothing of note occurred in their hospital until the 22nd of March, when a case of cholera appeared. It was rapidly followed by fifteen others among the soldiers, and, of the sixteen attacked, fifteen died. The disease then spread to the town, and prevailed with an average degree of severity, and still continues, after nearly four and a half months, with little abatement.

Hamath is a city of 30,000 to 40,000 inhabitants, mostly Moslems. It is situated on both banks of the Orontes, the most considerable river of Syria. The city is built on the meadows by the river's bank, and is at all times unhealthy during the hot season. The principal diseases at that time are diarrhœa, dysentery, cholera morbus, and various fevers, continued and intermittent. The streets, as in all Oriental towns, are the receptacles of garbage, and reek with the foul odours of the surface drains and heaps of filth. The damp exhalations of the soil and the mist arising from the river furnish the most suitable aid for the development of the diseases which are generated or aggravated by the above-mentioned causes, forcibly calling to mind the original focus of the cholera in the tropical regions of India. If to these circumstances be added the extreme abundance and cheapness of fruit and green vegetables, and the fact that many of the people live almost wholly upon them during the summer months, and prefer them in an unripe state, or from poverty not unfrequently consume them in such a state of decomposition as to be unfit for food, the mind will be prepared to recognise the possibility of the generation of a disease, which has not yet been proved to be the result of a materies morbi incapable of fresh production under the operation of suitable causes.

During the month of April, Dr. Pestallozza, the physician of the quarantine department in Beirût, visited Hamath, and pronounced the disease to be genuine Asiatic cholera. At the time of its appearance there was no epidemic prevailing in either Europe, Western Asia, nor Africa. No traces of communication with India could be detected. There had been no cholera for a year at Mecca or Jeddah or in Egypt, nor has there since appeared a trace of the disease in those quarters. Persia is quite free from all taint, and there has been no outbreak in the northern provinces of the Turkish Empire. Under these circumstances, and unless further investigation shall show a distinct foreign origin, the disease in Hamath must be regarded as endemic at the outset.

Soon after the spread of the pestilence in Hamath, a detachment of troops from the garrison was sent to Damascus. The officers of this detachment deny the occurrence of any cases of cholera on the road or before leaving the barracks. There is reason, however, to believe that this testimony is false. Subsequent investigations, notwithstanding the efforts made to conceal the truth, made it probable that a number of soldiers died on the route. Cholera appeared in the intervening villages soon after, and about the middle of June the rumour of fatal cases in Damascus spread dismay through Syria, and the speedy confirmation of this lamentable news, by daily reports of the severity and prevalence of the epidemic, caused the people of the cities to flock to Lebanon and Anti-Lebanon, which have always heretofore proved a safe asylum from its ravages. Almost the whole Christian and Jewish population of Damascus and Beirût fled, and the overcrowded villages and hamlets, notwithstanding the fevers and dysenteries and other maladies engendered by the massing of so many people, ill-equipped for their sudden journey and long summer residence, still afforded a safe retreat. A few unfortunates, who had contracted the disease before leaving the infected region, died on the way or in the mountain villages; but in no case thus far has the disease spread above the level of the sea-coast or the interior plateaux of Coele Syria and Damascus. The air of the mountains seems in some way to counteract the influence of the poison, and it may be hoped that, as heretofore, the many thousands of refugees will find their refuge secure until the disease has disappeared from the places where it is now prevailing.

On the night of July 5th a woman from Damascus arrived by diligence in Beirût, and after two days died of cholera. No further cases appeared for a week, although a sudden impulse of violence seemed to be given to the usual summer complaints, and the remaining Christians and many Moslems hastened their exodus to the villages of Lebanon. From the 20th July cases more closely resembling the Asiatic cholera have multiplied until about the 28th, when they became more numerous and pronounced, and at the present date (August 3rd) the epidemic may be said to be fairly inaugurated. It is also prevailing in Antioch, Aleppo, Sughbeen (a village of Coele Syria), Hasbeiya, Tiberias, Safed, and many smaller towns and villages. It is to be feared that before this reaches you it will have escaped the boundaries of this province, and then no one can predict its future course.

No quarantine has been attempted between Damascus and Beirût, and the farcical operation of fumigating the daily diligence and its passengers has been the only attempt to ward off the advent of the disease. The mountaineers have gone to Damascus, and in some cases contracted the disease there, and perished after their return to their homes. There is no quarantine between the infected cities and the mountains, and it is said that none will be established.

As regards treatment, too little time has been given in Beirût for the trial of the various plans. The chloral injection (hypodermic) will be fairly tested.

In a future communication I hope to give you more details on the subject of the origin of the epidemic, and the statistics of its ravages in the various places where it prevails. Respectfully yours,

GEORGE E. VOST,

Beirût, August 3rd, 1875. Surgeon to St. John's Hospital, Beirût.

Ziemssen's Cyclopædia of the Practice of Medicine.

Many of the subscribers to this work are aware that the volumes of the German edition are not being issued in regular succession—some of those treating upon subjects of greatest interest having the precedence, although numbered to conform to the plan of the entire work. It has been concluded to follow the same course with this translation; and in compliance with the expressed wish of many subscribers, volume x., Schroeder's "Diseases of the Female Sexual Organs," is now published with copious illustrations. Volume iv. will follow on December 1st, and volume v. on March 1st, 1876. The publishers, Messrs. Sampson Low & Co., announce that rumours of an intended change in the plan of publication are entirely without foundation. This work will be obtainable only by subscription for the entire set of volumes. No single volume or series of volumes will in any case be sold. The Cyclopædia is now being published in the English, German, Dutch, Italian, and Russian languages.

Dr. H. D'O. Foote.—Very soon.

Case of the late Mr. P. C. Merryweather.

To the Editor of The Lancet.

Sir,—In forwarding to you a list of the donations we have received since you last published the contributions to this Fund, we feel it will be a subject of much satisfaction to those who have kindly aided in this matter to know that the amount raised has done great and permanent good. Besides supplying immediate wants, it has enabled Mrs. Merryweather to take a good house, where she is already prospering, and maintaining and providing for the education of her children. She is very grateful indeed to all who have so kindly extended the helping hand in the time of her great need.

The appeals in the medical journals have brought assistance even from distant Kurrachee.

We are, Sir, yours faithfully and obliged,
Charles J. Hare, M.D. Cantab., F.R.C.P.
W. A. Atwood, L.K.Q.C.P.

57, Brook-street, Grosvenor-square, Aug. 21st, 1875.

Donations already acknowledged	£148	16	0
J. Waggett, M.D., Stanley-terrace, Notting-hill, W.	2	2	0
Mr. Nodes, Norfolk-terrace, W.	1	1	0
R. D. Poppleton, Esq., Highbury New Park, N.	1	1	0
H. A. L.	1	1	0
Henry Smith, F.R.C.S., Wimpole-street, W.	5	5	0
John Penhall, M.R.C.S., St. Leonard's	2	2	0
Mrs. Cave-Brown, Hastings, per J. Penhall, Esq.	5	0	0
Miss Willington, Hastings, ditto	1	0	0
Per Mrs. Dawes, The Oaks, Burgess Hill, Sussex:			
Messrs. Foster and Else, Brighton	0	10	0
W. F. Coleman, M.R.C.S., Brighton	0	10	0
Mrs. J. Hampson, Cheltenham	10	0	0
Mrs. Hooke	3	0	0
Mrs. Hampson	2	0	0
Mrs. Booth, Pennington Hall, Manchester	3	0	0
J. Pickett, L.R.C.P.E., Blenheim-crescent, W.	1	1	0
A Friend, C. C. B.	10	0	0
Miss Atwood	0	10	6
C. and Uxor	1	1	0
Henry N. Stevens, M.R.C.S., Connaught-square, W.	2	0	0
Dr. Thomas Liddard, Ladbroke-grove-road, W.	0	10	6
Thomas Taylor, M.R.C.S., Bocking, Braintree	1	1	0
Edward A. Vinen, M.D., Chepstow-villas, W.	1	1	0
N. F. J. Haydon, L.R.C.P.L., and Mrs. Haydon, Newton Abbot	5	0	0
G. F. Burder, Esq., Clifton, Bristol	10	0	0
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A Friend at Kurrachee	5	0	0
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W. C. Begley, M.D., F.R.C.P., Hanwell	1	1	0
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T. Langston, Esq., Broadway, Westminster, S.W.	0	10	0
J. J. Martin, Esq., Cosham, Hants	1	1	0
	£240	7	6

Uncongenial Callings.

The *Echo* a few days ago published a well-written article, entitled "How to Succeed." The reason why men fail in life, says our contemporary, is that they choose for themselves work for which they are not fit.

"The 'learned' professions are crowded with 'failures,' who would have been brilliant successes in other walks of life. Men who are no use at all at *nisi prius* would have been second Nelsons on the quarter-deck; surgeons to whom no patient will entrust his limbs might have earned martial reputations for themselves out of hostile armies; and many a clergyman who can neither keep his congregation awake nor his children decently clad, might have been a "warm" man if he had taken to business instead of theology. The misfortune is, however, that half the world flatters itself that it is, and prides itself upon being, something that, as a matter of fact, it is not."

Hypodermic Injections of Morphia in Acute Gonorrhœa.

Dr. Pietro Gamberini publishes, in a late number of *Giorn. Ital. delle Malat. Ven. et della Pelle*, the report of two cases in which subcutaneous injections of chlorhydrate of morphia (one grain to half a drachm of water for two injections) were highly useful in soothing the urgent symptoms of gonorrhœa—painful erections and micturition, intense burning pain in the urethra, &c.—when belladonna, hyoscyamus, chloral, and other remedies had all failed. The injections were made into the perineum, and near the sides of the urethra.

University College, London.

A discrepancy appeared in our columns last week regarding the introductory lecture to be delivered in the Faculty of Medicine, University College, this year. An advertisement erroneously states (although it was supplied to us officially) that it will be delivered on the 1st October by Dr. F. Roberts. On page 280, however, it is correctly given. The address will be delivered by Professor Corfield on the 4th October.

Mr. H. Wild.—1. Watson on Medicine.—2. The little manual mentioned is a reliable one as far as it goes.

Fractures of the Thigh.

To the Editor of The Lancet.

Sir,—I have read with much interest your report of the address of Prof. Spence, delivered at the late meeting of the British Medical Association in Edinburgh, and I beg that you will afford me a small space in your valuable journal for the following description of an apparatus I have lately had constructed for the purpose of overcoming, if not all, at least most of the difficulties connected with the treatment, as recommended by Prof. Spence and others, for fractures of the thigh.

My apparatus consists of an ordinary wooden long splint, provided with a movable foot-piece running in a guide, and worked by a screw. To the lower surface of this foot-piece is attached a V-shaped piece of brass, which receives the loop of adhesive plaster as used in most cases treated by weight and pulley. In the centre of the lower half of this brass piece, the extremity of a screw, twelve inches in length, revolves after passing through a female screw fastened to the lower extremity of the splint. By means of this screw the distance between the foot-piece and the upper extremity of the splint may be increased or diminished, the foot-piece being at the same time kept perpendicular. On the outer surface, and a short distance from the upper extremity of the splint, two buckles are fixed, which receive two leather straps, one passing in front, the other behind the patient's body, and connected with a broad and well-padded band fastened with buckles round the middle or upper part of the sound thigh. By these latter counter-extension is maintained.

The method of application is as easy as the apparatus is simple. Take a strip of adhesive plaster, two inches in breadth, and of sufficient length to extend along the inner and outer surfaces of the injured limb, as high as the seat of fracture, leaving a loop of from four to six inches in length beyond the sole of the foot. Having fastened this in position, lay the splint (well padded) along the outer surface of the limb in the ordinary way, and pass the loop over the foot-piece. Make a few turns with a broad flannel bandage round the upper portion of the splint and the abdomen; next fasten the broad band round the sound thigh, and carry the straps to the splint buckles, where they are to be fixed pretty tightly; then, having made sufficient extension by means of the screw, the operation is completed by making a few turns with an ordinary roller round the leg and splint just below the knee.

The advantages which I claim for the appliance are—1st. It will be found most efficient in extending the limb to and maintaining it at the proper length. 2nd. The patient's comfort will be greater with this than with any other appliance at present known. 3rd. The cost is not great, and it is very easily applied.

There is another matter of great importance in cases of fracture of the thigh. The beds now in use necessitate in a greater or less degree the moving of the patient, and until recently no method of overcoming this evil was known. Lately a bed has been introduced into the London Hospital, with a simple appliance for using the bed-pan, which is very efficient, comfortable for the patient, cleanly, gives the nurses less trouble than any other, and requires absolutely no moving of the patient.

I am, Sir, yours respectfully,
R. H. A. Hunter, M.R.C.S.

Malvern-road, Dalston, Aug. 10th, 1875.

Doctors and Druggists.

To the Editor of The Lancet.

Sir,—Attention has been recently directed in the columns of your journal, and elsewhere, to the subject of chemists employing legally qualified men to visit and prescribe on their behalf—a practice which I regret to say extensively prevails at this end of the town; and as an instance of the manner in which it works, it may not be uninteresting or unedifying to relate an experience of my own with one of these anomalous practitioners. The facts are as follows.

I was called to attend a gentleman, an old patient, who had been seized with apoplexy. On my arrival I found the gentleman in question, Mr. O'Donovan, who had also been sent for in the hurry and alarm occasioned by the occurrence. After a few remarks he left me, as he said, in charge of the case. Shortly after I quitted the house to get some remedies from my surgery, being absent about ten minutes. On my return I found that Mr. O'Donovan had sent a mixture, leeches, blister, enema with syringe, &c., also voluminous written directions to the wife and nurses, and, worst of all, a note, cunningly devised, to supplant me in my attendance on the case, to be forwarded to my house if approved by the wife of the patient. On ascertaining that her wishes were directly opposed to the spirit of the note, she only accepting the remedies believing that I had forwarded them, I addressed a remonstrance to him for such unprofessional conduct and ungentlemanly treatment. Neither explanation nor apology was tendered. On the contrary, I was treated by the chemist who employed Mr. O'Donovan—viz., Mr. Garman, of 278, Roman-road, Old Ford,—to an eulogium of his merits and high professional attainments, and was also grossly insulted for daring to call his conduct in question.

My object in bringing this matter before you is not one of professional pique, but simply to point out a result clearly attributable to the baneful practice of which this is a product. It appears to me that it would never have occurred between gentlemen settled in the same neighbourhood, and each enjoying a professional reputation; while it is extremely likely to occur when strangers are introduced and employed as the factotums of an ordinary chemist.

I have the whole correspondence in my possession, and should be happy to place it in your hands for whatever use you may think fit to make of it.

I am, Sir, your obedient servant,
Robt. Rugg, L.A.H. Lond.

Tredegar-road, Bow, Aug. 18th, 1875.

THE "UNION" PAMPHLET.

To the Editor of THE LANCET.

SIR,—I have to thank you for your notice of the above pamphlet. With reference to the distinctive titles for each rank of medical officer, I desire to say that the utmost confusion is caused by the present indefinite system. The title "surgeon" may be either a boy fresh from Netley, or a man of fifteen years' service. Twice, on two separate troopship voyages, I and with me all the medical officers were wrongly cabined, because it is impossible to tell by the Army List the standing of the surgeons ranking with captains. In the same way the title "surgeon-major" may mean two separate grades, each of different rank. Now, in civil practice it is of little importance what I am called, because I live amongst the same people for years—they know my standing and position; but in the service it is not so. Constant movings, and every year meeting new people, it is necessary to know a man's exact position, and this cannot be done with our irregular titles at present. I suggested the military titles, because they are definite, and cannot be mistaken; but it is quite unimportant what the titles are, provided they are distinct and definite, which they now are not. Nothing is so unpleasant as to have to explain to a Q.M.G. or other officer your exact standing, when by reference to an Army List all should be clear. The naval people, by abolishing the subaltern grade of surgeon, and establishing the "fleet surgeon" grade, have made their ranks quite definite. We need the same done for us. As we demand equality with the naval doctors in rank, Mr. Gathorne Hardy will, of course, abolish the subaltern grade for us in the army, and that will make things clearer as regards rank; but a new title is needed for surgeon-majors over twenty years' service.

I am, Sir, yours &c.,
India, July, 1875. THE WRITER OF THE "UNION" PAMPHLET.

WOOD *versus* MANCHESTER, SHEFFIELD AND LINCOLNSHIRE RAILWAY COMPANY.

Dr. Dacre Fox's letter arrived too late for insertion this week.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. H. Thompson, London; Dr. G. H. Savage, London; Dr. F. Brown, Rochester; Mr. Jones, Buxton; Mr. Lawson Tait, Birmingham; Mr. W. Coulson, London; Mr. Caddy, Liverpool; Dr. G. Fowler, London; Dr. Vandyke Carter, Bombay; Mr. Haynes Stanstead, Montfichet; Mr. Wilkins, Burton-on-Trent; Dr. Kebbell, Brighton; Dr. Power, London; Mr. Shorland, Westbury; Mr. Sergeant, London; Mr. Wild, Pudsey; Mr. Provis, Bourton; Mr. Foss, Manchester; Dr. Tattersall, Clayton; Dr. Broxholm, Barnsbury; Mr. Hatchard, St. Leonard's-on-Sea; Dr. Griffiths, Dublin; Mr. Moore, Dublin; Dr. Bramwell, Newcastle; Dr. Sim, Nottingham; Messrs. Southall and Co., Birmingham; Mr. Scott, Southampton; Mr. Smith, Kensington; Mr. Jessop, Leeds; Mr. Bradley, Manchester; Dr. Faber, London; Mr. Shattock, London; Mr. Grant, Methlick; Mr. Patsey, Derby; Mr. Rugg, Bow; Mr. Skene, Castle Douglas; Mr. Butler, Wednesbury; Mr. Borchert, Netley; Mr. Leeson, Wharfedale; Mr. Hullah, Graham's Town; Mr. Littlejohn, Dundee; Mr. Chitty, Shaftesbury; Messrs. Sampson Low and Co., London; Mr. Forbes, Glasgow; Messrs. Gillon and Co., Leith; Dr. Hemrys, Manchester; Mr. Price, London; Mr. Revis, Olney; Mr. Condy, Battersea; Mr. Vost, Beirût; Mr. Burgess and Willows, London; Mr. Nellasmith; Dr. Foote, Rotherham; Dr. Guppy, Falmouth; Dr. Carles, Devizes; Mr. Bradley, Pensnett; Mr. Duke, Colchester; Mr. Wall, Bickerstaff; Mr. Thomas, Shirehampton; Mr. Jones, Llandilo; Messrs. Oliver and Boyd, Edinburgh; Mr. Harrison, Hadfield; Mr. Sheppard, Dudley; Mr. Appleby, Newark; Mr. Bell, Edinburgh; The Director-General of the Army Medical Department; A. B., Birmingham; E. K.; Senex; J. V. R. C.; Radius; The Military Secretary, India Office; A Father of a Family; Subscriber; The Director-General of the Medical Department of the Navy; Borea; One of the Executive Committee; R. M., West Hartlepool; W., Warrington; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Coward, Huddersfield; Messrs. Harvey and Reynolds, Leeds; Messrs. Grace, Bristol; Messrs. Lee and Nightingale, Liverpool; Dr. Reid, Pembroke; Messrs. Orridge and Co., London; Mr. Fox, Topsham; Mr. Swinson, Leamington; Messrs. Leader and Sons, Sheffield; Dr. Braden, Staplehurst; Mr. Arminson, Preston; Mr. Smith, Glasslough; Mr. Richardson, Oundle; Messrs. Levy and Co., Dundee; Dr. Brett, Watford; Mr. Drew, London; Mr. Wright, Liverpool; Dr. Corns, Oldham; Mrs. Maskelyne, Kensington; Mr. Thain, Devonport; Mr. Hale, Barrow Hill; Mr. Denton, Bridlington; Mr. Richardson, Lockerbie; Mr. Rutherford, New Wortley; Mr. Mead, Waltham Abbey; Messrs. Horsfall and Whiteley, Wakefield; Mr. Nicholls, Bayham; Mrs. Chapman, Wandsworth; Mr. Pelton, Tunbridge Wells; Mr. Royds, Reading; Dr. Collins, Hounslow; Mr. Nelson, London; Medicus, Morley; M. S., New Church; Surgeon; W. W. H., Dartford; Psychological, Daventry; L. M. B., Stalybridge; M.R.C.S.L.; X. Y. Z., Bradford; W. H. L., Whitstable; M. M., Neath; B., Sheffield; Medicus, Southport; A. Z., Sandy; V. M., Milford Haven; G. W., Girvan; M.D., York; M. B., Newcastle; W. W. H., Dartford; C. H. H., London; M. B., Hamstreet; A. B., Manchester; Medicus, Mitcham; J. D. P., Manchester; E. Q.; X., Cheapside; Theta, Washington; M.R.C.S., Leominster; Alpha, Chester-le-Street.

Newcastle Chronicle, Birmingham Morning News, Local Government Chronicle, Welshman, European Review, Western Morning News, Manchester Guardian, Isle of Man Times. Liverpool Post, Cork Constitution, Surrey Advertiser, Metropolitan, Figaro, Huddersfield Chronicle, East London Observer, Scotsman, Record, and *Macclesfield Guardian* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, AUG. 26TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Aug. 20	30·20	N.W.	58	60	104	78	58	0·50	Foggy
" 21	30·27	W.	59	63	103	76	58	...	Overcast
" 22	30·25	W.	58	64	105	77	58	...	Overcast
" 23	30·13	W.	56	59	107	76	55	...	Overcast
" 24	29·92	W.	56	62	99	76	55	...	Fine
" 25	29·89	W.	60	64	99	73	57	...	Fine
" 26	30·01	W.	62	65	...	...	62	...	Overcast

Medical Diary for the ensuing Week.

Monday, Aug. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Aug. 31.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 1.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1¼ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Sept. 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 4.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—
Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

A Lecture
ON
SOFTENING OF THE BRAIN.

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,
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We very frequently hear the expression "softening of the brain." It is often used by educated patients; for many people who simply suffer slight and often but temporary nervous exhaustion think, always erroneously, that they have "softening," or are going to have it. It is really an expression of pathological application, but just as the symptomatic word "apoplexy" has come to have a pathological meaning (effusion of blood), so the pathological term "softening" has come—so, at least, it appears to me—to be used, even by some medical men, as a name for a certain rude clinical grouping of symptoms in cases in which there really is no softening. This use of the term is to be deprecated. Let me mention the symptoms of cases wrongly called "cases of softening." We see patients who have become excitable, irritable in temper, and desponding; they have found that their attention easily fails, and that they cannot do their accustomed work; they usually sleep badly; they have often what they call headache, but it is mostly not an ordinary headache, either in kind or in position; it is a feeling of pressure, or sometimes of burning, and its seat is the vertex or the back of the head; there is very often, indeed, a disagreeable feeling at the occiput and in the upper parts of the spine, more distressing than pain—an intolerable physical feeling; the queer feeling in the spine is often intermittent, and frequently comes on slowly with great depression of spirits. Altogether there is a strange mixture of "mental" and "physical" symptoms. Recognising the group of symptoms I have mentioned as a fair clinical entity deserving particularly careful study, I do not see the evidence for the diagnosis that softening of the brain is the pathological change causing them. Such cases are called by the laity nervous debility, and often by medical men hypochondriasis. The symptoms, I think, indicate nervous exhaustion, beginning often in the sympathetic nervous system, and secondarily affecting the nutrition of the highest centres in the brain. Of course this is only hypothetical, for there is no morbid anatomy of such cases. Everyone's conclusion as to their pathology must, therefore, be hypothetical. These symptoms are often produced by excesses, and especially by sexual excesses, and by "fast life" generally; they are sometimes suddenly developed by fright, and may be brought on by misery or by overwork, either of the mind or the body, especially when the work is done under responsibility. Of course they occur most often in persons who inherit a weak temperament, who bear trouble badly, who are easily excited and easily depressed. In some of the cases the patients get quite well by simple common-sense care, and the delusion that they have softening vanishes. In the graver, prolonged, and ingravescent cases, I should think there was no softening of the brain, but rather greater firmness of it; atrophy of nerve-cells and fibres, with increase of connective tissue; there is some atrophy of the brain. In saying this I am not making a very strong statement. We often see considerable atrophy of the brain at post-mortem examinations on those who have died of non-cerebral disease, and whose mental condition has attracted no attention. Atrophy of brain is normal in old people; it is often seen in middle-aged drunkards and even in comparatively young people who have been long bedridden by wasting diseases not primarily involving the nervous centres. I mention this, as you may think the statement that there is some atrophy of the brain an extravagant conclusion as to the state of things in a man whose symptoms are those of prolonged and severe hypochondriasis or nervous debility, or whatever the right name or label is.

Be sure there is no softening in these cases. Indeed, I do not see how the diagnosis that there is actual softening of the brain is in any case to be possibly arrived at, *unless the patient has certain local paralytic symptoms, as hemiplegia, or some other symptoms implying a local cerebral lesion, such as affection of speech*; or, again, unless there be signs of cerebral tumour (severe headache, urgent vomiting, and double optic neuritis), or evidence of injury to the head. For, so far as I know, cerebral softening is always local; I know nothing of general or universal softening of the brain. To be warranted in diagnosing softening, you must have symptoms which point to local disease. I do not say that local cerebral softening cannot exist without localising symptoms. I only say that in their absence you are not warranted in diagnosing its existence. We know that large parts of the brain may be destroyed without any marked local symptoms resulting; these parts may be destroyed by the process of softening without causing marked local symptoms. But in these cases the softening is mostly about tumours or other kinds of adventitious products. It is, however, almost an abuse of language to speak of these as cases of softening. The softening is, I suppose, a result of encephalitis about the tumour. We shall not refer to these cases again. For all practical purposes they belong to a distinct category. The cases which deserve to be called cases of softening are cases in which there is blocking up of cerebral arteries, or, which is infinitely rarer, of cerebral veins. Of these only shall I speak.

It is from the distribution of arteries, it is "for arterial reasons" so to speak, that there are localising symptoms in softening. The highest part of the motor tract (corpus striatum) and adjacent convolutions are usually the parts of the brain damaged or most damaged in softening, or simply the parts of the brain which often undergo softening. And this is because the artery which supplies these parts is an artery—the middle cerebral—which often gets blocked up, for reasons we shall afterwards state. Hence hemiplegia and affections of speech are the symptoms to be most trusted in the diagnosis of cerebral softening, for they are the symptoms producible by disease of the parts mentioned as being supplied by an artery which often gets blocked up. Curiously, however, unless there be valvular disease of the heart to, as it were, insist on softening by the process of embolism, cerebral softening is frequently not diagnosed in cases of hemiplegia and affection of speech when it often exists. Suppose that perfect hemiplegia comes on in a quarter of an hour without loss of consciousness in a patient past middle age, who has not renal disease, we are practically certain of local cerebral softening. There is in these cases softening by thrombosis—a commoner cause of local softening than embolism. Thus we see that the word "softening" is used by some for cases of nervous exhaustion and cerebral atrophy where there is not that pathological change, and, strangely, those who so use it very often do not diagnose softening in the really simple cases of hemiplegia coming on without loss of consciousness where it does exist. Sometimes, indeed, when the diagnosis is made that hemiplegia has been caused by embolism, because the patient is young and has valvular disease of the heart. There seems to be no clear notion in the mind of the diagnoser that he has before him a case of softening. There are two reasons for these mistakes. First, hemiplegia is too often attributed as a matter of course to cerebral hæmorrhage, and softening is not thought of. This is, I think, because clot is oftener seen at post-mortem examinations in cases of hemiplegia, as it is a more speedily fatal lesion. We have more autopsies on patients who die from cerebral hæmorrhage, because they die sooner, and therefore under our care. Nevertheless, hemiplegia, *coming on without loss of consciousness*, is mostly caused by softening. I except cases of chronic renal disease, for hemiplegia in these cases, as a matter of fact, nearly always depends on effusion of blood, whether there be loss of consciousness at the onset of the paralysis or not. A second reason for the mistake in diagnosis is that there is a widespread impression that general mental symptoms *must* exist if there be "softening." I shall devote a great part of this lecture to show that this is an error, or, at any rate, it is an error to suppose that softening of the brain *necessarily* causes *general* mental symptoms *directly*. Observe, I say directly, because I shall show that softening may be preceded by general mental symptoms, and may be followed by general mental symptoms. But in neither case do these symptoms depend directly on that softening. Observe, too, that I speak of *general* mental symptoms. I admit that softening directly causes special mental symptoms—loss of speech, for example. I deny that it directly causes general mental symptoms, although I admit, as I have said, that it may be preceded and followed by them. It is practically convenient to speak first of *special* mental symptoms *directly* resulting from softening; then of general mental symptoms following it. Although out of chronological order, it is more methodical to consider the mental degradation which may precede an attack of softening after speaking further of arterial changes.

Certainly there is not necessarily any direct connexion betwixt cerebral softening and *general* mental symptoms. There need be no such symptoms at the onset. The typical case is that of the middle-aged man who, having gone to bed feeling well bodily and mentally, finds out when he gets up in the morning that he cannot use his left side, but who is as clear in mind as usual; yet that man has local softening, or rather thrombosis of an atheromatous artery supplying a part of the motor tract, which will therefore speedily soften. We are obliged to make some kind of arbitrary limit. We speak of cases commonly met with. But, as I shall tell you, later there may be deep coma from blocking of the trunk of the middle cerebral artery—coma as deep as that producible by large cerebral hæmorrhage. A patient may have, however, special mental symptoms, without any insensibility, at the onset of softening, and as a direct result of it. Such cases I now consider.

Special mental symptoms directly resulting from softening.—The parts of the brain which most frequently soften are, as I have just said, the highest divisions of the motor tract; most often the corpus striatum and adjacent convolutions—that is, in other words, the parts supplied by the middle cerebral artery. If a large part supplied by the right middle cerebral artery be softened, there need, after the shock of the onset, be no obvious mental symptom of any kind. If a branch of the *left* middle cerebral artery be blocked there is a mental symptom, but then it is not a general one, but an exceedingly special one—viz., affection of speech (aphasia). Affection of speech *is* a mental symptom. A person who has lost speech has lost a part of his mind. Indeed, if the *trunk* of the middle cerebral artery be blocked there is very extensive softening, and a state very like imbecility as well as loss of speech; the patient's power of expression in all ways, and even the exhibition of states of feeling by smiling, &c., may be gone. Even then the symptom is a special one—loss of language or loss of speech.*

General mental symptoms may follow local softening. We will for convenience speak separately of those following in a few days (these are usually temporary), and then of those following weeks or months after; these are often permanent. Remember the simple case we took for purpose of illustration. A patient, about fifty, has become hemiplegic without loss of consciousness. This is the symptomatic statement; the pathological statement is that he has local cerebral softening.

General mental symptoms following a few hours or a few days after local softening.—After a short time the hemiplegic patient may begin to "wander," although at first, and usually all through his illness, he can pull himself together, clearing his mind of his fancies, and can reply to ordinary questions correctly. The mental symptoms are of a general character. There is not a loss of one faculty in particular, but a reduction of the whole mind to a more automatic condition. The patient "wanders" about his business, about the persons or places to which he is most accustomed (which are most automatic to him). He imagines that he is doing his work, and he may take strangers for those persons to whom he is most accustomed. I repeat there is not here loss of any one faculty, there is no special mental symptom. The patient is reduced to a more automatic condition of mind. There is Dissolution, using this term as the opposite of Evolution. Then, of course, much depends on the kind of brain the patient had before his illness. Old drunkards will have more absurd delusions, illusions, and hallucinations than persons who have not abused their nervous systems. My own belief is that this state results simply because the hemiplegic patient's brain power is slightly reduced in a universally lowered bodily condition, and that it is not caused by the very local disease of his brain. A local softening, practically an absence of brain (circumscribed destruction, could not possibly cause such *active* mental symptoms as we have mentioned. These symptoms are, in my opinion, ofen owing to debility. Let me explain how I think *debility* produces *active* symptoms. Explanation is required, as the expression seems paradoxical, and the expression "debility" wants definition. Probably the hemiplegic patient has, for theoretical reasons, been put on a spare diet, a diet next to nothing, although the very local damage in his brain has not seriously affected his digestive organs—not obviously affected them at all. The palsy has alarmed and depressed him, and he has not in consequence slept, or has not slept well. Very likely he has had a strong purgative, and perhaps blisters to the back of his neck. These mental symptoms are often due in great part to want of food. Very likely the poor fellow may have every day for years eaten and drunk far too much. Some people eat little during the day, and then "stun" themselves at dinner. If such a man be taken hemiplegic just before his dinner hour he would feel the want of food in the night. We should be cautious how we begin to change a man's habits, even bad habits, very soon after an attack of hemiplegia. If we do not keep up his arterial tension the parts of his brain *the furthest from his heart* will not get plenty of blood. The parts geographically furthest from the heart are the most intellectual; he may therefore become delirious if his arterial tension be much lowered. When I have spoken more about arterial changes, you will see that the brain of a man who suffers softening is often one of which the apparatus for nutritive supply has long been getting slowly defective. He is usually past middle age. There is arterial degeneration, and thus the circulation of distant parts will fail very easily. So far, we have concluded that there is defective blood-supply, and corresponding defect of action of the highest, that is of the most intellectual nervous arrangements. But obviously this negative condition could not account for *active* mental symptoms. Before I speak of the manner in which I believe the active symptoms to result let me widen the field of observation.

I would earnestly beg you to bear in mind that I declare that such mental symptoms are not characteristic of cerebral softening; they are just as likely to occur with hemiplegia from clot as with hemiplegia from softening; they cannot be due directly to either; they cannot, as I have said, be due to a circumscribed "destroying lesion" of any kind. But we can go far beyond this statement—we can say that these symptoms are rarely dependent on *primary* disease of the brain of any kind. In general physicians' practice very active mental symptoms (delirium) are rarely even associated with primary disease of the brain of any sort. Of necessity they imply something wrong in the brain, but the brain is suffering secondarily, "functionally," as the popular and inexact expression is. Such symptoms are common in the medical wards of a hospital. The patients in whom they occur are those whose primary ailment is not a cerebral one; they occur in phthisis, in chronic Bright's disease, in pneumonia, in erysipelas, and in pyæmia—in some cases of these diseases, I mean. As a rule, the more acute the disease, and therefore the more rapidly the brain suffers secondarily, the more active, the more uproarious and constant, the mental symptoms. They occur without a very high temperature oftener than with one. The temperature is often normal. Now we come to the explanation.

Such mental symptoms are on an utterly different platform from all other kinds of nervous symptoms. Remark, they are positive, or, as I said, active symptoms. Negative mental symptoms, such as loss of speech, imbecility, defect or loss of consciousness, are often owing *directly* to disease of the brain, but the most extravagant and most changing positive mental symptoms must in all cases, even where there *is* disease of the brain, be due to the action of parts of the brain which are *not* the seat of a lesion which produces *loss* of function. They are due to the action of parts which, except for over-excitement, are healthy. I am fully convinced that in all cases, from the insanity of slightest delirium to insanity ordinarily so-called, there is, as Dr. Monro says (in accordance with a principle many years ago formulated by Laycock), a negative and a positive condition. There is loss or defect in the highest faculties along with exaltation of those lower and more automatic. It is even so in health; automatic mental action goes on during sleep or reverie. But we shall keep to actually morbid conditions. I wish to impress on you that it is the negative element only which is the *direct* result of disease. Now mark, the delirious patient is symptomatically in a double condition. The negative element is defect or loss of consciousness. Unfortunately such an expression often rouses thoughts about coma; but be sure that there are all degrees, from the slightest and most transient confusion of mind (defect of consciousness) to deepest coma. Now, the defect of consciousness is the condition produced directly by loss of arterial tension leading to failure of the highest centres—those most distant from the centre of the circulation. With regard to the causation of the positive symptoms (the delirious ravings &c.), we may apply the principle Anstie stated when he said "that the apparent exaltation of faculties is due to removal of controlling influences," or, as Thompson Dickson said of delirium and mania, that "they result from loss of control," or as Rutherford says,* "to diminution of inhibitory power." When a man is delirious his negative state is, I repeat, that his highest nervous arrangements in the cerebrum, the substrata of consciousness, are more or less put out of use; he has defect of consciousness. In any general lowering of health the very highest nervous arrangements are the first to fail. (Principle of Dissolution.) The positive or active symptoms, the illusions, delusions, and grotesque actions, are owing to the action of the lower nervous arrangements, which, except for over-excitement *permitted* by the loss of control, are healthy. (Principle of Loss of Control.)

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* I must insist that loss of speech is a mental symptom. For we speak not only to tell other people what we think, but to tell ourselves what we think; rather a proposition is the ending of a mental operation, and often the beginning of another. The aphasic can still think in some fashion; he remains able to do so, I consider, because, although speechless, he is not wordless; he has remaining the automatic and unconscious use of words in the right undamaged cerebral hemisphere. I believe, too, that there is a similar duality of Perception, or, rather, that the process which ends in perception is double. This process is not affected in cases of aphasia. There is, I think, chiefly from disease of the right posterior lobe, a mental state which I call "Imperception," corresponding to Aphasia in the Word series. I do not discuss this symptom in the text, for, besides other and better reasons, the topics necessarily to be considered are numerous.

You may reply that the active mental symptoms may be attributed to active disease about the original lesion—about the softening or the clot. This is contrary to the evidence. It is a grave error in any case to put these symptoms down as a matter of course to meningitis, encephalitis, or to any kind of acute primary head affection. It is a deplorable error if it leads to severe purgation, to blistering the back of the neck, leeches, and low diet. The characteristic symptoms of encephalitis, meningitis, and acute brain disease generally are not mental, but physical. Thus, besides gross motor affections, convulsion, and paralysis, there are alterations of circulation, respiration, temperature, and constipation, vomiting, &c. Do not forget this seemingly paradoxical statement, that the trustworthy symptoms in the diagnosis of acute and primary disease of the organ of mind are physical, and that the untrustworthy symptoms for that diagnosis are mental.

General mental symptoms slowly developing weeks or months after an attack of softening.—These certainly follow at too great an interval to be erroneously attributed to the local damage which caused the hemiplegia. They often develop when the hemiplegia has become chronic. A general mental and bodily failure often follows a severe attack of hemiplegia, the result of local softening. It is not due to that softening nor to any extension of it; it is, I suppose, a result of secondary atrophy of the whole or of a large part of the hemisphere in which the local softening lies. But remark that widespread atrophy of a hemisphere follows on any large cerebral lesion, not on softening in particular; it follows clot, for example, and it may follow tumour, as is evident in some very long-standing cases. I say in some very long-standing cases, for, of course, in most cases of tumour, as we see them post mortem, from the added bulk and from œdema of the brain about the tumour, the convolutions are flattened and the brain looks bigger. Probably here there is concealed atrophy. In cases of autopsy in adults who have been hemiplegic from infancy, we may find, besides the local paralysing lesion, extreme wasting of one cerebral hemisphere. This is, I think, a consequence of the local damage which caused the hemiplegia. There was at first, I suppose, softening by thrombosis of a branch or of the trunk of the middle cerebral artery. This local softening is afterwards represented by a cyst. The atrophy is consecutive and secondary.

The mental symptoms following late (weeks or months) after an attack of hemiplegia are more slowly developed than those following immediately, hence they are very different. The deterioration shows itself both intellectually and emotionally. There begins to be loss of power of connected thought on difficult, novel, and complex subjects, or, speaking simply, the patient is soon confused; there is also peevishness and selfishness. Both these are highly characteristic of slow mental degradation. This is just what one would expect *a priori*. From a process so uniform as atrophy of the brain you would expect failure to begin slowly, and, on the Principle of Dissolution, that it would affect first the highest and most special of all faculties, or we may say those faculties last acquired both by the race and the individual. These faculties are power of abstract reasoning (intellectual) and sentiment of justice (emotional).* That these two faculties are the most special is seen by the fact that young children and savages have little or none of either. It is said that Australian savages have not even such abstract words as tree, red, justice, &c. Now, inferior people among the civilised are inferior because these faculties are little developed in them. I repeat, these are the two faculties developed latest; they fail first in cerebral disease where the whole brain is slowly implicated. So far for the principle of Dissolution, under which comes the negative condition. Next for the positive symptoms. The process of dissolution which directly causes the negative indirectly causes, or rather permits, the positive.

Patients with general cerebral deterioration, like persons naturally inferior, are easily excited; for by saying that they have defect in their highest processes, we say that they have defect in their controlling or inhibiting processes. To be easily excited is to have little controlling or inhibitory power. Here again comes in the Principle of loss of Control. Every healthy man has all animal passions and instincts, but the properly organised man has them under control of well-developed higher faculties. Thus chastity is not the absence of sexual feeling, but the having it deep under the control of higher feelings. Here you see that the principle of the same explanation holds good as was given of the mental symptoms following soon after local softening. In the production of the class of symptoms just considered, the process of dissolution is very slow, and thus the control is slowly removed. The suddenness and rapidity with which control is removed is of vast importance; the more rapidly it is removed the more activity is there of the centres uncontrolled. Thus, in the epileptic maniac (the most furious of all maniacs) the control has been removed very suddenly and with great rapidity.

Defective sense of justice seems too fine a phrase for selfishness, peevishness, and greediness; but it is really a correct statement of them. The feeling of justice is regard for others. Of course the results of disease are as different as are the persons to whose brains disease comes. For example, inferior men who have little sense of justice while in health, are made very irritable by trifles and easily take offence. They would soon, even by a non-cerebral illness, display bad temper, greediness, &c. Then some men have a feeling of justice in excess: generosity is excess of justice; generosity is not simply an easy, soft, careless nature. Such men are less likely to become selfish and greedy when the brain begins to fail. They have a reserve of good faculty. Defective power of abstract reasoning also seems too fine a phrase for the confused mental state of many of our hemiplegic patients. But it is really a correct expression; I don't mean that they have difficulty in reasoning on abstruse subjects. What puzzles them is connected thought about things out of their routine, and which are not simple and actually before them. Persons of congenitally inferior minds are easily confused by anything complex, especially if it be novel.

So, then, when general mental symptoms follow weeks or months after local softening a sufficient explanation is given, not by the softening, which may not increase in extent as the symptoms develop, but by the slow consecutive atrophy.

To resume. Excluding softening about tumours and softening from gross causes similarly obvious, I know nothing of softening of the brain except that resulting from blocking of cerebral vessels. This, you will see, is saying in effect that softening of the brain is local; there is a softening of some part because a vessel supplying that part is blocked up. I have used in a former part of this lecture the expression "extension of softening." I wish to remark that, excluding softening about tumours, softening from injuries, &c., I know nothing of "extension of softening" except in the very simple sense of its resulting from new blockings up of arteries near those formerly blocked up.

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* The Lancet, April 29th, 1871.

* See Herbert Spencer's Study of Sociology, chap. xv.

The softening I have to speak of is a partial necrosis of brain mostly in arterial districts. Hence the first and essential thing in the study of softening is the study of the process and results of blocking up of arteries. It is exceedingly important to realise that it *is* a question of *arteries.* See how it bears on hereditary transmission of disease. Hemiplegia from local softening occurring in a person whose family has been subject to nervous disorders is no evidence whatever to show an inheritance of nervous disease, for the simplest possible reason that hemiplegia so caused is not strictly of nervous origin. The same remark applies to hemiplegia from clot, and thus it applies to nearly all cases of hemiplegia, for this form of palsy arises in the vast majority of instances from bad cerebral arteries; they break or get blocked up. Hemiplegia is the common arterio-cerebral symptom partly because an embolus can more easily get into the middle cerebral artery for anatomical causes, and partly because this vessel lies more directly in the way of strain from the heart, and thus is the most diseased and the most easily ruptured. To show how very mechanical, so to speak, the reason is for the predominance of this arterio-cerebral symptom, I mention that Prevost and Cotard found that tobacco-seeds injected into a dog's carotid most often lodged in the animal's middle cerebral artery. In fact, I know of no evidence to prove that any form of hemiplegia is ever of direct nervous origin—i.e., that the pathological changes causing it *begin in nervous tissue.* Hence it is, I think, very inaccurate to speak of a patient who suffers epilepsy as having a *tendency* to nervous diseases because his father or mother had such symptoms as hemiplegia, loss of speech, softening of the brain, &c. Your notions on hereditary transmission of nervous diseases will be confused unless you bear in mind that nearly all "nervous diseases" are really instances in which the pathological changes begin in *non-nervous tissue.* Very many of them begin in the compound tissue (artery), and many of them in the simple tissue (connective). Besides symptoms of arterial origin there are nervous symptoms from intra-cranial tumours (including syphilitic growths), abscesses, hydatid cysts, &c. All these are pathologically extra-nervous. So, in inquiring for evidence as to hereditary tendencies in a patient who had any kind of nervous affection, you try to get evidence as to general states; for what you really want most to know is to what tissue-changes the patient's family is prone. You only inquire about nervous symptoms in other members of the patient's family (paralysis, &c.) as indirect evidence of this. You inquire, too, for rheumatism, gout, for facts as to renal disease, as well as ask if there be paralysis, insanity, &c. What you most wish to know is, what tendency there is to arterial (including cardiac) changes. My own belief is, that in this direction of inquiry we shall find out the pathology of the neuroses. I do not believe that chorea and epilepsy are nervous diseases in the sense that the pathological changes *begin in* nervous tissue.

In all the cases I have mentioned so far nerve-tissue *suffers.* It is not primarily at fault. As to the neuroses, remark that according to most physicians their pathology is unknown. We cannot say, then, that they are hereditary as *nervous affections* simply because they pervade a family. Hemiplegia, apoplexy from cerebral hæmorrhage, softening, &c., may pervade a family, but this is not evidence that that family is predisposed to nervous disease, for the simple reason that all the three so-called *nervous* diseases mentioned are affairs of arteries, not a whit more significant than defect of sight from retinal hæmorrhage or epistaxis—arterial affairs too. In these cases it is more important to seek evidence of a tendency to arterial change than to note the occurrence of nervous disease or symptoms in the patient's blood-relations.

Mental symptoms preceding cerebral softening.—It is important for another reason to bear in mind that cerebral softening is a question of arteries; for, since local softening is due to blocking up of arteries, it is hard to see how such so-called causes of softening as anxiety and overwork can be said to produce it. Such causes may help to produce the clinical grouping of symptoms, often called softening, of which I spoke at the beginning of my lecture. Fright and anxiety—which latter is only fright spread out thin—are, indeed, potent causes, especially in predisposed persons, of severe, very distressing, and long-continued nervous symptoms, such as sluggishness of mind and body, failure of power of attention, incapacity for sustained exertion, &c.; but I do not see how they can produce that *local* pathological change which is properly called softening. I do not deny that hemiplegia from softening (thrombosis) is often said by patients and their friends to have been preceded by anxiety or overwork—"caused by" such things, they will affirm. I think the most reasonable explanation is that the brain has been slowly getting into a condition in which it is easily excited and easily overworked; for in many such cases (softening from thrombosis) there is widespread degeneration of the cerebral arteries, and thus a worse nutrition throughout the brain, before the actual softening of some part results because one of these bad arteries has become blocked up. In some cases before the hemiplegia, the patient had manifestly become, as he would say, although not in these words, incapable of connected thought on any unusual matter, forgetful of things slightly out of his routine duties, and we should learn from his friends that he had become irritable and selfish. What I told you on failure of the two highest faculties in consecutive atrophy of the brain applies here. As a rule, the failure of mental power before softening is much slighter, and occurs more slowly; it is often spoken of by the patient's friends as indifference to business, fidgetiness, and "alteration" of disposition. These symptoms are no doubt, in persons who have degenerated arteries, the result of an uniformly bad state of the vessels of the brain. This prior condition of ill nutrition does not, so far as I know, lead to *general* softening, however slight we may suppose that softening to be.

You will now see that the causes of softening of the brain, properly considered, lead you to consider the state of the arterial system—lead you beyond the nervous elements of the nervous system. I repeat that very few nervous diseases are directly of nervous origin. A great part of our knowledge of the pathology of cerebral softening is in the answer to the question, Why do arteries become diseased, and thus "blockable"? Obviously if the softening of the brain be very limited in extent, and the symptoms therefore slight and transitory, the consideration of the patient's general bodily state is the really urgent matter. It would be a very poor thing to dwell with exaggeration on the hemiplegia, and ignore the state of the patient's heart, arteries, &c. It would be a very unclinical mind which could feel comfortable about a patient who was very "degenerate" simply because he had speedily got rid of hemiplegia. Inquire into degenerations of all systems of tissues, and examine all important organs. Nor must you suppose that you are taking a broad view of a case if you dwell exclusively on important superficial matters—state of digestion, sleep, and occupation. You will have your patient's sympathies in making such investigation, for he can, or he supposes he can, follow your inquiries and understand their bearing. It is best to begin with the paralytic symptoms; then to consider the superficial, but very important, conditions; and, lastly, the deeper lying and most important evidence as to general pathological and pathogenetical states. The patient will wonder what you are at if, first of all, you examine his heart, urine, and arteries, when he comes to you because he cannot use his right arm and leg. Again, do not be illogical when the paralytic symptoms are slight and transitory. Suddenly occurring and transitory slight symptoms, such as affections of speech, unilateral numbness, may be owing to little foci of softening (or rather to thrombosis of small arteries, which in due time lead to local softening), just as much as permanent paralysis may be owing to extensive softening. Of course the slighter the symptoms the more need is there practically to consider many possibilities, for slight symptoms are not necessarily so easy of explanation as grave symptoms often are. After carefully considering all the causes I can think of, I feel warranted in attributing in many cases the slight and transitory nervous symptoms I have mentioned to local softening; for vessels of very small size may be blocked up as well as vessels of great size, and in correspondence there are foci of softening from the size of a pea upwards. Simple as this remark sounds, the principle deducible from it is not always borne in mind. Slight and transitory hemiplegia, which we are warranted in putting down to blocking up of very small arteries, is often hastily ascribed to general states of ill-health—for example, to affection of the liver, &c. In so explaining them you would have your patient's sympathies. He can, or thinks he can, frame some sort of conception of "local congestion," "disorder of the liver," "suppressed gout," "overwork," "anxiety," &c., as causing his slight localised nervous symptoms. At any rate these explanations or these phrases are familiar to him. I think that the existence of any of these states gives no explanation of local and suddenly occurring nervous symptoms. These "explanations" are superficial, not simple. If a man have atheromatous arteries (blockable arteries) of all sizes, why should not slight and transitory symptoms be owing to blocking of very small arteries? Observe, the question of first importance in diagnosis is not as to the slightness or transitoriness of a symptom, but as to its localness; a local symptom must imply a local lesion of some sort. One reason for the frequent denial that local lesions exist in cases of *transitory* paralysis is that it is not widely known that there is Compensation in nervous organs, so that paralysis will pass off when the damage causing it is not altogether repaired. Thus, we exclude such so-called general causes as I have mentioned, and go on to consider special causes. At the same time it is only an inference that such slight and transitory paralytic symptoms depend on small foci of softening; for there is no, or practically no, morbid anatomy of such slight symptoms.

REPORT OF A

CASE OF POPLITEAL ANEURISM CURED BY PRESSURE.

By STAFF-SURG. ALEX. TURNBULL, R.N., M.D.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

IT appears that the subject of this case (S. I——, aged thirty-five, master-at-arms), in the execution of his duty, parted two men who were fighting, and in the consequent struggle caught his right foot in a ring-bolt, and severely twisted the right leg and knee-joint. This occurred on the 10th of December, 1874. As head of the ship's police, his duties at this season were of a very responsible nature; and though he still felt the effects of the accident, ultimately becoming lame, with œdema of the leg and foot, he did not come under treatment until the nineteenth day after the accident—viz., on Dec. 29th.

The patient is a large-framed, muscular, obese man, six feet in height, a free but not dissipated liver, and a history devoid of syphilis or other degenerative disease.

Dec. 29th.—Having spent a night of great suffering, the patient applied for advice this morning, when an aneurism was discovered filling the right popliteal space, and there was marked œdema of the leg and foot. The aneurism measures—length, 4½ in.; semi-circumference at centre, 6½ in.; circumference of left knee, 15⅜ in.; right, 16⅝ in. The aneurism is posterior to the popliteal artery, and has a strong heaving pulsation. The contents of the sac are apparently still fluid, and the aneurismal bruit clearly audible. The posterior tibial and dorsal arteries of the right foot are hardly perceptible. No sign or symptom of arterial or cardiac disease exists elswhere; pulse quiet, equable, soft, 80. Strict rest in bed enjoined, and patient instructed in the use of Signorini's clamp tourniquet to slow the femoral circulation, and prepare for the future treatment by arrest of the circulation through the aneurism.

30th.—Patient slept well after the hypodermic injection of a quarter of a grain of morphia. Experiences great relief from the intermittent use of the clamp tourniquet. He was placed on an air-bed, and the tourniquet carefully employed to avoid local irritation; on its removal, the part was dusted with fuller's earth, a piece of spongio-piline being always applied over the sites of pressure.

31st.—Patient shows signs of suffering from the restraint and confinement, having been accustomed to an active life. Average local daily temperature 80°; daily range 2° to 4°. Aneurism remains as on admission; there is, however, little or no œdema of leg.—4 P.M.: Most acute pain across dorsum of foot, apparently due to pressure of tumour on peroneal nerve; pulsation in aneurism strong and full; measurements unchanged; right knee partially flexed. Intermittent pressure, to diminish force of circulation, still employed with caution; hypodermic injections of morphia when pain is severe.

Jan. 1st.—Slept well. Intermittent pressure as before; diet generous and unstimulating; no stimulants.

2nd.—Having had a Lister's tourniquet made on board, and the patient become more accustomed to the confinement and use of instruments, I determined to arrest the circulation through the aneurism by the alternate use of Signorini's and Lister's tourniquets, the precautions noted on the second day being most carefully attended to. In 1868 I succeeded in curing a smaller popliteal aneurism by this method in four hours and a half; the case had been previously under treatment for some time by modified pressure.—8 A.M.: Applied Signorini's clamp over femoral artery about an inch and a half below Poupart's ligament, and Lister's clamp over ordinary seat of ligature; at intervals of half an hour or less, if pain arose, the pressure was removed, the other tourniquet having previously been applied. By these means the patient was not needlessly distressed, nor was circulation through the popliteal artery allowed.—Noon: Removed tourniquets. As it had been impossible to give constant medical supervision, it was discovered that pulsation had not been entirely suspended during the four hours. Subsequent experience in this case demonstrated the necessity of screwing up these clamps from time to time, as the soft tissues give under the pressure, and pulsation will often return in the aneurism under the same application of the clamp, which at first, and for many minutes, completely arrested it.—2 P.M.: Under my own supervision the tourniquets were reapplied alternately for four hours and a half, and I then experienced the difficulty mentioned of completely arresting the circulation through the tumour. The patient suffered much from the pain in leg and foot previously noted, but comparatively little from the immediate pressure of the clamps. On removing instruments, the aneurism felt more solid and the pulsation feebler, less heaving and expansive.—12 P.M.: Acute pain in calf of leg and across dorsum of foot; no œdema; no diminished temperature; subcutaneous injection one-third of a grain of morphia.

3rd.—A restless night; broken sleep; appetite poor; tongue coated; pulse 72–80; marked change in aneurism; pulsation decidedly feebler; tumour firmer and more solid. Patient confirms this from local sensations, and is much satisfied, entering thoroughly into the plan of treatment, and submitting most patiently thereto.—1 P.M.: Acute pain across dorsum of foot; hypodermic injection; flannel bandage.—2 P.M.: Reapplied instruments, the pain being relieved; removed clamps after two and a half hours' application under my own supervision; still a difficulty in entirely suspending pulsation in tumour; no appreciable difference in circumference of knee-joint on removing pressure; pulsation more feeble; clot evidently forming.

4th.—Slept without anodyne; patient's appetite poor; tongue coated; pulse 80. It was intended to discontinue instruments for a day, but at noon the pain in foot became so severe they were applied to slow circulation, and were thus employed for three and a half hours, under which treatment the pain ceased.—10 P.M.: Pain of foot returned severely. Ordered half a grain of morphia as a subcutaneous injection, with friction to foot.

5th.—3 A.M.: Still suffering greatly; unable to sleep. Again applied modified pressure with relief to pain, though slight consequent œdema of limb; this treatment continued for eight hours. The aneurism is increasing in solidity; the patient is observed to flex the limb more and more daily. Circulation through aneurism arrested by forcible flexion or extension of knee-joint. Moderate flexion to be employed, and maintained by slipper secured to waistband. Some slight tenderness at sites of pressure, which of late has been very constantly applied.—10 P.M.: Morphia hypodermically.

6th.—Slept well; treated this day by moderate flexion only; no return of pain in foot. Appetite improved; patient in good spirits, becoming more accustomed to the confinement.

7th.—Slept well without an opiate; the condition of the tumour satisfactory; pulsation feeble; tumour more solid. Treatment this day: Moderate flexion and rest only.

8th.—Rest and moderate flexion.

9th.—Pulsation feeble and easily arrested by flexion.—9.30 A.M.: Forcible flexion attempted, but after an hour's treatment the aneurism was found to pulsate, and the patient requested the clamps might be substituted. Half a grain of acetate of morphia had been subcutaneously injected ere the treatment commenced.—10.30 A.M.: Applied clamps alternately, with a view to arrest circulation through the femoral artery, as on Jan. 2nd. Constant medical supervision could not be given, but the patient managed the instruments well, though not so as to arrest circulation entirely at all times. This treatment was continued for seven hours. On removing the tourniquets the pulsation in the aneurism was very feeble. The tumour had entirely lost the feeling of fluidity, and the sensation experienced might equally have arisen from any solid tumour situated over the popliteal artery. The aneurismal bruit, however, was still audible.

10th.—Passed a good night without opiate; moderate flexion maintained by slipper. There was some tenderness at sites of pressure. Moderate flexion alone employed this day.

11th.—Aneurismal bruit still audible. Treatment as yesterday to allow local effects of pressure to pass off.

12th.—6 A.M.: Applied Signorini's and Lister's clamps, as on the fifth day.—8 A.M.: Pulsation not entirely arrested; reapplied instruments, and under my own constant supervision and management thoroughly arrested the circulation through the artery until 3 P.M., when, on removing the tourniquets, no pulsation returned in the aneurism. Moderate flexion and perfect rest were maintained strictly for the next two days. During the prolonged arrest of circulation very little distress was experienced. The tourniquets were at first changed every thirty minutes, but later in the day every fifteen minutes. When not in use they were removed, and the compressed skin dusted with fuller's earth and exposed to the air. The patient could have continued the treatment if requisite, and made a good meal at the termination thereof. At noon the pulsation in the superior and inferior articular arteries around the knee-joint was well marked, and so much so was this the case in the popliteal space over the tumour that at first it was feared pulsation had returned in the aneurism. There was no resulting œdema of leg, or marked coldness. The flannel bandage, which had been constantly applied during the treatment, was continued, and the limb covered with a blanket, under which it gave a sensation of increased temperature, and perspiration ensued.

13th.—Slept soundly. "Feels as if he could get up and run." Condition of limb most satisfactory.

14th.—Removed slipper, and discontinued moderate flexion. Leg can only be partially extended.

16th.—Patient discovered standing on left leg, and kneeling on right knee, enjoying a "wash all over."

17th.—Allowed to sit in a Derby chair with foot rest; still unable to extend leg, owing to size of tumour, which now measures—length, 4 in.; breadth, by callipers, 2 in.

20th.—Moving about on crutches; leg slung by means of slipper and bandage passed over shoulders; still unable to extend leg; tumour solid, and diminishing in size.

23rd.—Detected a brawny induration of integument about 2 × 1½ in. in size, situated immediately below the internal tuberosity of tibia, and slightly overlapping the internal border of same bone. The indurated integument is divided into two parts by a well-marked sulcus, apparently in the line of the internal saphenous vein. There is no œdema of leg; the swelling is a little tender on pressure; there is no increased heat of part, but a vague feeling of fluctuation close to internal border of tibia. Patient's general health good; appetite good; sleep sound. Ordered to remain quiet.

25th.—Signs of suppuration more decided; no apparent connexion with consolidated aneurism. Opened abscess and evacuated an ounce or so of grumous fetid pus, deeply stained with blood; there was free arterial hæmorrhage from divided integument. The abscess was opened, and subsequently treated antiseptically by Lister's plan.

29th.—Since the abscess was opened there has been a slight sero-sanguinolent discharge when dressed, flowing most freely when pressure is made over the sulcus noted on 23rd. A probe was this day passed through incision upwards along this sulcus, or sinus, a distance of 3 in. It seems evidently the internal saphenous vein obliterated by thrombosis and subsequent suppuration.

30th.—Patient allowed to sit up in a chair with a foot-rest. Discharge from abscess almost *nil*. Continue antiseptic dressings.

Feb. 6th.—The abscess has ceased to discharge for four days. The induration of the integument is disappearing; the sulcus noted still apparent. The aneurismal clot has diminished considerably, and is now the size of a duck's egg. Extension of limb is nearly perfect. Patient moves about on crutches, and is commencing to put his foot to the ground.

Remarks.—In concluding the record of this case of treatment of aneurism by pressure, I would draw attention to the great advantage in such a method of qualified medical supervision being constantly at hand, and of taking every precaution to prevent the patient being distressed either locally or generally by the treatment.

In this case the treatment was suspended for two and on another occasion for three days, in order to let all uneasiness from pressure subside. Moderate flexion was certainly employed at those periods of rest, but more with a view to maintain perfect rest than to check the circulation; it caused no inconvenience to the patient.

Screw-pressure, unassisted by springs, requires most careful and constant watching, if the object be to stop the circulation. Pressure by weights or springs evidently must be superior to the means at my disposal.

At the date of these remarks (Feb. 10th, 1875) I am very sanguine that the patient may return to duty ere long, after being resurveyed by a medical board.

Zanzibar.

NOTE ON

THE TREATMENT OF SCARLET FEVER BY THE EXTERNAL APPLICATION OF COLD WATER.

WITH TWO CASES.

By JOHN EDWIN EDDISON, M.D.,
PHYSICIAN TO THE LEEDS INFIRMARY, THE FEVER HOSPITAL, ETC.

(The Cases reported by Dr. STEELL, *Resident Medical Officer at the Fever Hospital.)*

NOTWITHSTANDING all that has been written in support of the treatment of fever by the external application of cold, there can be little doubt that the value of this method, at any rate in the case of scarlet fever, is not yet fully appreciated by the profession generally. There is no novelty in the subject now, and no space need be occupied in referring to the practice and opinions of Currie in this country, or to the more recent publications of various physicians who, especially in Germany, have practised and strongly advocated this method of treatment.

The two cases reported in connexion with this paper are published, not because of any special feature about them, but particularly because they are ordinary cases, such as occur in every-day practice, and because they serve to show that this plan of treatment is as serviceable in such cases as it is in those special cases of unusually high temperature that have of late attracted so much attention. I am inclined to think that the published cases of "hyperpyrexia" successfully treated by cold have unfortunately led to the belief that the treatment may be very good in such special cases, but that it is not particularly useful in the ordinary cases that frequently come before every medical practitioner. The late Dr. Anstie, in particular, exerted himself to urge upon the profession the desirability, or rather the duty, of more generally adopting the method; but even his able advocacy has not been so successful as it deserved.

Scarlet fever seems, more than any other acute disease, to lend itself to this treatment. The patients, as a rule, are young, and therefore easily moved about, and the beneficial results are generally more rapid than in the case of many other diseases.

All sorts of objections have been, and still are, urged against the use of cold in scarlet fever. Danger is said to arise from "driving in the rash," from internal congestion, from the rapid loss of body temperature and consequent depression, and it is also said that the risk of renal mischief is thereby increased. If it were proved that the occurrence of nephritis is more frequent after treatment by cold it would be a very valid objection to the practice of it, and the real truth can only be learned by an examination of a large number of cases. From my own experience I am inclined to disbelieve that any harm results in this way. The fear of the occurrence of nephritis from this cause originates no doubt in the generally accepted opinion that the affection of the kidneys so commonly occurring after scarlet fever is due to "draughts," or "catching cold," or to leaving bed too soon. I think this opinion is not founded upon sufficiently good grounds, and that everyone in the habit of seeing cases of scarlet fever must often have seen nephritis beginning before as well as after the patient has left his bed, and as often in cases kept in warm stuffy rooms as in those in which fresh cool air has been freely admitted to the sick chamber. "Catching cold" is made to do duty as a cause of so many conditions for which we can find no better explanation, that it is adopted at once and without hesitation in order to account for any otherwise inexplicable phenomena. There appears, at any rate, to be no good ground for assuming that cold bathing increases the chance of an attack of nephritis, and in the two cases here reported the urine did not become albuminous after repeated bathing. Objections on the ground of the trouble and increased expense in nursing are scarcely worth consideration if it is true, as I believe it is, that this mode of treatment is better than any other. The difficulty is perhaps less in treating scarlet fever than in dealing with other cases because the patients are usually young and easily lifted in in and out of the bath, but when from the weight of the patient or the weakness of the attendants it is impossible to use the bath, the patient may easily be packed in wet sheets, with or without pieces of ice placed here and there, or india-rubber bags or large bottles filled with ice may be placed round the patient. The bath gives better results than any other plan when it can be thoroughly carried out, and the most satisfactory way is to begin with the bath at 98° or 100°, and cool down gradually to about 70°. It is of course better that the temperature of the patient and of the water should be frequently taken, but the hand is generally a good enough guide as to the water, and the appearance of the patient always indicates the improvement in his condition. This is well illustrated in the case of S. F—— (aged eight), near the end of the fifth day. The little patient was then drowsy and delirious, the temperature being 104°, and three-quarters of an hour in a bath, beginning at 90° and cooled down to 68°, resulted in the cessation of delirium and drowsiness, and a reduction of the temperature (in axilla) to 95°. In the case of M. A. S—— (aged four), a similar bath for one hour reduced the temperature from 105·3° to 95·6°. There was no dangerous depression or bad symptom whatever from this low temperature. In scarlet fever, as in other allied disease, the cardiac impulse and the character of the heart sounds are safer guides as to the condition of the heart and circulation than is the pulse at the wrist, the latter being often very deceptive.

In the case of S. F——, it will be noticed that the temperature rose again and again after removal from the bath, the rise beginning sometimes immediately, at others after an hour or less. This rapid rise is usual in severe cases, and the benefit derived seems always to be in proportion to the length of time during which the high temperature is warded off. It is worth consideration whether it will not ultimately turn out to be a better plan to keep the patient in the bath for many hours, even for a day or longer if necessary, cooling the water very gradually down, and maintaining it at whatever degree is found to keep the patient's temperature nearest to a healthy point. In the treatment of diseases or injuries of the skin, no evil, but, on the contrary, great good results from much more prolonged baths; and it seems far more reasonable to prolong the period of immersion than to take the patient out and allow the temperature to rise, to be again and again reduced in the same way. I am well aware that unpractised writers like myself often seem to be regardless of the time of their professional brethren, but I trust that the above remarks will not be considered too long nor be found altogether useless. The notes of the cases are, I think, sufficiently detailed and clear to need no further explanation. The first case was one of more than usual severity; and the second, though not quite so serious, was yet by no means a mild case, as a temperature of over 105° and a pulse of extreme rapidity indicate.

I should add that all the baths were begun at a comfortably warm temperature—between 90° and 100°,—and cooled down slowly to about 70°, or sometimes a few degrees below that.

(To be concluded.)

A NEW MODE OF TREATING CERTAIN TUMOURS OF THE LYMPHATIC GLANDS.

BY S. MESSENGER BRADLEY, F.R.C.S.

AT the recent Edinburgh meeting of the British Medical Association a paper of mine was read in which I advocated the subcutaneous injection of iodine in certain cases of lymphatic tumours, and as I have since then employed this method in several fresh cases I have thought that a brief account of the mode of procedure might prove interesting. It must be premised that I do not speak of lymphatic tumours generally, but of certain kinds only; thus I do not refer to syphilitic or carcinomatous affections, or to the infectious or soft form of lymphomata, but confine my attention to three groups. First, true hypertrophies of the lymphatic glands, with or without a strumous diathesis; second, strumous hypertrophies—i.e., cases of cellular hyperplasia *plus* caseous deposit; and, third, hard non-infectious lymphomata, which present many points of resemblance to the first groups, and, indeed, are often only distinguishable in being multiple.

Now, there is perhaps nothing more common than to paint iodine over all the above-mentioned tumours unless it be the disappointment which results. This, at least, is my experience, the result apparently being the same whether the iodine is painted indiscriminately over the whole gland or whether it is applied, according to Furneaux Jordan's advice, over the contiguous lymphatics rather than over the gland itself; and yet all that seems to stand between this treatment and success is the thin skin which intervenes between the gland and the pigment.

The first case in which I injected iodine into a tumour did not appear very promising, though it proved perfectly successful. It was an encapsulated tumour, about the size of a large walnut, situated beneath the lower jaw, which I should have removed with a scalpel, had I not once had some unpleasant hæmorrhage in a precisely similar case; and as the patient in the present instance lived at some distance, I resolved to try to procure absorption before resorting to extirpation. *The tumour almost disappeared with the first injection*, and after one more it could not be at all detected. I was pleased with the result, because it appeared to me to be so desirable to adopt such a plan at one's consulting-rooms, and in the out-patient room of the hospital, instead of using the knife, which is always more or less terrible to the patient, and which is sometimes, in the most careful hands, followed by unfortunate results. Since the case I mention I have been in almost the daily habit of employing iodine in this manner, and I think I may venture to affirm that, by properly selecting cases, a successful result may be assured, while there is no doubt that an indiscriminate use of the remedy will be productive of disappointment. The best cases are those where a single cervical gland is hypertrophied in an otherwise healthy (adult) subject. Five or six injections of the simple tincture of iodine (five to ten minims at a time, according to the size of the tumour), at intervals of about four days, generally effect a cure. The earlier stages of strumous hypertrophies are also very successfully treated by this method, as are the small hard multiple lymphomata; but in the later stages of strumous disease of the cervical glands, where the tumour is broken down into a mass of caseous matter, and the neighbouring skin is blue and undermined, no good results follow from the injection of iodine; and, indeed, these cases are best treated by a careful excision of the disorganised and degenerated glands. I have also recently employed iodine injections in a large and hard fibroid bronchocele, which had been treated unsuccessfully by the internal administration of the drug. The tumour was not only inconvenient from its size, but had almost destroyed the voice, and so pressed on the trachea as to deflect it to the right side of the neck. The case is still under treatment, but the first two injections of ten minims of iodine were followed by the diminution of an inch in the girth of the neck. By parity of reasoning we may expect this method to prove serviceable in uterine myomata and allied growths, but it is to its value as a remedial agent in cases of lymphatic enlargement of the cervical glands that I especially wish to call attention, and I may briefly summarise my results on this head by a tabular statement:—

1. *Cases of cervical tumours to be treated by injection of iodine.*
   - *a.* True hypertrophies of the lymphatic glands without strumous admixture.
   - *b.* Strumous hypertrophies before breaking down.
   - *c.* Hard lymphomata.
   - *d.* Encapsulated cervical tumours, as a tentative operation.
2. *Cases of cervical tumours to be treated by incision.*
   - *a.* Strumous glands which have broken down into pus, with or without previous treatment by injection.
3. *Cases of cervical tumours to be treated by excision.*
   - *a.* Strumous glands infiltrated with caseous matter, which may be rocked to and fro upon a base of degenerated cellular tissue, with a margin of blue undermined integument.
   - *b.* Encapsulated tumours which have resisted the treatment by injection.

Manchester.

OXALURIA.

BY JAMES REOCH, M.A., M.B.

(*Concluded from page* 310.)

THESE earthy salts are of three chief kinds—carbonates, phosphates, and oxalates. The carbonates may be dismissed, because, though common in decomposing urine, they do not appear in ordinary urine when voided. The phosphates also, though always present, never seem to be in sufficient quantity to exhibit insolubility in alcohol. If the average quantity of lime be 3½ grs. in 52 oz. of urine, it will be found on trial that two or three times this amount, in the state of acid phosphate, will give only a faint turbidity when alcohol is added to its watery solution. We are therefore thrown back on the oxalates as the chief source, if not of the white precipitate which immediately appears when alcohol is added to urine, at least of the permanent turbidity which results on shaking the mixture. But this is never a good way of obtaining oxalates; for, being thrown down quickly, they are in the form of granules, and never assume the envelope shape, however long they are afterwards allowed to stand. The alcohol ought always to be added gently to the top of the urine, and the whole allowed to stand for twenty-four hours. If the urine possesses oxalates in abundance they will of course be thrown down without the alcohol, and if it has none at all the alcohol cannot make any appear; but the vast majority of urines are placed between these extremes, and therefore give few or no oxalates unless alcohol be added. It is easily calculated that an ordinary microscopical preparation covers 10,000 times the surface which is taken in at one field of view under a power of 300 diameters; but, since it is rapidly passed over, suppose it to be only 100 times the size, and the effect of alcohol in precipitating oxalates will be appreciated when it is said that, of 41 urines examined, there was an average of several oxalates in each field of view in nearly every one to which alcohol was added, whereas without it there was often scarcely an oxalate to be found in a whole preparation. To be more particular: from 10 cc. to 15 cc. of 36 specimens of urine from the same person, taken indiscriminately at three or four different periods of the day, were put into some test-tubes; half of them had 3 cc. rectified spirit added to them gently; the next day the excess of urine was poured off, and the few drops at the bottom examined microscopically. Where oxalates were seen, their average size and number were noted and reduced to the uniform standard of $\frac{1}{3000}$ in. in the side. The following table expresses the comparative results obtained:—

	No spirit.		Spirit.
No. of urines examined	36	...	36
No. of times oxalates were found in twenty-four hours	30	...	35
No. of times one average oxalate of $\frac{1}{3000}$ in. was found in each field of view	16	...	33
No. of times ten such oxalates were found in each field of view	1	...	15

This table indicates the effect of adding alcohol to urine, and it may be here observed that this explains a well-known fact which has not been hitherto fully accounted for. Every surgeon knows the evil effect of alcohol in cases of stricture, but the cause is not so clear. Congestion of the mucous membrane is an unsatisfactory because merely theoretical explanation, but the greater tendency to precipitation of oxalates explains matters perfectly. If a crystal of uric acid or triple phosphate be gently pressed under the microscope it will be reduced to powder, but an equal or even greater pressure has no effect on oxalates; they are therefore comparatively hard, and as they present six solid sharp angles, each of which is finer than the sharpest needle, they must inevitably tend to irritate the already diseased bladder and urethra. But, however this may be, the fact remains that addition of alcohol to urine in a gentle manner causes increased precipitation of oxalate of lime, and this may serve to throw some doubt on the alleged fact that carbonated drinks increase the amount of oxalates. It is natural to suppose, seeing the almost universal prevalence of oxalic acid in the vegetable kingdom, and its simple relation to CO_2, that it could easily be formed from CO_2; but this is not the case, and the facts above related show that it is to the alcohol, and not to the CO_2, we must look for an explanation of the oxalates; not that the alcohol forms the oxalates in any way, but merely that it throws them down more completely.

The alcoholic method of analysis may be applied to determine the amount of oxalates present in the urine. Thirty specimens of different urines (10 cc. to 15 cc. of each) gave an average of twelve oxalates of $\frac{1}{3000}$ in. in each field of view. All the oxalates were in about two to five drops at the bottom; there might therefore be from 20,000 to 100,000 of such crystals in 15 cc., or about 2,000,000 to 10,000,000 in 52 oz. of urine. The whole quantity probably does not nearly amount to 1 gr. per diem; but it must be confessed that the absolute measurements obtained by this method involve some data open to question, yet comparative results of great value may be obtained. Although, therefore, not able to give exactly the quantity of oxalates passed per diem, the following results give the comparative quantity at different periods. Ten specimens of "urina sanguinis" gave an average of 8½ oxalates of $\frac{1}{3000}$ in. in each field of view, whereas ten specimens of urine after breakfast on the same days gave an average of 22 similar crystals. They appear therefore to be increased by food, but in a very irregular manner, as the following table will show.

	Urina sanguinis.		Urina cibi (same day).
	17	... ...	5
	15	... ...	15
	6	... ...	13
	12	... ...	130
	5	... ...	2
	4	... ...	0
	2	... ...	26
	4	... ...	4
	18½	... ...	14½
	2¼	... ...	9
Average	8½		22

Here the variation of the oxalates in urina sanguinis is only from 2 to 18, whereas in urina cibi it is from 0 to 130. This is, no doubt, partly due to the more constant composition of the former, and its being more typical of the whole urine and less liable to sudden variations. But there can be no doubt that oxalates take some time for elimination: thus, the abnormally high specimen of urina sanguinis, marked 18½ in the above table, was from a case where some rhubarb had been taken on the previous day, about seven hours before bedtime. Possibly this is also expressed by 14½ for the urina cibi of the same day, and if so it will be difficult to judge of the influence of various articles of food on the production of oxalates, since the latter may be retained for some time within the system. From the same cause it is difficult to say what is the real source of the oxalates found in urine. Nearly all plants contain a certain amount of oxalic acid, though whether they manufacture this for themselves or obtain it ready formed from the soil, in many cases, does not appear; but whether this would account for all the oxalates of the urine is very doubtful, and the more so as there are many animal products from which oxalic acid can readily be obtained by decomposition. The chief of these is uric acid. There can be no doubt that uric acid is easily oxidised. The sum of its elementary constituents is 168; but in 20 experiments on its solution in soda it seldom gave more than 140 or 150 after ten minutes' boiling; and if this soda solution be acidified by acetic acid and filtered, so as to separate the remainder of the uric acid, a little oxalic acid can be found in the solution by $CaCl_2$, though almost none could be found in the original uric acid treated with soda in the cold. Though there can be little doubt, therefore, that a small quantity of oxalic acid is readily derived from uric acid, even by the simple oxidation of boiling, yet it does not appear that this process takes place at ordinary temperatures; at any rate, uric acid seems less readily decomposed than urea, for urate of ammonia is a common precipitate in ammoniacal urines, due to the $(NH_4)_2CO_3$ produced from the urea giving up its NH_3 to the precipitated and dissolved uric acid. Moreover, the experiments described at the beginning of this paper seem to show that this process does not take place as a fact at least within a reasonable time to account for deposited oxalates; but these experiments show nothing as to what may go on within the body itself, and it is therefore possible that uric acid oxidised within the body may give rise to oxaluria; but as there are so many other products from which it may be obtained a large number of facts will be required to prove this point. The most common form in which oxalates appear in the urine is the transparent flattened octahedron, where a line drawn between the two apices through the crystal is not more than half the length of one of the sides; they must therefore rest upon one of their faces, and thus by no possibility can the two apices be seen in the same straight line; they therefore appear envelope-shaped. But if the distance between the two apices is much greater, as it sometimes is, they can no longer rest on one of their faces, but lie upon one of their sides, and appear regular octahedrons. The greatest abnormalities of form are seen in the scum of urine, which often contains abundance of oxalates after the first few days. The majority of crystals deviate from the usual shape, some even appearing as dodecahedral; but they are usually smaller than at the bottom, and are deficient on one side or edge, doubtless from the crystallisation taking place at the surface, where it is exposed to disturbance from the air. It is not easy to explain why oxalates should appear at the surface of urine; but uric acid and triple phosphate do the same. It is probably, therefore, due to the capillary attraction of the innumerable vibrios which cover the surface, and which must cause some of the water evaporating from the surface to leave its salts behind entangled amongst them; but it must be confessed that the vibrios sometimes appear too few to support the weight of crystals superimposed.

College of Medicine, Newcastle-upon-Tyne.

The Board of Trade has again revised their scales of medicines and medical stores for emigrant ships. Two scales are now officially published, one to be used on North Atlantic steamships, when the voyage does not exceed thirty-seven days, and the second on all other passenger ships sailing under the Emigration Acts.

A SUCCESSFUL CASE OF OVARIOTOMY.*

By W. EASBY, M.D.,

SURGEON TO THE HOSPITAL FOR SICK CHILDREN, DARLINGTON.

Mrs. B——, a widow, aged fifty-six, first consulted me on Nov. 14th, 1873. She had enjoyed good health until two months previously, when she was seized with a pain in the right side. This lasted for two or three days, when it passed off. Since then she had not felt well. She complained of dyspnœa, and thought she was getting stouter. Appetite fair; bowels regular; urine scanty and full of lithates, did not contain albumen; pulse quick; second sound of heart rather prolonged. The skin was rather jaundiced. The abdomen was distended with fluid, and was dull upon percussion all over. The distension increased until January 4th, 1874, when I performed paracentesis abdominis, when eleven quarts of claret-coloured fluid were removed. After the abdomen was thoroughly emptied I could feel on the left side in the iliac fossa a tumour the size of an egg. It was freely movable, nodulated, and not tender on pressure. I was at once able to diagnose a multilocular ovarian tumour. During 1874 she was tapped twelve times. After each operation pressure was applied to the abdomen, and she took internally the muriated tincture of iron, and occasionally a few doses of Parrish's food. After each operation her recovery was rapid, and she never had any pain. Her general health kept fair, but not good enough, in my opinion, for operative interference. Towards the close of the year the cyst required emptying every fourteen days, and the fluid had changed from a claret colour to that of thin gruel. The largest quantity I removed was fourteen quarts. The solid part of the tumour had also increased in size.

As matters were getting almost daily worse and the only prospect for my patient was a miserable death in a short time, I proposed ovariotomy, to which she consented without any hesitation, and having secured the assistance of Drs. Fothergill and Middlemiss of this town, I operated on Jan. 31, 1875. Temperature of the room about 70°. Dr. Fothergill administered chloroform, which she did not take very well; two or three times her pulse got feeble and almost stopped, her jaw also dropped; when the flannel upon which the chloroform was administered was removed she rallied, but great care required to be exercised, and she was only kept very slightly under its influence. An incision four inches in length was made three inches below the umbilicus extending downwards to the pubes, and the sac carefully dissected down to. The adhesions were few, principally near the site of the tappings; these were easily broken down. One adhesion in the right iliac region was very firm, but after some trouble it gave way. The hæmorrhage from the separation of these adhesions was very trifling, no ligatures being required. Unfortunately, during the separation of some of them, the cyst was ruptured and the fluid escaped; very little of it, however, passed into the abdominal cavity. The pedicle was six inches in length, one and a half in breadth. It was secured by a double antiseptic catgut ligature passed through the centre and tied on each side; another similar ligature was firmly tied above the first, this was passed round twice and the two effectually prevented any hæmorrhage; the pedicle was then divided and dropped back into the abdomen. The tumour was multilocular and grew from the left ovary; emptied of fluid it weighed 2 lb. 9 oz.; the solid part of it was the size of a large kidney, and consisted of several large and small cysts varying from that of an egg to some very little larger than a pea. The edges of the wound were brought together by three deep sutures of thick silk; these were passed through the peritoneum. Between these were three superficial wire sutures. A large compress of marine lint was placed next the wound and over this a flannel bandage lightly pinned. A half-grain morphia suppository was pushed into the rectum and she was then removed to bed and covered with warm blankets; hot bottles were applied to the feet and sides of the chest.

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* Read before the South Durham and Cleveland Medical Society.

She rallied well from the chloroform, which I may here say was given from a drop bottle, and the quantity used was seven drachms, the operation lasting about seventy minutes. During the remainder of the day she made no complaint, except of smarting pain in the abdomen. She never had any vomiting or retching, and when I left her at 9 P.M. she said she was quite comfortable. Pulse 110; temperature 101·2° F.; her temperature after the completion of the operation being normal.

Feb. 1st.—Has had about four hours' sleep during the night. Pulse 106; temperature 99·4°. Beef-tea enema. Catheter used; has no pain, no sickness; complains of a little soreness of the body. Enema repeated at bedtime.

2nd.—Had another good night. Wound dressed, which looks well; no pains or sickness; soreness of body much relieved. Pulse 100; temperature 98·4°. Had enema twice.

3rd.—Allowed her some milk by the mouth. Warm water enema was given to relieve the bowels. In the evening her temperature was 99·8°; pulse 116. Is taking beef-tea and milk freely. No sickness or pain.

4th.—Has had a fair night. Temperature 100·8°; pulse 120. Is suffering from vesical catarrh; urine full of mucus, and is passed with difficulty. Is taking beef-tea and milk freely. For the vesical catarrh I prescribed infusion of buchu, and hot fomentations were applied to the vulva and region of the bladder.

5th.—Slept well all night. Temperature 100°; pulse 128. Asked for fried sole to dinner. Removed sutures. Wound is healed, except about the eighth of an inch at the upper end.

6th.—Slept well all night. Is taking jelly, beef-tea, and milk, and a little champagne. Pulse 100; temperature 100 8°.

8th.—Still better; has no pains; can turn easily in bed.

12th.—Not so well; skin hot. Pulse 130; temperature 102°. Has no abdominal pain.

13th.—About the same; had a fair night; no pain.

14th.—About 5 o'clock A.M. the patient and nurse were alarmed by a gush of pus from the wound. There must have been about forty ounces; it was quite free from smell. In the evening her pulse was 106; temperature 98·4°.

15th.—Has passed a good night. Pulse 90; temperature 98·4°.

17th.—Got up for the first time, and was able to sit for an hour; wound is still discharging.

Since the last date she has made a good recovery, and is now able to follow her household duties; has improved very much in appearance, and had it not been for the cold weather would have been out of the house. The first two days after the operation all nourishment was given by the rectum, and the bladder relieved by the catheter. When all danger of vomiting had passed away I allowed her food by the mouth; this was the fourth day after the operation. No sponge was introduced into the abdominal cavity; a little fluid and blood were squeezed out by external pressure. We had no trouble with the intestines, only two inches of the small bowel being visible after the cyst was withdrawn. The cicatrix has now contracted to about three inches in length, and is barely visible. I ought to give my patient the credit of being one of the calmest women I ever met with, and her following out carefully my directions, with the excellent nursing of her daughters, have greatly contributed to her recovery, for which I need hardly say she is very thankful.

The Cholera in Syria.—The latest telegraphic advices which have reached the Sanitary Board in Constantinople indicate rather a diminution than otherwise, and especially in certain localities, of the cholera outbreak in Syria. At Damascus, from the 1st to the 8th ult., 51 new cases had occurred, and from amongst these and previous attacks, there had been 101 deaths. At Antioch, on the 1st and 2nd of August, there were 6 fresh cases and 4 deaths; no further attacks or deaths have taken place since the 2nd. At Aleppo, from the 2nd to the 7th ult., there were 152 cases and 104 deaths, and at Beyrout, within the same period, 69 cases and 45 deaths. At Lattakia, on the 5th ult., 3 attacks and 1 death occurred. Four cases of cholera are reported from Mount Lebanon, and Rustem Pasha, the governor of the mountain, has ordered all available sanitary measures to be resorted to.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES ILLUSTRATIVE OF SOME OF THE DISEASES OF THE RECTUM.

(Under the care of Mr. T. Bryant.)

We commence this week a series of cases illustrating some of the diseases of the rectum. The series will comprise cases of hæmorrhoids, prolapse, stricture, and cancer.

Case 1. *Internal hæmorrhoids; sloughing; cure.*—(The following notes were taken by Mr. T. F. Pedlay.) Joseph M——, a brewer's drayman, of good health, aged thirty, was admitted into Job ward on the 25th June, 1874, with a large portion of bowel protruding from his anus. It was very painful and bled a good deal when his bowels were opened, the motions being passed with great difficulty. He had had pain and slight bleeding on passing his motions for nine months. This increased, and, four months after, he became a patient in St. Thomas's Hospital, where he remained three weeks, going out much better; but the complaint returned, and he lost much blood every time he defecated. He seemed a strong, healthy man; was married, and had four children.

As he had been much confined in his bowels since admission and had great pain, he was ordered, on the 29th, confection of senna and also castor oil, after which the bowels were moved and the pain became less.

July 3rd.—The external folds disappeared quickly, and the man felt much better, the bowels being well opened.

6th.—The folds of mucous membrane had disappeared, having been healed by an entirely natural process, and he left the hospital cured.

Case 2. *Prolapsus of rectum; removal by galvanic cautery; improvement.*—(The following notes were taken by Mr. C. G. Lee.) Mary H——, a servant, single, aged thirty-eight, of good family history, was admitted into Lydia ward on the 5th July, 1873. Three years before admission she had a difficulty in passing her motions; they were in the form of hard lumps and caused her a great deal of pain, both in the act of passing and afterwards. She continued in that condition for six months; she was otherwise well. She was then taken ill, lost a great deal of blood from the bowel and was unable to pass anything; she had castor-oil enemata, but her bowels came down after every motion and she continued to lose a great deal of blood. She always was obliged to have injections to relieve her bowels. Her abdomen was very prominent.

July 14th.—The bowels were found on examination to be empty, although they had not been moved since her admission. She was ordered two ounces of the compound senna draught. The following morning they were slightly moved, but she passed blood after the motion. She seemed better.

16th.—She took one ounce of castor oil, and her bowels were moved without blood.

19th.—The patient looked better; her bowels were opened, but the motions were small and hard. She used an injection of soap and water and felt much relieved; her bowels were very sore, but she passed no blood.

22nd.—She was not so well; her bowels had not been opened after the injection as usual. She did not sleep well. Chloroform was administered; the extruding parts of the bowel were grasped with a clamp in two sections, right and left, which were cut off and the base well burnt with galvanic cautery.

23rd.—She looked very comfortable, but said the bowel felt very sore. She passed some small motions, with clots of blood, and did not sleep at all well. She said the bowel came down with the least movement; it was put up twice. Pulse 111; temperature 100·5°.

24th.—Patient woke up at 4 A.M. with cold sweatings and shivers. She felt very weak, and had hardly any appetite;

her bowels had not been opened, and came down but very little. Pulse 105; temperature 99·6°.

26th.—She had again cold, clammy sweats, followed by burning heat, and some pain over her stomach. Hot flannels were applied, and she passed a great deal of wind. She had not had her bowels opened since the 23rd, and complained of a lump in the right groin, which was very tender; it was about the size of a nut. No impulse could be felt when she coughed.

August 2nd.—She has remained in about the same state during the last few days. She felt great pain across the lower part of her abdomen, and had hot flannels applied. She complained also of sickness.

4th.—Her bowels had not been opened yet. She had a castor-oil injection, when four or five hard lumps came away. The pain had increased since her bowels were opened, and she was very sick. She had not much appetite, but her water passed easier.

5th.—She felt stronger, and her appetite had improved, but she could keep nothing down—it returned about an hour after her meals. She slept, however, without an opiate.

7th.—Sickness continued. She felt very weak, and complained of pain across the pit of her stomach. Her bowels were moved after an injection; the motions were very hard and lumpy, and slightly tinged with blood. The alternations of heat and cold returned, and she ate very little.

9th.—She was taking compound chinchona mixture, and felt a little better, but still very sick. Her bowels were well relieved after an injection, the motions being about the same, but without blood.

11th.—The patient was improving, and appeared more cheerful, but very sick. She sat up for the first time. No blood came away with the motion passed after injection.

12th.—She was better; the bowels had been again opened after injection; the motions were normal; had no pain, nor was any blood passed.

19th.—The patient was still improving, her bowels having been moved after injections, and without blood. Her appetite also was better, although she was sick in the night. She continued to do well, but the bowels were never opened without an injection. She seemed very comfortable, still the bowel came down a little.

26th.—She left the hospital.

CASE 3. *Very extensive prolapsus recti; application of galvanic cautery in stripes; cure.*—(The following notes were taken by Mr. Cusack.) Anna W——, a married woman, aged forty, of fair family history, was admitted into Lydia ward on Aug. 19th, 1874, with a large mass of bowel protruding from the anus, about the size of a cocoa-nut. She felt much pain, and seemed weak. She had suffered for fifteen years from the bowel coming down, but it had not given her so much pain; it bled very much at times, and she was also troubled with tapeworm and great relaxation of the bowels.

Aug. 25th.—By means of the electric cautery the surface of the protruding mass of bowel was cauterised in a linear direction, the stripes being made obliquely, and then returned, some small portions of mucous membrane above the sphincter being removed as the sphincters were found to be very feeble and relaxed. There was a little hæmorrhage the day after the operation, but it was stopped with ice. Temperature 99°.

Sept. 2nd.—The prolapsus had not come down again, but the bowels had not acted for some days. She took some castor oil, which relieved her, there being no blood with the motions. She complained of feeling weak, and also of pain when her bowels were opened. She had also a feeling of giddiness and lightness in her head. She was ordered on the 14th fifteen-drop doses of tincture of the perchloride of iron, and her pulse, which had been rather small (72), became much firmer (90).

Her bowels still being inactive, thirty grains of sulphate of magnesia was added to her medicine, when she became very relaxed, and she had no power at all to retain her motions. This difficulty remained some days. On the 22nd the prolapsus came down again about an inch, and continued to do so when her bowels were opened; but she has been able to go out in the air and gained strength, so that she left the hospital on Oct. 3rd.

Dec. 7th.—This patient came to Guy's to report progress. She said the bowel never came down now except when at stool, and then only when straining, and a very little. She never lost blood.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

CASES OF GLAUCOMA.

(Under the care of Mr. POWER.)

THE following cases, for the notes of which we are indebted to Mr. G. Ernest Alford, are the commencement of the record of a series of cases of glaucoma that have recently been under treatment at the above-named hospital. Although the results may not appear brilliant, they were under the circumstances good, and their publication forcibly teaches us one lesson—namely, the imperative importance of operating as early as possible in such cases. But early operation implies early diagnosis, and on this point it must be confessed much ignorance still prevails—not, of course, on the part of ophthalmic surgeons; yet very little experience will suffice to show that few diseases are more readily recognisable than glaucoma.

CASE 1. *Acute glaucoma; attempted iridectomy; slight temporary relief.*—R. E——, aged fifty-six, a labourer, from Gravesend, was admitted on December 21st, 1874. He stated that his right eye had been getting dim for the last six weeks, and that he had had violent paroxysms of pain in it at intervals during that time. Both the dimness and the pain had much increased during the last week.

The iris was found to be widely dilated, so that it could scarcely be seen at all. Tension very high; globe of stony hardness, the pupil having the greenish opaque look very strongly marked. The man could not distinguish light from dark, much to his surprise, for he did not know that he was blind until told to cover the left eye. Fundus invisible, owing to the haziness of the vitreous. Left eye quite normal.

Having previously warned the patient that an operation would probably do little more than relieve the pain, which was very intense, Mr. Power endeavoured to perform an iridectomy on the right eye, under chloroform, but owing to the extremely dilated condition of the iris he was unable to seize it, and so was obliged to be content with lessening the tension by the escape of the aqueous through the incision. He was sent to bed, and both eyes covered for twenty-four hours. He had no more pain that evening, and slept well for the first time for many nights. On the second day he was allowed to get up for a short time, and one eye was uncovered. He had had no pain since the operation. The tension was decidedly less than formerly. He went out on the 24th of December quite free from pain, and just able to distinguish light from dark.

He again attended as an out-patient on January 18th, 1875. He could then just distinguish light from dark; the tension was slightly above that of the other eye; the pupil widely dilated as before, and he had had no more pain from it. The media were hazy, preventing a good examination of the fundus.

On Feb. 1st he was in the same condition.

When last seen, at the beginning of May, the tension was still greater than normal, and he was unable to see light. He said he occasionally had some pain in the eye, but very little.

CASE 2. *Simple glaucoma; iridectomy; partial recovery.*—Edward T——, aged fifty-six, a labourer from Westminster, was admitted on the 2nd of January, 1875. He complained of pain in his right eye and temple, and periodic mistiness of vision. He said the eye had been getting dim for two years, but that it had got rapidly worse during the last few weeks. The tension was slightly increased; no cupping was visible; his vision was $\frac{20}{70}$. An iridectomy had been performed on the left eye for glaucoma two years previously, and with it his vision was $\frac{20}{70}$. A solution of atropine (four grains to an ounce) was instilled daily, and he was ordered a mixture containing quinine, aconite, and colchicum. On January 11th he had so much improved that he was sent out for a week or two.

He again appeared on Feb. 13th, and was readmitted. He had had more pain in the eye. The fundus was just visible through a hazy vitreous, there was slight cupping of the optic disc, and the tension was a little above the normal. His vision was $\frac{20}{200}$ with the right eye and $\frac{20}{100}$ with the left. Unfortunately he came in too late for operation that day. He improved for a few days, and then had another relapse, so that Mr. Power did an iridectomy upwards, without chloroform, on Feb. 19th. Atropine was instilled, and a pad and bandage applied. It was dressed daily, and some atropine dropped in. He had no more pain, and on March 3rd his vision was $\frac{15}{70}$ with the right eye and $\frac{20}{50}$ with the left. The vitreous was clear, and there was no sign of cupping. On March 5th it was still improving: V = $\frac{20}{50}$ with a convex 36 glass, and $\frac{20}{70}$ without any glass, and he could read No. 4 Snellen with + 16. He has not been to the hospital since.

Case 3. *Simple glaucoma; iridectomy.*—Mary N——, aged sixty-five, married, with eight children, was admitted Jan. 15th, 1875. She stated that the sight of the left eye had been getting dim for nine months, occasional obscurations, lasting for a few minutes, coming on generally whilst at needlework. Her sight has been weak for the last twenty years, caused, she thinks, by suckling too long, and she has worn glasses during that time. Caught cold on Christmas day, and since then she had had severe pain in the eye and down the side of the face, accompanied by headache, and always worse at night, preventing her sleeping well. Very subject to rheumatic gout for years, all her fingers and toes being thickened and distorted at the joints. Her bowels have been very irregular for three years, generally constipated for days together.

On admission there was no perception of light in the left eye; slight sclerotic congestion; iris greenish, immovable; pupil dilated; tension much increased; T + 2; vitreous too hazy to allow of examination of fundus; pain in eye acute, constant, and lancinating.

Under chloroform Mr. Power performed an iridectomy upwards in the usual way. Atropine was instilled, and a pad and bandage applied. In the evening the pain was less than it had been for three weeks. Atropine was instilled daily, and she had no more pain. The tension was normal; the incision healed by cystoid cicatrix with considerable protrusion, which was somewhat lessened by a firm compress. She went out on Jan. 25th.

On Feb. 8th the eye was in the same condition, but more tense than when she went out. She had had no more pain. There was still no perception of light, and the humours were too hazy to enable one to see the fundus. It was in the same condition on March 5th.

LEICESTER INFIRMARY.

DISLOCATION OF THE SIXTH CERVICAL VERTEBRA FORWARDS, WITH FRACTURE OF RIGHT TRANSVERSE PROCESS AND TIP OF LEFT TRANSVERSE PROCESS; FRACTURE ALSO OF BOTH LAMINÆ; DEATH ON THE SEVENTH DAY.

(Under the care of Mr. Benfield.)

One of the chief features of interest in the following case was the great variation in temperature, the lowest degree observed being 94·2°, the highest 106·4°, giving a range of 12·2°.

David W——, aged forty-six, a carpenter, was admitted on May 29th (at noon), 1875. The patient, who was a heavy man about 5 ft. 10 in. high, fell from Blaby Bridge, a distance of 25 feet, while removing iron bolts from sidings. On admission there was impaired sensation and mobility in both arms, complete loss of sensation from lower end of sternum (extending upwards three inches behind) to inferior extremities. He could not move the legs in the slightest degree, and tickling the feet did not excite any reflex action. The breathing was chiefly abdominal. The skin felt cold to the touch, and the patient complained of cold. Well-marked priapism. At 2.15 P.M (two hours and a quarter after admission) the temperature was taken, and found to be 96·5°. At 7.15 it was still below normal, but at 9.15 (twelve hours after injury) it had reached 99·2°. The temperature during the day had been as follows:—At 2.15 P.M., 96·5°; at 3.15, 94·6°; at 4.15, 95·6°; at 5.15, 96·4°; at 6.15, 97·2°; at 7.15, 98°; at 9.15, 99·2°; at 10.15, 100·1°. At 10.40 P.M. the pulse was 68, full; respiration 20. Patient complained of the arms being very painful—pins and needles sensation. Right wrist was swollen from severe contusion. The catheter was passed; not more than four ounces of urine in bladder.

May 30th.—The temperature at 12.15 A.M. was 100·4°; at 2.15, 101·2°; at 4.15, 102·2°; at 8.15, 102·6; at 9.30, 103·2°. At 9.30 A.M. the pulse was 96, full; respiration 32. Face flushed and hot to feel; conjunctiva congested; skin of neck and ears also congested; carotids throbbing; tongue dry and fissured longitudinally. Patient was lying with arms semiflexed; if put straight, they soon assumed the flexed position. He could flex, but not extend, the forearm, but was not able to raise the arm from bed. No increased loss of sensation; had had no sleep during night.—10 A.M.: Mr. Benfield visited patient, and ordered one grain of calomel every four hours, with ice-bag to spine. The temperature now began to fall suddenly. Thus, at 10.50 A.M., it was 102·6°; at 1.15 P.M., 98·6°; at 3.15, 95·6°; at 4.15, 94·2°. The two armpits were now both taken, and with the following result: At 5.15 P.M.: right, 97·4°; left, 100·2°. At 6.30: right, 98·6°; left, 100°. At 7.30: right and left, 100°. At 8.30: right and left, 100°. At 9.30: right, 97·8°; left, 100·4°. At 10.30: right, 99·4°; left, 100°. At 11·30: right, 100·2°; left, 100·4°. At 4.15 P.M.: Pulse 54; respiration 20. Loss of sensation had increased, and extended from third costal interspace. At 8.45: Pulse 64; respiration 20. No extension of loss of sensation.

31st.—The temperature at the armpits was as follows:—At 12.30 A.M.: right and left, 100°. At 1.30: right, 100·6°; left, 101°. At 2.30: right, 100·2°; left, 101·4°. At 3.30: right and left, 101·4°. At 4.30: right, 100·8°; left, 101·2°. At 5.30: right and left, 100·8°. At 6.30: right and left, 100·2°. At 7.30: right and left, 100°. At 9: right and left, 100°. At 10.15: right, 100·4°; left, 99·8°. Pulse 68; respiration 20; skin warm and dry. The temperature fluctuated during the day between 100° and 101°; but at 9 P.M. it was in the right axilla 101·6°, in the left 105; at 10.30 it was in the right 101·2°, in the left 100°. Thirty ounces of urine drawn off.

On June 1st the temperature was 98·6°; pulse 64, rather full; respiration about 20, but the patient was troubled with such incessant cough that it was impossible to count them; the respiration, too, was almost entirely diaphragmatic. No increase of loss of sensation. At 3 P.M. the temperature was, right and left, 99·8°; at 9 P.M., right 99·6°, left 101·4°.

2nd.—Temperature 99·6°; pulse 80; respiration 24. No material change in symptoms. A large quantity of ammoniacal urine drawn off by catheter. Evening temperature: right, 98·4°; left, 97·2°.

3rd.—Has passed a restless and delirious night; not more than half-an-hour of sleep. Pulse 92, full; respiration 28; temperature 102°. Has had several slight convulsive twitchings of the arms and shoulders; complains much of pain in the shoulders and legs.—8.50 P.M.: Temperature of right armpit, 102·8°; left, 104°.

4th.—Slept about an hour last night after a morphia hypodermic, $\frac{1}{4}$ gr.; then was terribly restless and delirious.—9.30: Evidently sinking fast. Temperature 106·4°.—11 A.M.: Death, just six days and two hours after receipt of injury.

Autopsy.—Part of ligamentum nuchæ and interspinous ligament between sixth and seventh cervical vertebræ ruptured; transverse processes of sixth bared of ligament. On separating sixth from seventh, which was readily done, the ligamentum subflavum was found to be ruptured, and cord exposed for fully half an inch. The transverse process on the right side was completely fractured, as were also both laminæ. The tip of the transverse process on the left side was fractured. The cord was exceedingly soft and pulpy; unfortunately it was so destroyed in removing sixth vertebra that a satisfactory examination could not be made.

NEWCASTLE-ON-TYNE INFIRMARY.

(Cases under the care of Dr. Byrom Bramwell.)

Case 1. *Left Hemiplegia; Double Optic Neuritis and Syphilitic Choroiditis; motor power regained before sensibility; convulsion; death; syphilitic tumour springing from dura mater; extensive softening.*—R. S——, a man aged forty-one, was admitted on Nov. 12th, 1874, suffering from left hemiplegia. Patient had led a dissipated life for the past ten years; had been an opium-eater; had had syphilis. For the past year his sight had been failing. Three months ago he awoke one morning and found he had completely lost the use of his left arm and leg. Speech was slightly affected; the mouth was drawn to one side. Motor power slowly returned.

On admission, there was partial loss of motor power in the left arm, leg, and left side of the face. He could walk with a stick, and could raise the hand to his head. The tongue was protruded in the middle line. Tactile sensibility in the arm and leg was destroyed. He made no complaint when pricked with a needle. Mental condition was much impaired; memory seemed almost gone. His statements could not be relied on. He said he had no pain in the head, and had never had any. There was atrophy of both optic discs, and well-marked syphilitic choroiditis. Patient was stout and very jovial. His appetite was voracious. The heart, kidneys, and other organs were, so far as could be ascertained, natural. There was a well-marked node on the left tibia. He slept soundly, and passed his urine in bed during the night.

Under large doses of iodide of potassium he improved considerably; motor power was very greatly restored; sensibility partly returned; he could tell when the upper extremity was touched or pricked, but could not localise the impression.

Dec. 5th, 6th, and 7th.—Complained of severe pain in the head.

8th.—Had a severe convulsion at 10 A.M.; foamed at the mouth. The convulsion was followed by profound coma, which continued until he died, at 8 P.M.

At the autopsy, which was made eighteen hours after death, the dura mater was found to be firmly adherent along the vertex; it was much thickened, especially over the posterior part of the right hemisphere. A nodulated tumour, the size of a large walnut, was firmly attached to the dura mater at this point. The tumour pressed upon the right upper parietal convolution. The cerebral substance was softened, almost diffluent. The softening extended through the whole of the right upper and middle parietal convolutions, and invaded the upper occipital convolution. The membranes of the brain generally were thickened and opaque. There were a few cicatrices on the upper surface of the liver. The other organs were healthy. On microscopic examination the tumour was found to consist of small round cells and a few delicate fibres.

Remarks.—The chief point of interest in this case was the fact that motor power was regained before sensibility. This perhaps may be explained by the position of the tumour, for Ferrier has experimentally shown that the occipital lobes in the monkey and the middle of the superior external convolution in the rabbit are in all probability sensory, and not motor centres. It must also be remarked that in this case there was loss of memory and marked impairment of the mental powers. The absence of pain until a late period, and the absence of vomiting, are worthy of note. (The patient may have forgotten that he had pain in the early stages.)

Case 2. *Male Hysteria.*—R. W——, aged twenty-three, was admitted on 23rd October, 1874, saying that he was suffering from consumption. Had been for three years subject to fits; for three months had a cough. A few weeks ago he consulted a medical man, who told him he was labouring under consumption. He was a fish dealer by trade, and has been accustomed to carry heavy loads on his head.

On admission he was a tall, fair man; the hair of his head was very long, reaching almost to his shoulders. Had no hair on the face or chin. The state of general nutrition was good; the limbs were sound and well covered by fat, but not muscular. The genital organs were well developed. He spoke in a faint whisper. Was troubled with a frequent short dry "nervous" cough. The pupils were equal and widely dilated. No organic visceral disease could be detected. The bowels were costive. Pulse 72; temperature 98·5°.

Oct. 25th.—Had a severe fit at 6 P.M. last night; he threw himself about in the most violent manner and had to be held by five men. He foamed at the mouth when in the fit. The urine is copious and light-coloured. Ordered bromide of potassium and a purgative.

30th.—Complains of severe pain in the forehead, worse over the frontal sinuses than elsewhere; lies in a semi-stupid state; never speaks. Has had several severe fits; in some of the fits he rolls about the floor, but never hurts himself; never bites his tongue, but sometimes foams at the mouth. Pupils still widely dilated; radial pulse 100; temperature, axilla, 98·5°. Ordered galvanism to the larynx, valerianate of zinc, and a cold shower-bath daily.

Nov. 14th.—Very much better. Has not had a fit for several days. Says his voice is now natural; it is still very weak and woman-like.

18th.—Discharged well.

Remarks.—Dr. Bramwell had known this patient by sight for some years, and had frequently remarked his effeminate appearance. The case is a good example of hysteria in the male.

Reviews and Notices of Books.

On the Relation between Diabetes and Food, and its Application to the Treatment of the Disease. By Arthur Scott Donkin, M.D. London: Smith, Elder, and Co. 1875.

It is now some seven years since Dr. Donkin first drew attention in these columns to a new method of treatment in diabetes. It was a treatment which at the time excited some surprise and not a little scepticism, partly on account of its simplicity, and partly because of the novel theoretical basis upon which it was founded. In spite of this, however, it has been put to the test by many practitioners eager to adopt any remedial agent for a disease so intractable and so fatal. The result has not been wholly encouraging for the value of the skim-milk treatment, at least if we may judge from published cases. Some cases—like those recorded in this book—of success have been put upon record by other physicians; but, on the other hand, we hear of numerous failures, and some of our chief authorities have spoken in no measured terms against the method. We cannot, then, wonder that its promoter, with a zeal worthy of all praise, and confident in the truth of his researches and the value of his method, should again bring it under the notice of the profession; although he has but little to add to what is to be found in his first work, published in 1871.*

The present volume opens with an account of current opinions held concerning the pathology of diabetes mellitus, and, although differing from some of the conclusions enunciated by Bernard, he agrees in the main with the doctrine of glycogenesis, one of the crowning works of that illustrious physiologist. Dr. Donkin, however, is in error in stating that Bernard believes the destination of liver sugar to be in the lungs, for it is well known that he has abandoned this view which he first propounded, in favour of the more feasible one, that it is destined to be stored up as fat in the tissues, or expended in the production of muscular force. Dr. Donkin further shows that diabetes cannot be due to mere hyperglycogenesis (except when it occurs as transient glycosuria, which may well be termed "hepatic"), but to malassimilation of the glycogen-forming materials of food, by which sugar is at once substituted for glycogen—a view similar to that adopted by Dr. Dickinson in his recent work. But he is wholly at variance with Dr. Dickinson with regard to diabetes being a nervous disorder, and repeats in these pages his objections to the deductions drawn by that observer from the vascular changes he describes as occurring in the nervous centres of diabetics. We may remark, in passing, that these objections seem to be well founded, not only because the changes in question are equally well considered to be secondary to the disease, but because there is every probability that the traumatic disorder is not identical with the idiopathic; however great may be our desire to seek a structural change as at the root of what has hitherto been considered only a functional disorder. We must, however, dissent from Dr. Donkin in the statement that "the liver in diabetes is generally free from morbid changes"; we believe the converse to be true, and that, above all, it *does* show evidence of prolonged hyperæmia. Dr. Donkin then holds that there is a functional derangement of the liver, by which its cells secrete diabetic sugar directly, and he compares this sugar to a new formation or morbid growth, which, by reason of its crystalloidal nature, passes rapidly into the fluids of the body, and its being so carried far from its seat of formation renders it incapable of detection at this place.

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* Skim-milk Treatment of Diabetes and Bright's Disease

The main object of this book is, however, not to deal with the pathogeny of diabetes so much as with its physiological phenomena; to show, in fact, that there is solid and good reason for the adoption of the skim-milk treatment. Abundant evidence is brought to show that this method, when properly carried out, is in a large proportion of cases capable of affording great relief to symptoms and often of effecting a cure. It has, however, been reasonably objected that skim-milk contains lactose, which, as a sugar, is contra-indicated, and is destitute of fat, which is generally held to be beneficial. This is, indeed, the main question at issue between the author of this book and those who differ from him, and he meets their assertions with a direct negative. What Bouchardat rejected as prejudicial—viz., milk,—on account of its containing sugar, Dr. Donkin accepts for the same reason; while he excludes cream, which was the constituent of milk included by Bouchardat in his dietary. With regard to the albuminous principle of milk, casein, this is of course retained by both parties; but Donkin declares that in the form of cheese it is prejudicial. Briefly he bases his reasons for this conclusion on one or two simple statements. The first is that lactose—an animal sugar—differs from the vegetable sugars and starches in not being assimilated as such, or metamorphosed into hepatic sugar, but as lactic acid. This being the case, it is curious that the lactic acid treatment introduced by Cantani has failed in good result, even in Dr. Donkin's hands. The reasons he gives for the exclusion of cream—hitherto included in all diabetic dietaries—apply to all fats of whatever description. They are based on the researches of Van Deen, Poggiale, and Salomon, which point to the fact that glycogenesis occurs even on pure fatty diet. But the author appears to be unmindful of the previously opposite results obtained by Pavy, McDonnell, and others, which have gone to confirm the prevalent idea that fats can be given to diabetics with impunity, and even with benefit.

The various chapters of the work are occupied with the demonstration of these views. In the first place it is shown how diabetes results from the malassimilation of vegetable and starchy foods, next of oleaginous, and, lastly, of albuminous foods. The last chapter is devoted to an exposition of the treatment. The author rightly insists upon its being carried out strictly, as, indeed, merely as a therapeutical experiment, it should always be; but we cannot follow him in his insinuation that its failure in most cases has been due to negligence or want of strict supervision of the patient. The quantity of skim-milk to be administered must not exceed twelve pints (less to commence with), and must be regulated by the age, sex, size, and state of the patient. If more casein is required, this may be supplied in the form of curds, and he combats the taunt that it is a "starvation method" by showing that the quantity of albumen thus administered is really all-sufficient (i.e., if it be all assimilated), and that patients gain in weight under its administration. As a general rule, he has found the sugar to disappear from the urine within five or six weeks (a fortnight is the usual time he states). If the disease be too advanced the treatment will not effect a cure, but will relieve the patient's condition to a vast extent. In such cases, and in cases where the skim-milk has been attended with success, he resorts to restricted diet, based much on the long recognised principles. A few illustrative cases are given, which have been recently recorded by other physicians, as instances of the value of the treatment; and we can only say that if they be not cases of hepatic glycosuria (to the existence of which Dr. Donkin is fully alive, as is shown in the opening sentences of the book), and to be considered as genuine examples of diabetes mellitus, they are valuable evidence in support of his theory.

We do not pretend to decide upon the efficacy of the skim-milk treatment. Certainly there is plenty of evidence adduced in its favour in this little volume, which renders it incumbent upon those who have not tried the remedy to apply it as the writer directs. But, at the same time, we must warn them not to carry the treatment too far, for even the author confesses that it is not a panacea for all forms of the disease, and the result may be disastrous both to physician and patient. Nor must we forget that cases of diabetes have been cured before now on restricted diet. The author seems to us to be under the impression that the treatment he advocates has not had a fair trial, but we think he is hardly just in his criticism of those who prefer the older methods; while with Dr. Dickinson, who dismissed the subject in a few curt sentences, he is especially angry, and administers a rebuke to that physician in the form of a solemn protest against "irrational investigators."

In fine, we commend this book to all who are interested in the subject; they will find it readable, and they may be convinced, for the author writes with the earnestness of conviction himself.

A Dictionary of Chemistry and the allied Branches of other Sciences. By Henry Watts, B.A., F.R.S., F.C.S. Assisted by eminent Contributors. Second Supplement. London: Longmans. 1875.

Although there is a gap of nearly thirty years in the pedigree, Watts's Dictionary of Chemistry is a lineal descendant of Ure's Dictionary, which for so many years was one of the most highly esteemed of English scientific handbooks. The vast increase in size which it has sustained, and the disappearance of all but a few paragraphs of the original text, mark the enormous development of chemistry during the interval. In its new form the work was completed in 1868, after nine years of careful work. The five large volumes were followed in 1872 by a supplement of over 1000 pages, in which the corrections which time had rendered necessary were supplied, and the record of chemical discovery carried down to the end of the year 1869. Three years have passed, and now a second supplement, even larger than the first, appears, and continues the great chemical history to the end of 1872. It would at first appear that at this rate another supplement must already be wanted, and there would seem to be no prospect of end to the growth of the book. Further increase, however, is in reality unnecessary, for since the year 1871 the Chemical Society of London has published in its monthly journal a series of abstracts of all important papers on chemistry and its allied sciences, both English and foreign; and this journal is so well arranged and edited that the yearly volumes, with their copious indices, will supply the place of future supplements to Watts's Dictionary. When a new edition of the work is required we trust it will be found possible to abandon the system of publication in parts, and issue it at once in a complete form. Much inconvenience would in this way be avoided.

The period of time covered by the new supplement, though fertile in chemical research, did not witness the birth of many really great discoveries. Hundreds of new compounds were of course obtained, particularly in organic chemistry; old laws were revised and some new ones brought to light; but nothing transpired that seems likely to effect any radical change in chemical thought. One great tide of discovery sets towards the physical side of chemical phenomena. Possibly the greatest secrets lie in this direction, and the results gained by Quincke, Valson, and others in regard to capillarity, by Berthelot (whose name must ever be mentioned with the highest honour) and Thomsen on heat of combination, and by Mills, Berthelot, Favre, and Deville on the conditions of chemical action, are examples of the material which is collecting for future use. Another great labour of the time is the determination of the constitution of organic compounds. The theoretical conceptions which first gave an intelligible explanation to the facts of isomerism are gradually throwing light on the most complex compounds, and have hitherto proved of the utmost value in suggesting methods of research and indicating probable means for new synthesis. Terrible names continue of course to abound. We are introduced to *orthochloroparachlororthamidophenol*, to *diacetylphenanthrenehydroquinone*, and the like, but we all know that they are necessary and really simpler than any empirical terms would be.

Physiological chemistry is well represented in the volume. Some of the articles are by Dr. Newell Martin, of Christ's College, Cambridge; but the editor contributes many, and all good. Thus we find, under "Blood," an account of Schützenberger's method of determining oxygen; and, under "Milk," an epitome of the most recent methods of milk analysis. Mr. Warrington's articles on agricultural chemistry are also excellent; and the same may be said of nearly every article we have inspected.

Altogether, it will be seen that the volume is a most valuable contribution to scientific literature; and, taking the work as a whole, we can but congratulate editor and publishers alike on their noble and colossal achievement.

The Commercial Handbook of Chemical Analysis. By A. Normandy. New Edition, enlarged and to a great extent rewritten by Henry M. Noad, Ph.D., F.R.S., Lecturer on Chemistry at St. George's Hospital. London: Lockwood and Co. 1875.

Dr. Noad has greatly improved this well-known handbook, and has done his best to bring it down to the present state of chemical knowledge. The alphabetical arrangement is wisely retained, and the analytical methods described for the most part well chosen and clearly described. Some important omissions occur, among which we may mention at random, paraffin and petroleum oils, benzene, turpentine, mustard, tobacco (often adulterated with liquorice), oil-cake, coal, and the use of the polariscope in the analysis of sugar. On the other hand, the editor has, we think, erred in including such methods as those for the complete quantitative analysis of the ores of cobalt, platinum, iron, and copper, and the assay of silver and gold. Methods like these are described in all manuals of analysis. No one but an experienced chemist would be likely to undertake them, and he would be sure to have larger manuals at his command. The space so saved might have been devoted to subjects proper to the scope of the work, and its utility thereby increased. In spite, however, of these blemishes, the book is a good one, and will be useful, not only to the manufacturer, but also to the professional chemist. Dr. Noad has greatly extended the glossary, which now contains many valuable hints on manipulation, and clear descriptions of the more ordinary forms of apparatus. That great essential, the balance, is, however, somewhat unaccountably omitted.

Vaccination Grants.—Mr. T. Taylor, of Bocking, has received the "extra vaccination gratuity," amounting to £15 17*s.* Mr. J. C. Leach, Sturminster Newton, has received a grant of £8 16*s.* for efficient vaccination (second time).

CHLOROFORM OR ETHER.

To the Editor of The Lancet.

Sir,—As the comparative merits of ether and chloroform are now under discussion, and the subject is one, moreover, of paramount interest and importance, the following case may not prove uninteresting, illustrating as it does two very prominent features in ether inhalation.

Two years ago I had occasion to operate on a woman into whose larynx I had one year previously introduced an ordinary tracheotomy tube for organic stricture. As she was reduced to the last verge of weakness it was decided to administer ether. This was given through the tracheal tube, by means of a cone of stiff paper and a sponge. It acted beautifully, sleep—calm, peaceful sleep—being at once induced. The pulse, from being quick, small, weak, and rather irregular, became slow, full, and vigorous—just such a pulse, in fact, that gives to the country surgeon perfect comfort and confidence. In this case the vapour must, of course, have entered the larynx directly, yet it did not seem to cause the slightest irritation, as there was neither gasping, coughing, nor other symptom of laryngeal disturbance. As the tracheotomy tube had been in one year, it is just possible the mucous membrane of the air-passages had become less sensitive. Be this as it may, the fact stands prominently forward that the ether vapour did its work efficiently, safely, and with apparently less discomfort to the patient than if it had been given by the mouth.

I hope I may not be considered presumptuous in coming to the front when so many experts are already in the field of discussion, but in a question of such vital importance one well-attested fact is always valuable; and from some of the letters which have already appeared on the subject, I consider this case not devoid of value, inasmuch as it shows that ether may be inhaled *directly* into the larynx without causing bronchial or laryngeal disturbance.

I am, Sir, yours truly,
James More, M.D.

Rothwell, Northamptonshire, August 29th, 1875.

THE LATE DR. MAUNSELL.

To the Editor of The Lancet.

Sir,—The announcement, in your last week's issue, of the premature death of Dr. Maunsell, of Dublin, is the heaviest blow and greatest discouragement which the cause of Poor-law medical reform has sustained since the day when poor Richard Griffin broke down. To me Dr. Maunsell's death is especially unfortunate, for he constantly afforded me most valuable aid in procuring statistics, notably as regards the administration of dispensary medical relief. On my first visit to Ireland six years since, undertaken for the purpose of studying the working of the system followed in that country, Dr. Maunsell was my companion and guide; indeed, without his assistance it would have been wellnigh impossible for me to have succeeded in obtaining any information. He was the originator of the Irish Poor-law Medical Officers' Association, and in his capacity of honorary secretary devoted himself with untiring energy to the realisation of its objects—viz., the improvement of the status and emoluments of his colleagues, and their superannuation. I doubt not that some effort will be made in the "sister isle" to show how much his great services have been appreciated, but in this country I feel we owe him something also. There can be no doubt that to his writings much of the success which has attended the efforts made to ameliorate the position of the Poor-law medical service is justly due,—notably as regards superannuation allowance.

That he has left his wife and young family in very indifferent circumstances there can be no doubt, and I therefore do hope that members of the profession in the United Kingdom will evince their sense of his public work *in their behalf* by contributing to a fund for their benefit.

For this purpose I shall be most pleased to receive any amount which may be forwarded to me.

I am, Sir, yours obediently,
Dean-street, Soho, August 30th, 1875. Joseph Rogers.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 4, 1875.

THE meeting of the British Association at Bristol presents, perhaps, fewer topics of interest to members of our profession than has often been the case at previous gatherings. The tone of the meeting is sensibly influenced by the presidential address, which this time was devoted to a review of the salient points in the history of a mechanical, although perhaps the grandest mechanical profession. In some points, indeed, the sciences of civil engineering and of medicine have an analogy; both have to deal with forces very much beyond immediate control—to guide where they cannot thwart, to divert where they cannot arrest, and often to meet with unforeseen and impassable obstacles. A retrospect of medicine will indeed compare in some respects favourably with the retrospect of engineering. If our forward steps are halting and slow, we have, at any rate, the consciousness that we have reached the highest point of knowledge and of power the history of our art presents, and have to look back on no monuments of an ability we cannot rival and a greatness we cannot achieve.

The subject of the very able address of BALFOUR STEWART, in the section of Mathematical and Physical Science—the physics of the sun,—is one which has no very distinct connexion with the treatment of disease. But there are not wanting indications that the indirect influence of the sun on the occurrence of disease may be found some day to be much more extensive and important than is at present suspected. In illustration of this we may refer particularly to the paper by Professor STANLEY JEVONS, read before the Economic Science Section, on the Influence of the Sun-spot Period on the Price of Corn. The distinct periodicity so often observed in commercial matters, prices of produce, monetary panics, and the like, suggested to him a further and more detailed comparison, which shows that, while the period of variation in the sun-spots is 11·11 years, the interval between the principal panics is 10·8 years, and the periodicity in high price of provisions was formerly the same. The intimate connexion of the meteorology of the sun and the earth was also ably discussed by BALFOUR STEWART. He traces, besides the ordinary light and heat effect, a peculiar magnetic and meteorological influence depending somehow upon the rotation of the sun, and also a cyclonic effect depending on the disturbed state of the solar surface. All three of these conditions, with the exception perhaps of the magnetic influence, are, as is well known, important agencies influencing the occurrence of disease. It seems as if the supposed influence of the moon on the terrestrial meteorology were about to be transferred to the sun. It may possibly be found that a similar transfer may have to be made of the imagined connexion between lunar influences and some phases of periodic maladies.

Of Professor ROLLESTON's admirable and eloquent address in the department of Anthropology we cannot now speak. In part more strictly scientific, it was also an able vindication, founded on scientific method, of the doctrine of human progress. A comparison of averages leaves the improvement in mind and morals quite unquestionable. The development of organic beings has, according to Professor CLELAND's address in the departments of Anatomy and Physiology, reached its highest point in man. "Animal life has attained its preordained climax in humanity." His remarks upon the confused system of nomenclature in comparative osteology, which he lamented as so puzzling and repelling to the student, will probably be thought in a few weeks' time, by not a few students, to be equally applicable to human anatomy. He concluded with a vindication of the scientific position of anatomy, and an earnest appeal for its instalment in its due position as an important element in a scientific education, expressing his somewhat enthusiastic opinion that it is even yet destined to take the highest place among the sciences as a guide to philosophy! In this department an interesting paper was read by Dr. HALLETT, of Bristol, on the Bearings of the "Conservation of Forces" upon Life. With great ability and subtle thought, he opposed the inclusion among the correlation of forces of those of vital action, urging that the logical outcome of that doctrine was the prospect of the ultimate destruction of the universe by the conversion of all forces to one dead level.

Of more direct interest to us is the report of the committee appointed to investigate the conditions which influence the intestinal secretion, which was presented by Drs. BRUNTON and PYE-SMITH. The results obtained by the experiments tend to show that neither the splanchnic nerve, the pneumogastric, the sympathetic above the diaphragm, nor the spinal cord, has any influence on the intestinal secretion. They render probable the influence upon it of the solar plexus, including, but not confined to, the semilunar ganglia. The absence of relation between the hæmorrhage and the secretion when paralysis of the nerves has been produced seems to point to a separate influence on the blood-vessels and on the secreting structures of the intestines. A paper on the Effects of Drinking-waters upon Animals, by Mr. W. J. COOPER, contained little of new or special interest beyond some experiments on the effect upon rats and other animals of certain artificial drinking-waters.

Among papers in the Economic Sciences Section we must notice that read by Dr. F. J. MOUAT on the Value of European Life in India. Within the present century the annual loss of life has gradually and steadily decreased from about 60 per thousand to an average of 15 or 16, and the decrease is still in progress. Among officers, from 1861 to 1870 the death-rate from all causes was not quite 17 per thousand; and among European railway *employés* the mortality was only about 10 per thousand. The improvement in the death-rate is due to causes which will probably be permanent, and may be in large measure ascribed to the influence and advice of the medical staff, wiser modes of living, improved sanitary arrangements, and more careful invaliding when early symptoms of disordered health appear. We should, however, like an explanation of the better health of the railway officials compared with that of the military officers. Each is a carefully selected body; each has a large amount of exposure to unhealthy influences, solar and terrestrial; and it is difficult to believe that any difference in habit of the two classes can account for the different mortality. Such was, however, the explanation offered by some subsequent speakers, who epitomised the worst antagonistic influences to European health in India as "brandy and soda." The excessive mortality among women and children adds, of course, very largely to the average, and seems to be, in the case of children at any rate, almost irremediable.

The statistics of Mr. Vivian on the Influence on Life of Total Abstinence, as evidenced by the tables of an insurance office in which the records of total abstainers and those of other cases were kept separately, are considerably in favour of the former. According to him, the deaths in nine years in the temperance section were about eight-elevenths of the expected deaths, while in the general section the deaths were only about one-seventieth below the calculated number. He did not, however, give the respective numbers of each class, on which all the value of the figures depends. Nothing is more fallacious than the publication of an average from a small number. The general impression in life offices is that total abstainers are bad lives, because they are so often reformed drunkards. Those who have been abstainers from youth are probably, other things being equal, better lives than those who are not, for they are withdrawn from one great cause of mortality which creeps insidiously among the best-selected lives. It is probable that to an office which is ostensibly in part a temperance one a larger proportion of life-long abstainers are attracted than to the ordinary offices.

It is satisfactory to learn that private munificence is to supply the absent funds for a continuation of the chemical analyses connected with sewage experiments. According to Mr. J. C. Melliss, the sewage problem, so perplexing to many towns at the present moment, has been solved at Coventry in a very satisfactory manner. The purification of the sewage and manufacturing refuse is effected at a cost for chemicals of £2 12*s.* 10*d.* per million gallons, and a manure is obtained worth 35*s.* per ton. The total cost is 5*d.* or 6*d.* per head of the population. The removal of noxious materials is at present most effective; the effluent water is described as clear and bright, of a high standard of purity, without perceptible smell, and almost free from colour. We are not surprised to hear that all parties concerned are well satisfied at such a result.

Auscultation of the heart, without doubt, forms one of the most interesting studies for the clinical observer, and the precise significance to be attached to the various murmurs heard in valvular disease of that organ has afforded matter of debate since the time of Laennec and Corvisart. Nor is it to be wondered at that such debate should still be going on with regard to these abnormal sounds, seeing that even yet physiologists by no means agree as to the causation and time of occurrence of the normal sounds, as to how far they are of direct valvular origin, or how far the muscular walls or the fluid contents of the heart itself participate in their production. The murmur which, above all others, has the most given rise to discussion is that styled "presystolic," which, when fully developed, is at once most characteristic and significant of the lesion underlying it—viz., obstruction to the flow of blood through the mitral orifice. Our own columns have frequently been the arena of discussion upon the nature of this murmur, and but recently we have had the question revived in a somewhat novel and singular manner. We do not intend to stop to examine critically the views propounded (to our thinking, somewhat too lightly for scientific debate) by Dr. A. Harvey in his recent contribution (The Lancet, vol. i. 1875, pp. 819 and 852); for, as Dr. Gairdner (vol. ii., p. 48) pointed out, all Dr. Harvey's arguments are based upon what is to him a mere assumption and not existent in fact. For confessing that to him the presystolic murmur has no existence, he forthwith proceeds to argue *ex hypothesi*, and to demonstrate on theoretical grounds that it could not have the physical cause assigned to it. The paper in question, however, did good in producing the clear exposition by Dr. A. Carter (p. 203) of the clinical facts; and, although we doubt whether there is one physician out of a hundred who is of Dr. Harvey's opinion, we are grateful for the results of his contribution.

The chief ground for debate, however, is that raised in our columns three years ago by Dr. Barclay, as to whether the murmur in question be not really due to the flow of blood backwards from the ventricle—in fact, that it be of regurgitant and not of obstructive nature, and therefore produced by no contraction of the auricle, or even passive venous flow from the auricle to the ventricle. In his closely reasoned argument, Dr. Barclay endeavoured to show that the auricular contraction passes continuously onward into the ventricular, and that preceding the forcible systole of the ventricle there is a period of tension of its walls, during which, in cases of thickened and contracted mitral orifice, the blood is poured back into the auricle, thus delaying the first sound of the heart, which is coincident with the systole, and which terminates the murmur abruptly. He further argued that the hypertrophy of the auricle so frequently attendant on mitral stenosis is not due to the increased work it would have to perform in forcing the blood through a narrowed orifice, but that it is rather due to the increased amount of blood delivered into the chamber; since, he said, if it contracted at all, it would empty itself in the direction of least resistance—viz., into the pulmonary circulation, in consequence of the pulmonary veins being unguarded by valves. Doubtless this always occurs to a slight extent; but it is equally true, as was pointed out by Dr. Balfour at the time, that, the pulmonary circuit being closed, there is a considerable amount of tension on this side, sufficient—in all, perhaps, but the most extreme cases of stenosis (and in these the characteristic murmur is frequently absent)—to neutralise the resistance afforded by the narrowed outlet.

We wish, however, to call attention to the most recent work on this subject by Dr. Galabin in his paper "On the Interpretation of Cardiographic Tracings," in the last volume of Guy's Hospital Reports. We have here the presystolic murmur put to the test of the cardiograph, the result being a strong confirmation of the view taken by Dr. W. T. Gairdner, and held by the large majority of clinicians,—that the murmur is "auricular-systolic" in nature. The paper is illustrated by a large number of tracings, and all of them clearly show that in cases where there was clinical evidence of mitral stenosis the contraction of the auricle occurred earlier, was more pronounced, and lasted longer than in health; besides confirming the view of MAREY (in opposition to that of FICK), that the auricular systole is concluded before that of the ventricle begins. Criticising the view of Dr. BARCLAY in the light afforded by this research, Dr. GALABIN points out that if the murmur in question be indeed due to regurgitation, and therefore occurring with the first act of contraction in the ventricle, then in such cases the carotid pulse ought to precede the first sound of the heart, and the action of the ventricle must be prolonged in such cases, both of which effects it is known do not occur. Dr. GALABIN does good service in pointing out that the term "presystolic" is open to question, that Dr. GAIRDNER'S term of "auricular-systolic" is preferable, and that, strictly speaking, it is diastolic with regard to the state of the ventricle; and he shows—what we have indeed observed at the bedside, but have never had an opportunity of verifying in the dead-house—that in some cases there may be a pure diastolic murmur—i.e., a murmur occurring after the second sound, but terminating before the first sound, heard only at the apex of the heart, and unaccompanied by any of the signs of aortic regurgitation. Such a murmur is presumptive of mitral contraction, but yet it does not conform to the presystolic type. That it is due to mitral contraction is borne out by the cardiographic tracing afforded in such a case, and its occurrence is explained by Dr. GALABIN on the hypothesis that the passive venous flow from the auricle, due to the high state of tension in the pulmonary veins, may give rise to a murmur as the current passes through the narrowed orifice; a murmur which disappears when the pressure in the ventricle equalises, or nearly so, that in the auricle. This, we think, is a most important fact, and one to which we direct Dr. BARCLAY'S attention; but at the same time we must admit that such murmurs are conspicuous by their rarity, and that the commonest of all the abnormal sounds indicating mitral contraction is that which begins before the first sound of the heart, and, increasing in intensity, terminates abruptly in that sound, and that this *is* due to auricular contraction we think no doubt can remain in the mind of him who studies Dr. GALABIN'S essay. There remain doubtless, further refinements in cardiac auscultation to be one day elucidated—e.g., such modifications of the sounds as may be produced by the minuter changes in valves &c.; but surely the day is passed when we can no longer diagnose manifest obstruction at any of the orifices of the heart.

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ACTS OF PARLIAMENT are not usually light or pleasant reading, particularly in the dog-days; but as so many of our readers, as well as the public generally, are interested in the buying and selling of food and drugs, the submission of a summary of the Sale of Food and Drugs Act, which will come into operation on the 1st of October next, cannot be deemed by any a work of supererogation.

There are thirty-six sections in this Act, all former enactments relating to the subject being henceforth repealed. The authorities appointed to carry out its provisions are the Commissioners of Sewers for the City, the District Boards for the rest of the metropolis, the Court of Quarter Sessions of every county, and the Town Council of every borough having a separate quarter sessions or a separate police establishment. In Scotland, the authorities are the Commissioners of Supply for counties, the Commissioners or Boards of Police, and the Town Councils for boroughs; and in Ireland the authorities are the grand juries of counties and towns and the Town Councils of every borough. Each and all of these authorities may or, when required to do so by the Local Government Board, shall appoint an analyst, who, on receipt of a sum not exceeding half a guinea, shall analyse any article of food or drug, the purchaser notifying to the seller his intention respecting it, and dividing the article into three portions, there and then to be sealed and marked, and held respectively by the vendor, the purchaser, and the analyst. All medical officers of health, inspectors of nuisances, weights and measures, and markets, or any police constable, may direct an analysis at the cost of the local authority; and a penalty is attached to the refusal to sell for the purposes of analysis any article exposed for sale. The analyst is required to report quarterly to the authority appointing him the number of articles analysed and the results, copies of which are to be transmitted to the Local Government Board. The offences under the Act include mixing, colouring, staining, or powdering any article so as to render it injurious to health, performing the same operations so as to affect injuriously the "quality or potency" of any drug, or selling any articles that have been so treated, exemption being allowed if ignorance of the fact be proved. Also no article is to be sold that is not "of the nature, substance, and quality demanded by the purchaser"—harmless ingredients required for "the production or preparation of any article," "proprietary" medicines, and food or drugs unavoidably mixed with "some extraneous matter in process of collection or preparation," being excepted. Also no person must, without notice, abstract any part of an article of food so as to affect its quality injuriously; exemption being, however, allowed, if the label indicates any change in bulk or quality. Proceedings against offenders may be taken by the person who has caused the analysis to be made, the certificate of the analyst being *primâ facie* evidence for the prosecution, but the analyst to give evidence if required. The justices may reduce or mitigate any penalty imposed, and may also at the request of either party cause the article to be examined by the analysts of the Inland Revenue Department at Somerset House. A further appeal is also allowed to the general or quarter sessions. Provisions are made against forging or misapplying a certificate or warranty, and for giving false labels. There are two special sections relating to tea, which recite, in effect, that on and after the 1st of January next all tea imported as merchandise into Great Britain and Ireland shall be subject to examination by officers of the Customs; and if such tea is found unfit for human food, it is to be condemned and destroyed, or otherwise disposed of as the Commissioner of Customs shall direct. "Exhausted" tea is defined to mean "any tea which has been deprived of its proper quality, strength, or virtue by steeping, infusion, decoction, or other means."

The weak points of the Act are not far to seek. The exemptions are so many and various that the chances of the escape of the defendant are by no means few. Indeed, as it appears to us, the 5th and 6th sections are specially framed to enable the vendor to wriggle out of a conviction. Section 22 will practically make the Laboratory Department of the Inland Revenue a court of arbitration in all cases of dispute, which will be numerous, so that the officers will doubtless have plenty of work to do. We again take leave to record that (and particularly as regards the provisions of this Act) the duties of medical officer of health and of analyst are incompatible, and cannot be properly or successfully performed by one and the same person. We trust that in a short space of time these dual appointments will have ceased to exist.

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THE ostrich buries his head in the sand in the presence of danger no doubt because that is the readiest mode of shutting his eyes to a difficulty he has neither the courage to face nor the wit to avoid. Our own policy in many grave emergencies is substantially the same. If a few sheep or oxen imported for food exhibit symptoms of a malady which must render their flesh not only unwholesome but perilous to consume, we kill off the entire herd or flock and sell the carcasses as quickly as possible, lest they, too, should turn out to be infected and therefore unsaleable. It is no concern of ours that probably — if there were any real grounds for apprehension as to the health of the herd—the animals slaughtered are, in point of fact, poisoned and incubating the disease, and that it is infected meat we allow to be sold to the public. At the moment the animals are killed we presume them to be technically healthy, although it is the misgiving that they may be infected which prompts their immediate sacrifice. In like manner, if a servant resident in a family is supposed to be sickening for some infectious disease, she is hurried away lest the supposition should be realised, and, the nature of the malady being actually known, it may be impossible to get rid of her. In all these cases refuge from the difficulty is sought in blindness to consequences. We fear the evil, and intentionally shut our eyes to the danger it threatens. The device is not without plausible excuse, and it enjoys a measure of success or it would scarcely be tolerated. No case of blood-poisoning from eating meat hurried to market to avoid the discovery that it was unfit for food has been recorded; and instances in which a neighbourhood is poisoned with disease blindly sent into it are not, as a rule, obtruded on public notice or allowed to scandalise the sense of decency. Exceptions do, however, occasionally occur, and one of them has found its way into *The Times*, to be followed most likely by others equally or even more sensational. The case, reported by a clergyman, possesses no special feature. A servant suffering from malignant fever, as the event proved, was sent home to her friends in the country—no doubt with benevolent intentions. She carried the disease into her family, and her own life and two other lives were sacrificed. Eleven cases in all formed the group of which this one, quietly put away out of sight by the persons who first *suspected* its real nature, was the seed and centre. We have no thought of moralising on the "indiscretion" or pouring out vain lamentations about the "untoward accident." If there had not been some fear that the girl was affected with an infectious disease she would not have been sent away. The circumstance that the fear entertained was well grounded is creditable to the forethought of those who rid themselves of the danger. It may not reflect the same credit on their humanity as on their sagacity; though even in this regard much may be said for those who keenly remember that charity to the human family begins at home, but forget that it does not end there. We do not think anything is to be gained by lecturing the public. Self will always be first, and it is generally all, with the best of us. The more practical consideration is, whether it would not be well if, attached to each hospital, or located in suitable districts in blocks by themselves, there were wards, appropriately furnished, where persons suffering from anomalous attacks, not sufficiently advanced to admit of diagnosis, might be instantly received, on small payment, without obtaining an "order" or any other troublesome preliminary, and where they might remain under proper expectant treatment until such time as the attack terminated or developed itself. A convenience of this nature would be greatly appreciated by the public; it would also prove singularly useful to the family practitioner, who is now often sorely pressed to advise his client as to the instant removal of a case occurring among the domestics, concerning the precise nature of which he is at the moment doubtful, but which he has no wish to send into a hospital or to remove from his own supervision before its character becomes apparent. It is of the essence of our suggestion that the wards should simply provide shelter and suitable appliances of nursing, and that the cases sent in should remain, if desired, under the medical care of the practitioner by whom they were introduced. We throw out the hint as a possible solution of a grave and pressing difficulty.

Annotations.

"Ne quid nimis."

THE ARMY MEDICAL SERVICE.

MR. GATHORNE HARDY, like the rest of the world, is probably at this time enjoying a *dolce far niente* life after his official labours, although it has been rumoured that the War Office was to be employed during the recess in evolving some new scheme of military organisation or in modifying and perfecting that left by their predecessors. It is to be hoped that one of the first announcements on the meeting of Parliament will be that Mr. Hardy has made up his mind what he intends doing for the Army Medical Service. The War Minister must have given the subject his full consideration, for, according to his own showing, he has taken his time about it; but we have not been able to gather anything from his statements, so far, beyond the fact that he seems very indisposed to introduce a system of compulsory retirement for the upper ranks. The view that it would be productive of hardship on medical officers to be compelled to go at sixty years of age seems to us an unreasonable and untenable one. The officers in the administrative ranks of that age will have long been not only in the enjoyment of a higher rate of pay and allowances, but they will have been on full pay service for years after the compulsory retirement of their juniors in the executive ranks, and when they do retire it is with a much higher rate of pay. Let the position of an officer who has had the good luck to have been promoted early and to have filled, it may be, the principal post in India, be contrasted with that of an executive officer going at fifty-five years of age, and the difference is enormously in favour of the former, especially when it is considered that there was, perhaps, little or no difference in the abilities, character, or services of the two men. The benefit of the Service, as a whole, should be taken, in this as in all other instances, as the true and legitimate basis of action; and if it be held right to compel a military chaplain to retire at sixty it certainly cannot be wrong to apply the same rule to a military doctor. If, however, Mr. Gathorne Hardy has another and better method for securing a reasonable flow of promotion we shall be very happy to hear it. And in any case we anxiously await the time when Mr. Hardy shall disclose his intentions, for the present condition of things is eminently unsatisfactory. We learn that at the last competitive examination twenty-two candidates went up, one retired, and the remainder qualified, out of whom fifteen were selected. From this it appears clear that Mr. Gathorne Hardy's statements as regards his intentions are considered to portend some changes for the better. We can only hope that the Service will not be disappointed.

THE PHARMACEUTICAL CONFERENCE.

THE twelfth annual meeting of the British Pharmaceutical Conference, held at Bristol, seems to have been a useful and creditable one. The address of the President, Mr. Groves, was interesting and well sustained throughout. It showed an admirable knowledge of the progress of pharmacy, and especially of the points of it at which scientific and practical ends meet. The President seems dissatisfied with the Irish Pharmacy Bill, and especially with the fact that it was framed without consultation with the Pharmaceutical Society. The withdrawal of the reciprocity clause was boasted of by one of the subsequent speakers as a result of the plain speaking of a deputation of the Council of the Pharmaceutical Society to the members of the House of Commons in the lobby. It is, to say the least, lamentable at this time of day that there should not be reciprocity between the druggists of England and Ireland, as there is between the doctors of the two countries. The President discussed the pharmaceutical position of some new or recent remedies, especially of jaborandi and salicylic acid. He referred with gratification to the production of salicylic and carbolic acids from the essential oil of a variety of the genus *Andromeda*, which grows inexhaustibly on the Neilgherry Hills. His account of the chaotic state of our knowledge of the active principle of digitalis makes us very thankful that there is a Pharmaceutical Society to take cognisance of such matters and present them in a practical form to medical men. The President was not slow to acknowledge the services of the profession in introducing drugs found useful in foreign countries, such as those of Dr. Fayrer in introducing Goa powder; and of Dr. Dougall, of the Indian Government, in employing gurjun balsam as a remedy for leprosy. Referring not very sanguinely to the prospect of an international Pharmacopœia, he expressed a hope that the indication of extreme doses would be made binding on the prescriber, as is the case now in Germany. This is only reasonable. We should all be grateful to a chemist for making inquiry in reference to the prescription of an obviously excessive quantity of a poisonous drug; and it is but due to dispensers to make such prescriptions clear, and not leave them in anxious doubt. We cordially endorse the views of the President as to the necessity for a commission which would grapple with the evil of the unrestricted sale of so-called patent medicines, many of which are frightfully injurious. He instanced one, known as the "sure cure for the opium habit," and found to contain two-grain doses of morphia, to be taken three times a day!

THE CASE OF GENERAL REECE, C.B.

THE letter of Mr. Low, which we publish to-day, if it puts the case in no new light, adds some important facts to the details which have already appeared. The history is a sad one. The final unhappy state of affairs appears to have been the result of family estrangement, which had lasted for many years, and to which the General's solitary life, and probably much of his mental state, are to be attributed. Whatever the General's actual mental condition may have been, it is to this estrangement that we must attribute any necessity there was for his detention and restraint as a certified lunatic. There is no account of violence which would have rendered it impossible for his friends to receive and take care of him. The law expressly favours the reception of lunatics by their relations, in its provision that any person deriving no profit from the charge may take care of a lunatic without legal supervision. The case was one, at the worst, of merely senile alienation, a condition apparently very similar to that of thousands whom no one dreams of incarcerating or restraining from the free exercise of their will, so far as such exercise is harmless to those around them. Whether or not the evidence of insanity was distinct and unquestionable we do not attempt to discuss. The point will, it appears, be decided before a legal tribunal, since the will of the deceased is to be disputed in the Probate Court. The letter of Dr. Tuke, which we published a fortnight ago, hardly explains the ground on which the certificates were signed, and he is in manifest error in believing that no medical opinion has been expressed in opposition to the affidavits which he and Dr. Maudsley signed.

While the circumstances of the case were such as to suggest the mildest mode of treatment, if any comfort to the patient or hope of recovery could be expected, there are sufficient evidences that the treatment adopted was one of considerable severity. The facts stated by Mr. Low, and, indeed, admitted by Dr. Tuke, show this clearly, as did also the evidence at the inquest. Not only was the old friend and banker denied admission, and only able to get access to General Reece at long intervals and by official interference, but even the landlady, who had been in constant intercourse with him, was not allowed to enter his room. It must be admitted that such treatment is likely to increase rather than lessen the mental disturbance of senile brain degeneration, and no facts have been stated on which it could be justified.

While we can hardly say with Dr. Tuke, that "the case shows very forcibly the intense jealousy of our English law of any undue interference with the liberty of the subject, and, with the present legal safeguards, the impossibility of any real sane man being treated as a lunatic," we are glad to believe that such cases as the present, in which even a doubt on the subject can arise, are of extreme rarity. The case illustrates, perhaps, the only danger of misapplication of our lunacy arrangements. It is not easy—it is, perhaps, not possible—for a man in perfect mental health to be confined as a lunatic. It is possible for a person of unsound mind to remain in the fullest possession of his liberty, to live unrestrained among his friends, provided he is not violent, and provided he has relatives willing and able to take charge of him. But it is possible for those who are on the borderland of insanity, who are in that condition in which some physicians may take one, and others another view of the exact mental state of the patient—the individuals whose harmless eccentricities are sometimes unreasonable but hardly mad, to whom freedom is happiness and restraint would be misery,—it is possible for these to be restrained and relegated to the mercies of a paid attendant, if the relatives are desirous that such should be the case. They have only to dismiss the doctors who consider the patient eccentric, and employ those who regard him as insane, and the thing is done. We do not say that this was so in the present case, but the circumstances show very clearly that it is possible, and that it is a loophole in our present lunacy system for the exercise of some practical injustice. It is probably not often that evil consequences actually ensue, but it would be well if means could be devised to prevent the occasion of such reflections as those which must arise from the circumstances of a case such as that of General Reece.

WOOD v. THE MANCHESTER, SHEFFIELD, AND LINCOLNSHIRE RAILWAY COMPANY.

IT would certainly have been by no means surprising had the juries to whose decision the practical issues of the case of "Wood *versus* the Manchester, Sheffield, and Lincolnshire Railway Company" were committed, failed to come to a uniform opinion on the merits of the case. To a lay mind the conflict of medical evidence must have been most perplexing. It is only by weighing carefully the character of the statements on the two sides that a fair judgment can be formed of the probable circumstances of the case, and even then the verdict can be only an approximative one. Our readers had, in the letter of Dr. Withington, which we published a fortnight ago, an account of the case from the point of view of the patient's medical advisers, in which it is contended that the cause of death was traumatic meningitis, consequent on an injury received in the railway accident. The letter of Mr. Dacre Fox, the medical officer to the Company, which we publish to-day, sums up the evidence in favour of regarding the cause of death as typhoid fever. The unfortunate man had been, on the one hand, exposed, certainly, to a possible cause of traumatic meningitis. On the other hand, he was possibly exposed to the cause of typhoid fever. The symptoms during life were compatible with either view. As to the post-mortem appearances, the most contradictory statements were made by the medical men who made or witnessed the post-mortem examination on the part of the friends of the deceased and of the Company. It is said by one side that the appearances of meningitis were amply sufficient to account for death; on the other, that the brain and its membranes were perfectly healthy. On all sides it is admitted that in the intestines there was a swollen condition of Peyer's patches, such as is seen in a certain stage of typhoid fever, but it is alleged by those who represented the friends that the appearances were not compatible with the condition which would be found on the seventeenth day of the disease, the day on which the deceased died; and, further, that they might be explained by powerful purgation at the commencement of the illness. The swollen condition of one or two of Peyer's patches is, indeed, the one positive fact which stands out among the conflicting statements concerning the post-mortem appearances. In accepting it as conclusive of the existence of typhoid fever, one fact is assumed for which there is no published corroboration—that typhoid fever may last sixteen days before the commencement of ulceration. The latest date on which ulceration has not been found has hitherto been the twelfth day. It usually occurs some days earlier, even in mild cases. Dr. Murchison, however, does not consider, as his statement to the Company shows, that the absence of ulceration at that date is exclusive of typhoid fever. The grounds on which his opinion is based — an opinion with difficulty reconcilable with the published statements in the last edition of his book—would be interesting to the profession. As it stands, it is the most authoritative opinion that can be obtained on the subject. If the merely swollen state of Peyer's patches of the intestines was not incompatible with typhoid fever, they might reasonably be supposed to be indicative of it—the symptoms during life being taken into consideration,—provided no evidence of meningitis was to be discovered. Here the conflict of statements, as it stands in the report of the inquest, is absolute. They can, indeed, only be valued by looking at the character of the assertions by which the several statements were supported. When we do this we must confess that the balance of knowledge of pathological appearances appears to be on the side of the Company. It is certain that the written opinion of Dr. Lancaster on the point, which was not, however, given at the inquest, has a special value, because, as former assistant at the West Riding Asylum, he must have been perfectly familiar with the appearances of the normal and abnormal meninges, and his opinion is "that there was nothing particularly abnormal in the brain or its membranes except some opacity of the arachnoid membrane." This is, we need not say, a most common condition apart from any preceding inflammation, as several witnesses on the side of the Railway Company pointed out. On the other hand, Dr. Morris, who made the post-mortem examination, asserted that the arachnoid was "rough, covered with lymph, milky white or semi-opaque." Much would depend upon the position of the roughness, and the value of this witness's evidence against the Company is reduced by his subsequent statement that the deceased was suffering from typhoid fever at the time of his death, although the death was due to meningitis—an opinion which, although not very satisfactory as a scientific explanation of the case, probably coincides very closely with the impression which the evidence would leave upon the mind of the jury, and with the verdict which they brought in.

The extreme practical inconvenience of the word "typhoid," as applied to the specific fever, appears very clearly from the report of the inquest. We find one medical witness asserting that the disease in the intestine showed there was typhoid fever, but that typhoid fever might result from the blood-poisoning with urea consequent on the retention of urine. If we find such confusion existing in a medical mind on the subject of typhoid fever and the typhoid state—a confusion which results from the unfortunate nomenclature which, in spite of the College of Physicians, remains, and seems likely to remain, the popular terminology —we cannot wonder that the task of witnesses and of juries in such a case is rendered even more difficult than the facts necessitate.

UNQUALIFIED OBSTETRIC PRACTICE.

THE death of Eliza Swain, from hæmorrhage, near the time of her confinement, undelivered, has been the occasion of an inquest at Islington. First a midwife was called, and then Mr. Byers. Mr. Byers, we have reason to remember, is unqualified. Mr. Byers went for another doctor, and found Mr. H. F. Burnes at 2 o'clock in the morning. When they returned the poor woman was dead. The midwife saw the patient in the preceding afternoon at 4 o'clock and again at 6, at which times there were no symptoms of hæmorrhage according to report. Of course it is possible in such cases for there to be great internal hæmorrhage without any or any proportionate appearance of blood externally, and it is to be admitted that such cases are amongst the most terrible in practice, even to the most accomplished accoucheurs. Schroeder says that the prognosis for the mother in such cases is much more unfavourable than in placenta prævia. Dr. Barnes says, "Death may occur in a few hours, even before delivery." Still there is much to be done in these cases which does not seem to have been done. The jury came to the following verdict:—"That death resulted from excessive hæmorrhage during labour, and that death was accelerated by neglect and want of proper skilled treatment on the part of an unqualified practitioner."

Mr. Burnes stated that on making a post-mortem he found a breech presentation, and no attempt had been made to deal with the case scientifically. The hæmorrhage which had taken place was dreadful. He had no doubt that if he or another qualified medical man had been called in earlier the deceased's life might have been saved. The placenta was not prævial. It is important to place the blame of these lamentable obstetric cases rightly. Our contemporaries, in reporting this case, give prominence to the fact that Byers is unqualified; but they ought to give prominence to the further fact that such is the disgraceful condition of the law that qualification is not required for midwifery practice. Anybody may practise midwifery. Byers has already been punished for using titles falsely. This he has ceased to do, and he breaks no law in attending lying-in women, whose cases, however, it is seen are often the gravest in practice. Our lay contemporaries should use their influence to procure a change in the law that permits unqualified persons, men or women, to practise midwifery. Until this change is made a great many lives will continue to be lost.

THE DISCUSSION ON VIVISECTION AT EDINBURGH.

CONSIDERING the importance of the subject of vivisection, and the way in which certain classes in this country especially have been moved by it, we think that it may be well to supplement Dr. Rutherford's remarks thereon, at the late meeting of the British Medical Association, by a reference to those made by Dr. Burdon-Sanderson and Sir R. Christison on the same subject. Dr. Burdon-Sanderson drew particular attention to the statement made by Dr. Rutherford—viz., that in the experiments used in illustrating the processes of physiology for teaching purposes, it was possible to demonstrate all the great facts, especially those fundamental facts which had made the last twenty years so notable in the history of the science, in animals altogether free from suffering. As regarded the result of Dr. Rutherford's own experiments, it was by means of such investigations alone that they could obtain an answer to the question, which, of all others interested them most in physiology, or, in fact, in any of the applications of science to medicine. The question was, How did those agents, of which they had a vague knowledge by means of their experience in medicine, affect the great functions of the body? They must all feel that it was of immense importance that the agents which they were using daily in practice should be known to them, not merely by the knowledge they gained from experience, but also by that kind of knowledge which could only be obtained by the application of scientific methods of investigation. In the instance before them there could be no doubt that the knowledge gained by Dr. Rutherford was of the most important and valuable kind, and the only question was whether the requisite skill and judgment were used in the performance of the experiments, in order to ensure that the best results were obtained, and that for every grain of suffering which was inflicted on the animals there might be got an equivalent of valuable knowledge. Dr. Burdon-Sanderson expressed his great confidence in the Legislature in this matter, and he believed that those who were considering the subject would not only be guided by motives of humanity, but afford evidence of a sagacious consideration of the necessities and requirements of the case. Sir R. Christison dwelt, and very forcibly, on the great practical value of the results obtained by Orfila and Majendie by the aid of animal experimentation, and adverted to some of his own labours and observations in toxicological science. Sir R. Christison did not suppose that anyone would desire to prevent our having recourse to such experiments as might either establish the guilt of a criminal or save a man's life when unjustly charged. Alluding to an investigation which he had undertaken to settle a very difficult and primary question as to the action of medicines and poisons through the medium of the blood or of the nervous system, Sir Robert said he had abandoned the method he had devised some time ago for settling the point, in consequence of the cruel nature of the experiments required; from which it might be inferred that in a great school such as that of Edinburgh, where men of sense knew what they should or should not undertake, nothing would be done in the least degree offensive to public decency or public opinion even; and, further, that cruelty was just as disagreeable to a vivisectionist as it was to any of those super-delicate people who were offering a reward of twenty guineas for the discovery of a vivisectionist.

THE CASE OF LOUISE LATEAU.

FOR the past seven years the public mind in Belgium has been greatly exercised by the performances of a country girl, who has been subject to weekly attacks of ecstasy accompanied by cutaneous hæmorrhages from special regions, which, from their associations, are held in Catholic countries in profound reverence. Many have been the pilgrimages to the village of Bois d'Haine, where this lowly mystic dwells, and many have been the treatises, religious and scientific, that have been written to explain the phenomenon from their special point of view. At the commencement of the present year a commission of the Royal Academy of Belgium, under the leadership of M. Warlomont, investigated and reported fully upon the case. The report, which was a most elaborate one, came to the conclusion that the girl was the subject of "stigmatic neuropathy"—a new addition to nosology. We have just received a most interesting memoir (*Science et Miracle: Louise Lateau, ou la Stigmatisée Belge*), by Dr. Bourneville, of Paris, the talented editor of M. Charcot's work on Nervous Diseases, and himself no mean contributor to the literature of neuropathy, in which, after careful study and analysis of the writings on Louise Lateau, he concludes that her case is nothing but one of extreme hysteria. After giving a detailed account of her early life, and of her manifestations, each of which—the stigmata, the ecstasies, visions, prolonged abstinence, anuria, insomnia, &c.—he analyses in full, he passes on to compare her case with those of other well-marked examples of hysteria, many of which either have been or are in the wards of La Salpétrière Hospital. A case is given in which cutaneous hæmorrhages, preceded by neuralgic pains, and occurring in different parts of the body, were met with, accompanied by hystero-epileptic fits. Another, recorded by Magnus Huss, of Stockholm, as early as 1851, in which the subject had similar hæmorrhages, unaccompanied by menstrual derangement, and without any hæmophilic tendency. This patient could even provoke the hæmorrhages at will, and became the object of much curiosity and sympathy. She also was subject to epileptiform attacks. With regard to the ecstasies, there has been in La Salpétrière since 1840 a most unique case of hystero-epilepsy, in which the convulsions are most extreme, and on several occasions the subject of them has passed into a state of cataleptic rigidity in the attitude of the crucifixion. Whilst in this state she sees visions of the Saviour and the Virgin, and in every respect, save the regularity of recurrence, the attacks resemble those of Louise Lateau. Prolonged abstinence, diminution or even suppression of the excretions, have also been observed among other subjects of hysteria, which even excel the mystic of Bois d'Haine in the extremity to which their functions are deranged.

A striking commentary regarding Lateau has just been going the round of the papers. "It appears that for some weeks, her sister having kept priests and sightseers aloof, she reverted to normal habits and conditions; but, relapsing into a state which led to priestly services being called in, the former symptoms—fasting, trances, and stigmata—have reappeared." *Verbum sat.*

GOVERNMENT RESEARCHES.

It is encouraging to find the time which must now elapse before the shortcomings of the last session in the matter of sanitary reform can be compensated, is not to be unimproved. Mr. Sclater-Booth has, it appears, determined to send out a commission composed of Mr. C. S. Read, M.P., Mr. Robert Rawlinson, C.B., and Mr. S. C. Smith, C.E.—the name of the scientific medical man who will, *of course*, be included in the staff has not transpired—to examine and report upon the various methods of disposing of town sewage adopted on the Continent. It is said that the inquiry will be directed "principally to the effects of frost, during severe winters, on closets, house-drains, and irrigated grounds." We should have supposed this might form a subordinate feature of the researches prosecuted. It surely cannot be difficult to conjecture pretty accurately what effects are likely to be produced by frost upon sewage. We presume it is in contemplation to separate the "storm-water"—i.e., the accumulated rain and washings of the streets—from the ordinary fluid of the sewage and domestic "slops." This procedure was, many years ago, held to be the first step essential in any efficient reform. Without doubt it would greatly facilitate the disposal of sewage if the superfluous bulk of the water could be separated from it. But there are sanitary perils in the way. It would never do to leave the house-drains without frequent flushing. We venture to suggest that the commission shall be further charged to inquire what effect the drought of a severe summer may have upon the closets and house-drains. Again, is the problem of "utilising sewage" solved in several places on the Continent at that risk to health which must always be entailed when sewage conduits and receptacles are left dry? We should be glad to hear that the atmosphere of some of the closets and air-chambers connected with the drains was to be examined and tested, that the effects of winds blowing through the sewers would be investigated, and that the general sanitary condition of the districts where sewage is "utilised" was to be carefully scrutinised and form a prominent topic of the official report.

DEAR MEAT.

What dear meat means already to householders is too well understood for them not to be gravely concerned with the unpromising prospect of having to pay still higher prices during the ensuing winter. In hospitals, also, where, of necessity, the consumption is large, the effect of high prices of meat will be greatly felt; and it will be felt even more severely in the case of sick people belonging to the poorer and middle classes, who have no funds to fall back upon. As it is, many belonging to the professional classes are much worse off and fare worse than the working classes in this country. As everyone knows, the consumption of meat has enormously increased of late years, and it forms the essential part in many households of three daily meals, to the injury very often of those who consume it. Still, in the case of sick people it sometimes happens that their diseases may be partly attributable to a state of chronic starvation, and it commonly happens that a liberal supply of animal food is required at some stage of their illness, or during convalescence. What with adulterations of many simple articles of diet, and the dearness of others, like milk, eggs, fish, and the like, many a professional man with a family outwardly maintains a fair social position, but, in reality, leads a life of what may be termed genteel starvation. The occurrence of a case of typhoid fever, or scarlatina, proves most disastrous in such a household, and may even irretrievably ruin the head of it. What dear meat means under circumstances like these can be more readily imagined than described. It is a question in which we are all interested, but we confess that while we have no sympathy with the grumbling of those—and they form a numerous class in this country—who eat more meat and do less work than is good for them, we cannot avoid sympathetically asking ourselves what is to become of people who are compelled to live with strict frugality, and, after toiling all day, are anxious at night as to the morrow's bills? Surely more extensive use might be made of Australian and other preserved meats imported into this country.

COMPOSITION OF PUS AND MODE OF FORMATION OF THE LEUCOCYTES OF PUS.

In a memoir recently presented to the Academy of Sciences, M. Bergeret, of St. Léger, gives the results of a long series of investigations he has undertaken in regard to the composition of pus, and the mode in which the leucocytes it contains are formed. He finds that every collection of pus, whatever may be its origin, contains pyocytes in three stages of development. 1. Young leucocytes not more than twenty-four hours old. These contain mobile corpuscles of various sizes and forms—globular, linear cylindrical, in chaplets, or dumb-bell-shaped, or hemispherical, and conceal the nuclei. The pus-corpuscles are highly hygrometric, and, when immersed in water, swell till they burst, discharging their granular contents and nuclei into the surrounding medium. 2. Young leucocytes from twenty-four hours to four days old. The nuclei of these are very apparent; a portion of their contents is still mobile, the remainder is attached to the nuclei and renders them granular. These leucocytes are smaller than the former, and irregular in form, in consequence of the envelope having contracted adhesions to the nuclei. They are less hygrometric, but still swell in water usually more or less irregularly; and the granules they contain, at first quiescent, soon begin to move, and escape when the envelope bursts. 3. Old leucocytes, the age of which is more than four days. These are small and crenulated, have lost their hygrometric properties, and their granules are no longer capable of reacquiring movement after imbibition of water.

In addition to the leucocytes, pus is also composed of serum, and in the serum float numerous mobile granulations of the same form as those contained in the interior of the leucocytes; their movements are, however, much more free, and whilst some may be observed merely to oscillate, others traverse the field of the microscope with more or less rapidity and in every direction. These granulations also, like those in the pus, only remain lively for about four days. After this they group themselves together, and form the small amorphous granular masses which are always met with in collections of pus, but especially in chronic abscesses.

M. Bergeret explains the formation of pus in a blister by pointing out that on the under surface of the detached epithelium there is a layer of amorphous mucus, which constitutes a pyogenic medium. He is opposed to Virchow's views.

VEGETARIANISM A CURE FOR INTEMPERANCE.

A paper read before a section of the British Association last week may perhaps call attention anew to one of a tolerably comprehensive series of specifics recommended for the cure of intemperance. Unfortunately they partake too much of the nature of those "love potions" and "beauty powders" which beguiled the faith of our forefathers. The notion of making a person possessed with the passion for drink temperate by feeding him exclusively on vegetables is at first sight so amusing that it amply justifies the pleasantry about a forthcoming proposal to prescribe "intemperance as a cure for vegetarianism." Without doubt the consumer of huge quantities of succulent edibles or of food which promotes the absorption of a considerable amount of water when it is eaten, is not so likely to drink copiously between meals as an individual who feeds differently. In so far, therefore, as the propensity to drink is called forth by the sensation of thirst, which is seldom the case with the genuine drunkard, the vegetarian may be less prone to irregular and uncontrolled indulgence than the eater of meat. It is also possible that the vegetable feeder, living, as it were, an octave under the consumer of flesh, may not require the same amount of stimulant to recover him to his habitual tone when he falls below from exhaustion; and it is this need that usually incites to drink. Meat is a stimulating diet, and in excess it is well known to elevate the pitch of organic life to a point of high tension. The artificial stimulant required by the excessive meat-eater is alcohol; the sufficient stimulant of the man who lives wholly upon vegetables may possibly be milk! There is something in this, though we state it thus broadly. Nevertheless, to attempt the cure of a propensity for the excessive use of stimulants by changing the whole character of the diet is so startling and unscientific that it reads more like the nostrum of an enthusiast than the conception of a sober practitioner. It entirely ignores the peril of lowering the vital tone of a system already enfeebled by over-stimulation. We venture to hope no one will have recourse to the expedient, even by way of experiment, except under conditions well considered and abundantly secured from a peril neither imaginary nor of small proportions; and we venture to think few who have bestowed as much thought on the prescription as these precautions imply will put it in practice.

CONCENTRATED FILTH.

Take an apparatus ingeniously constructed to collect and keep back all the worst impurities of water, while it allows the fluid to percolate slowly through its strainer; continue to pass water for drinking purposes through the residuum accumulated until it runs out so discoloured as to attract the notice of persons drinking it; let the water you subject to this *purifying* process have been previously driven, with force enough to stir up all deposits, into a cistern the bottom and sides of which are thickly encrusted with slimy matters derived from the same source, the water having first lain for a considerable time exposed to sun, rain, and air, in one or more of the reservoirs provided by water companies for the purification of their supply, but generally regarded by the neighbourhood as convenient receptacles for dead cats, and rapidly developing into aquaria. Could any procedure not intentionally designed to ensure a subtly impure condition of our principal drinking fluid be more likely to produce that disagreeable and dangerous state of matters? The domestic filter gives the finishing touch to a process eminently unsanitary, and all because the apparatus employed to cleanse the water passed through it is not itself sufficiently clean to be innocuous. It is probable that some of the most deleterious foreign substances in water are not eliminated by the filter. If this be the case, the consumer takes them in a highly diluted form, and may escape with impunity. But whatever the filter detains is accumulated in a mass of slime and filth through which the water trickles gradually, doubtless dissolving much which it would otherwise not take up and becoming more or less poisoned by the putrefying matter through which it is wantonly set to gravitate. The facts are so simple and suggestive that they need no enforcement. Better leave the water unfiltered than pass it gratuitously through a bed of concentrated filth. The notion of cleaning a filter once in twelve months, or, as is the practice in some establishments, once in three years, when the apparatus itself requires removal, is so nasty that unless the fact were notorious it would be over-credulous to speak of it. The custom of leaving cisterns uncleaned until they become interesting to the naturalist, and allowing reservoirs to grow into manure pits, is probably too deeply rooted to be changed by anything short of a revolution in the interests of common sense and common decency.

HEALTH OF CUSTOMS OFFICERS.

Dr. Dickson, R.N., medical inspector of Her Majesty's Customs, contributes his annual chapter to the nineteenth report of the Commissioners of Customs. Nothing specially worthy of record appears to have occurred during the year. The out-door Customs establishment consisted of 923 men, 700 of whom were stationed in London and 223 at Gravesend. There were in the force during last year 534 cases of sickness, 148 of which were due to diseases of the respiratory organs, 84 to those of the organs of digestion, 9 of the urinary organs, 1 to periostitis, 46 to diseases of the skin and cellular tissue, and 66 to accidental injuries. Dr. Dickson says, "the same remarkable absence of zymotic disease, which has been commented on in former years, testifies to the fact that notwithstanding the vast number of vessels (some 12,000) on which these officers have been boarded for a greater or less length of time, the risk of their contracting or conveying infectious maladies is apparently infinitesimally small." These officers have, however, had fortunate escapes, for several vessels during the past year passed Gravesend and hauled into dock with contagious disease on board, among which the *Abbotsford* steamship was conspicuous, which, when examined by the officers of the Port Sanitary Authority in the Victoria Docks, was found to have no less than eight cases of small-pox on board. There is no doubt that the work of Customs officers afloat is often risky and by no means specially conducive to the maintenance of health.

POLICE RETURNS.

The Commissioner of Police of the Metropolis, in his annual report issued lately, and to which we have already had occasion to refer, states that during the past year 2773 persons suffering from accidents or other causes were taken by the police to hospitals. The gratifying announcement is made that there was a diminution in the number of drunk and disorderly persons in 1874. We hope the improvement will be continuous. Colonel Henderson complains of the difficulty of dealing with this class of persons. It is a duty in the execution of which the police are frequently maltreated and always annoyed, "especially as the fact of a person being drunk is always a matter of opinion in which the medical gentlemen who are called in are frequently as much at fault as the police themselves." "There is, in fact, no medical test for drunkenness," bewails the Commissioner. It must be admitted that among such a huge number of cases an occasional mistake appears to be inevitable. We are glad to find that the most ample authority is now given to officers in charge of stations to send for medical aid in every case in which there is the least ground for doubt. In the year such aid was afforded to 7611 persons, of whom 2319 were found in a state of insensibility. The fees paid to surgeons out of the police funds amounted to £2115 of which a small moiety only was recovered. A great decrease in the number of prostitutes apprehended was observable. The general health of the force was about the average of former years.

IN PERILS BY WASHERWOMEN.

IT cannot be said that the sort of cleanliness secured by a plentiful recourse to the services of washerwomen is wholly productive of health or happiness. Apart from the circumstance that the soapy sisterhood are prone—especially those who protest in capitals that they use no chemicals—to reduce the newest and strongest raiment to the condition of tinder, there is the alarming fact that, as a rule, they cast everybody's clothes into the same cauldron, immerse them in the same indescribable solutions, and hang them up to dry in the same artificial atmosphere and humid exhalation of muck. It is too horrible to think to what dreadful contingencies the linen we wear in closest contact with the highly absorptive skin is exposed in the process of purification. Professor Tyndall has not yet scared the public with some sensational demonstration of the constituent parts of a vapour such as that with which the ordinary washerwoman fumigates the clothes of her customers after laving them in an elixir into the nature of which science should not inquire too curiously. If any such intellectual treat is in store for us, let us hope it may be long deferred. Meanwhile something should be done to secure at least the minimum of mischief from a measure of cleanliness meant to be health-preserving. An inspection of laundries, and particularly the establishments of those nondescript persons who "take in washing," would do much to throw new and needful light on the perils by which we are incontinently beset. Overcrowding in the matter of living is bad enough. We are not sure whether crowding clothes of all orders and conditions of foulness into one "wash," and then crowding them, damp and dirt-attracting, into an atmosphere seething with vapourised filth, is not as much to be deprecated and more to be feared.

OUTBREAK OF SCARLET FEVER AT HUDDERSFIELD.

SCARLET FEVER has made its appearance at Huddersfield, and the medical officer of health, Dr. Bland, reports that up to the evening of the 18th instant there have been seventeen cases since the 7th of August. All the early cases were scholars in the Huddersfield Church Infant School. The sanitary condition of the school does not seem to have been quite perfect—the gratings communicating with the drains to carry off the surface water being choked up, the closets not over clean, and the ashpit containing a quantity of semi-liquid excreta. The school-building itself, however, is lofty and well-ventilated. Dr. Bland very properly drew the attention of the Sanitary Committee to the importance of preventing "not only those who are recovering, but also those who have come in contact with them, from mixing with others, and so spreading the disease." The Sanitary Committee at once proposed to close the school in question, fearing lest other children should become infected, and a request to do so was addressed to the managers of the school, who at first declined to accede, but afterwards consented to close the school for three days! The Vicar of Huddersfield has written a letter to the Sanitary Committee denying that the school premises were in the insanitary condition described by the medical officer of health, and protesting against the closure of the school. As to the sanitary condition of the school, or whether the disease originated there, or was brought to the school, we cannot decide without a personal inquiry into the facts of the case made on the spot, but we heartily approve the action of the Sanitary Committee in closing the school after the appearance of scarlet fever among a considerable number of the scholars. The first duty of the Sanitary Committee was to check the extension of the disease, and this could only be done by isolation of the centres where the disease had been most severe and the cases most numerous. There is not a shadow of doubt that, however originated, the Infant School was the focus of the disease, and the intercourse of so many children at this infected spot was a source of danger to the inhabitants, and a means of disseminating the disease through all parts of the town.

HEAT OF RAILWAY CARRIAGES.

ONE of the many discomforts incidental to travelling at this time of year is the intolerable heat of the railway carriages, and the railway companies seem to do their utmost to increase it. We entered a carriage at Charing-cross Station the other day. It had evidently been standing for some time in the sun, for the wood was almost too hot to touch. The roof was black and dull—the best possible surface for absorbing heat, and both windows were shut. It was like entering a baker's oven, and we fled precipitately to a third-class carriage, where the temperature was, at any rate, some degrees below blood heat. In some conditions of body it would be highly unsafe to travel in such a carriage, and when we consider the ease with which the evil might be lessened, we are amazed that even railway officials do nothing in the matter. A false roof a few inches above the true one, painted white, and permitting the free passage of air below, would make a wonderful difference, and would be an advantage both in summer and winter. If any contrivance could be added which should allow the windows to be opened without giving entry to a cloud of dust, railway carriages might become positively comfortable, and some of the longing for State management of railways averted.

CAPTAIN WEBB AFTER HIS CHANNEL FEAT.

WE have received the following interesting communication from Mr. Thomas Law Webb, M.R.C.S. and L.R.C.P. Lond., of Ironbridge, Salop:—

"A few facts relative to the physical condition of my brother, Captain Webb, on his leaving the water after swimming from Dover to Calais, will be of interest to the profession. He assures me that on landing he did not feel at all cold, but was as warm as when he started. He felt, however, fearfully tired and exhausted, and was very sleepy. He fell asleep several times as he was being driven to his hotel, though roused repeatedly by his cousin (Mr. G. H. Ward, who never left him throughout), who thought it best not to let him sleep until he had taken some nourishment. At the Hôtel de Paris, he went to bed, and drank some hot wine. Immediately on getting to bed, he took his own temperature with a thermometer with which I had provided him, and found it to be exactly 98° Fahr. He did not *count* his pulse, but *felt* it, and says it was 'slower than usual.' After five hours or so of sleep, he awoke feeling rather hot and feverish. He then took his temperature again, when it had risen to 101° Fahr. He says that his face was then flushed, and his skin hot and dry. He then slept again for some time, and on waking felt himself 'all right,' excepting a troublesome stiffness of the arms and legs, scarcely to be wondered at.

"Towards the termination of his swim he became nearly blind from the salt water. He denies that he was at any time delirious (as was stated in some of the newspapers), and Mr. Ward also says that he certainly was not so. Moreover, I think that his own careful temperature observations disprove this. He told me on Sunday last that his temperature, when taken the second time, was 101° Fahr.; and I find that my thermometer (which he has just returned to me) still registers precisely 101°. At present he is perfectly well in every respect—indeed, as well as ever he was; for we must not consider the abrasions on his neck caused by the salt water to be of any account. That he is apparently *not one whit the worse* is an immense relief and satisfaction to me, and a further proof of the perfection and soundness of his circulatory system and constitution generally."

THE GROUSE DISEASE.

A member of our staff writes:—"Reports from the Scottish moors this season have all the same tenour, 'Birds never were so scarce.' In fact so great is the dearth of game in some parts of Perthshire that shooting parties are already breaking up, and sportsmen are returning homewards. This is doubtless the result of the disease which has been so prevalent of late years, and which seemed to be the natural consequence of the enormous quantity of grouse bred in 1872, the moors at that time having been literally over-populated. Density of population amongst grouse, as amongst human beings, seems to have the effect of exposing the weaker birds to the ravages of epidemics, especially should a scarcity of food coincide with great increase in the numbers of the birds, as was the case in 1873. 'The survival of the fittest,' however, is a law which is applicable to birds as well as to men, and sportsmen may find some consolation in the fact that the birds shot this year have invariably been fine and healthy. I hear from one moor on which over 700 head of grouse have been killed that not a single diseased bird has been found. Those, therefore, who have sufficient self-denial to leave a fair number for breeding purposes may expect fine broods and large numbers next year."

ALCOHOL.

The comparative effects of the various members of the series of alcohols obtained by fermentation have been studied recently by MM. Dujardin-Beaumetz, and Audigé. They found that the toxic properties correspond closely to their atomic composition; the higher the figures which represent the atomic weight the greater is the toxic property. The latter varies also, it is to be observed, according to the manner in which they are administered, being greater when introduced by the stomach than when injected under the skin. The experimenters explain this by assuming that the dilution of the alcohol by a foreign substance increases its toxic properties; it would probably be a more correct assumption that there are some limits to the power of subcutaneous absorption of alcohol. The effects of the several alcohols presented little difference beyond that of intensity; they were practically the same. The chief lesions found on post-mortem examination were congestion &c. of the mucous membrane of the intestine, congestion of the lungs, and pulmonary apoplexy. The intestinal congestion was so intense in some parts of the small intestine as to have led to hæmorrhage, and this was found equally whether the alcohol had been administered by the skin or the stomach. On the other hand, curiously enough, the pulmonary changes were more frequent when the alcohol was given by the stomach.

WISE PRECAUTIONS.

The committee of the Children's Hospital at Birmingham are entering with admirable spirit into the very necessary precaution of separating cases of an infectious character from the general run of diseases. They are building new wards for fever, diphtheria, and croup, establishing quarantine wards, providing separate laundries and homes for nurses, so as to cut off every possibility of injurious communication with other parts of the establishment. The importance of these measures cannot be exaggerated, and we call attention to them with the view of lending what support we can to the movement, and with the further object of recommending the adoption of equally prudent reforms elsewhere. There can be no question that the condition of too many provincial hospitals is lamentable in the extreme. Under the plea of poverty some of these institutions perpetrate offences against the first laws of sanitary science which would call down the severest censure if committed by establishments not privileged as these are. It would be better to let the poor remain in their own homes at the mercy of their neighbours than to remove them to some of the hospitals started without sufficient resources or under management so defective in point of wit and zeal that they soon become worse than useless.

THE ARREST OF CARDIAC PALPITATION.

A correspondent of *L'Union Médicale* draws attention to the influence on palpitation of the heart of lowering the position of the head. The effect is said to be its almost instantaneous arrest. Whether the palpitation be from nervous disorder of action or from anæmia, if the head be so lowered by bending forward that a mechanical congestion of the upper half of the body results, the irregular action speedily ceases. This treatment, however effective for pure palpitation, can hardly be recommended in cases of organic disease of the heart in which dyspnœa is associated with the disturbed action. It will probably be found useful in the simpler cases. The writer (Dr. Lardier of Rambervilliers) speculates that the effect may be analogous to or identical with the retardation of the cardiac pulsation which occurs as one of the earliest symptoms of asphyxia, and which appears to be a consequence of the venous stasis in the upper part of the spinal cord. It may, he suggests, be due to the failure of arterial stimulation to the roots of the nerves which pass from the spinal cord to the sympathetic, and which have for their function, as von Bezold showed, the acceleration of the heart's action.

SUCCESS OF STUDENTS AT EPSOM COLLEGE.

At the last Matriculation Examination of the University of London many of the students of the Royal Medical College acquitted themselves creditably, and one, Mr. A. Cutfield, passed third in honours. At the subsequent First M.B. Examination we find in the list of successful candidates the names of no less than five Epsom students, Mr. F. Baylis, Mr. E. M. Cuffe, and Mr. Noble (the last now a scholar of Keble College, Oxford—a scholarship gained in open competition), standing in the first class, and Mr. Thomas and Mr. Yate in the second. Considering that this is the first time that Epsom students in the ordinary course of their studies have been prepared for the higher examination, the result must be regarded as very satisfactory.

PARTRIDGE DISEASE.

ACCOUNTS we have received describe the partridge-shooting this year as unsatisfactory. In Surrey especially the birds are very scarce in low-lying parts, although on the high ground coveys of fair numbers and quality are to be found. Scores of young birds have died from an inflammatory affection which attacks the eyes, producing blindness, and so depriving them to a great extent of the power of obtaining food. The continuous wet weather which prevailed at the time when the birds were hatched may account for much of this loss. It would be interesting to ascertain the precise nature of the disease by careful examination of a few dead birds. The result would reward the pathologist, and might prove valuable in more ways than one.

MORTUARIES.

THE want of mortuaries in the metropolis is so frequently made apparent in inquest proceedings that we welcome any attempt to increase a very necessary provision. We understand that Dr. Joseph Rogers will shortly submit the following motion to the consideration of the Strand Board of Works:—"That, with the view to the more effectually and economically securing the establishment of mortuaries in the different parishes of the metropolis, this Board do memorialise the Metropolitan Board of Works, urging that Board to apply for powers in the next session of Parliament authorising that body to undertake their erection in such parts of the metropolis as may be considered necessary."

STENCH ON THE SURREY CANAL.

WHY is there such an intolerable stench on the Surrey Canal at the point where the South Eastern Railway crosses it? We have known persons absolutely nauseated by it, and many close the windows as they approach the spot. Have the sanitary authorities overlooked this choice corner, or are there some technical difficulties which have prevented the nuisance from being swept away? Surely the powers of the new Public Health Act enable the medical officer of health to make very short work with the offenders.

THE Medical Officer of Health for St. George in the East, Dr. Rygate, has intimated to the district authorities that he will lay before the Metropolitan Board of Works at the next meeting an official representation concerning 291 houses in the parish, which by reason of want of light, air, ventilation, sanitary conveniences and other causes are unfit for human habitation, and require rearrangement or reconstruction. As might have been expected, such a resolution has proved distasteful to the vestry, who think they ought to have been consulted by their officer before he determined on such a step. We hope Dr. Rygate will disregard any factious opposition to his course of action. He has given an example of courage and independence which might well be followed by his colleagues in other metropolitan districts. It is impossible for medical officers of health to perform their duty as long as they are hampered by local influence.

IN London 1440 deaths were registered last week, including 1 from small pox, 22 from measles, 71 from scarlet fever, 10 from diphtheria, 53 from whooping-cough, 24 from different forms of fever, and 215 from diarrhœa. Different forms of violence caused 43 deaths. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained 225 patients on the 28th ult., 180 of whom were under treatment for scarlet fever. Of foreign cities, Berlin, as usual, has the highest death rate—viz., 45 per thousand annually.

THE special report on the licensing laws in Liverpool, published in *The Times* of the 2nd inst., makes a particular reference to the surroundings of the Sailors' Home in that town, that must perforce remind all sanitarians of the necessity for an extension of the Contagious Diseases Acts to our mercantile marine towns in general, and to Liverpool in particular. It appears, too, that the work would in this instance be comparatively simple, as it would appear that the haunts of sailors' prostitutes in this port are well known. Houses of bad character are, according to the chief constable, "there so full of prostitutes, that a respectable person would not go in." Pending the adoption of the Contagious Diseases Act, we recommend all shipowners who have not a regular complement of seamen on their staff to take advantage of the 9th section of the Merchant Shipping Act of 1867, and have all suspicious hands medically examined before signing articles.

THE *Gentleman's Magazine* for this month contains an article by Mr. M'Cullagh Torrens, M.P., on Hospitals. He insists "that in proportion as hospitals are big they are bad; that, in proportion as they are far off, they fail; and that in proportion as they are crowded with an accumulated mass of disease they cease to be what they ought to be—refuges for the saving of life—and become pest-houses for the harbouring of death," and supports his contention by quoting the opinions of medical men in favour of treatment in small buildings. We shall next week devote greater space to the consideration of the article.

THE sanitary state of Camborne is, according to Mr. E. S. Angove, the medical officer of health for the district, far from satisfactory. There are a large number of nuisances which require to be removed; very many houses are without privy accommodation; the water-supply is defective; there are many open gutters which smell very offensively; while the drainage calls for immediate improvement. In spite of conditions militating so strongly against the preservation of public health, the death-rate is not so excessive in the district as might have been expected, a result no doubt due to compensating natural advantages.

WE are glad to find that the St. Pancras Vestry has resolved to take the initiative in removing some of the pest centres to which attention was recently directed in THE LANCET. One or two of the worst nests are to be cleared away under the new powers given by the Artisans' Dwellings Act, and the medical officer has been directed to inquire and report upon the general condition of the parish. It is much to be desired that the zeal evinced by this "local authority" may extend to the authorities of Kensington, Westminster, and Chelsea.

AT an inquiry held by Colonel Cox, the Local Government Board Inspector, relative to the proposed sewerage works at Aspull, near Wigan, the Commissioner stated there could be no question as to the desirability of providing an efficient system of sewerage for the township; the fact that last year the death-rate was 39·7 per 1000 showed, he remarked, even the necessity of such a provision more strongly than could any words of his.

WE gather from a recent report by Mr. S. W. North, medical officer of health for York, that scarlatina, though in a mild form, still exists in that city, in spite of the measures which have been adopted for its suppression. The governing authorities of schools in infected districts have been warned of the danger of receiving children from suspected houses, and this precaution, when exercised, will probably prove very efficacious.

WE have no doubt that a considerable impulse will be given to the temperance movement in this country by the fact that Her Majesty the Queen has lately consented to become a patroness of the Church of England Temperance Society, a society which does not necessarily insist on total abstinence from alcoholic liquors.

A SERIOUS outbreak of scarlatina is said to have occurred amongst the children in the married quarters at the School of Military Engineering. We hope shortly to ascertain some particulars regarding the epidemic.

WE understand that Sir Duncan Gibb has resigned the office of Physician to Westminster Hospital in consequence of the state of his health.

SIR JAMES ALDERSON, Knight, M.D., and Arthur Farre, M.D., have been appointed Physicians Extraordinary to Her Majesty.

SIR ROBERT CHRISTISON has been elected President of the British Association for the year 1876.

LUNACY.

THE last Report of the Commissioners in Lunacy (a brief statistical summary of which was given in THE LANCET of the 7th ult.) contains, as usual, a number of interesting facts relating to insanity. There is, of course, a large actual and comparative increase in the total number of persons under confinement or supervision. The county and borough asylums appear to be more and more crowded with harmless and chronic cases, which, according to the opinion of the Commissioners, might we well provided for in workhouse wards. But, if we remember rightly, it was decided long ago that lunatics or imbeciles ought not to be retained in workhouses, because no proper machinery existed for their safe keeping and accommodation. Hence the origin of the establishments at Leavesden and Caterham. It appears that in the large asylums the night watching is still very defective. Epileptic patients are found dead in bed, and suicides have occurred in the night. This is the third time that the Commissioners have specially alluded to these faults. They express in this report a strong opinion that the sick and dying demand continuous care and nursing during the night; that the epileptics should have assistance always at hand during their terrible seizures, and that all suicidal patients should receive strict personal supervision.

It appears that the boroughs of Portsmouth, Norwich, Bath, and Derby are still without asylums, and that the other boroughs mentioned in the last report as being similarly situated have not as yet taken any steps to comply with the provisions of the Lunacy Acts. Of the patients in local hospitals, the recoveries during the year were, as compared with the admissions, in the proportion of 45 per cent., or 5 per cent. higher than in the previous year. There are now 115 houses in England and Wales licensed for the reception of lunatics, which accommodate unitedly a total of 2293 males and 2638 females. In commenting upon the workhouse establishments, the arrangements made for epileptic cases at the Brownlow Hill Asylum, Liverpool, are severely censured. There are no closets or bath-rooms in connexion with the ward, and no special lavatory. The only court available for exercise is entirely flagged, and is used by the inmates of the surgical wards as well as by the imbeciles and epileptics. The same unsatisfactory condition of things still exists in the Nottingham Workhouse, although on two previous occasions the Commissioners have commented upon these defects. The day-rooms continue to be much overcrowded, the means of personal washing insufficient, and the means of bathing inadequate. Three prosecutions have occurred during the year, none of which call for special notice. The State Criminal Asylum at Broadmoor contained at the end of last year 509 inmates, of whom 402 were men and 107 women. No person certified to be insane whilst undergoing sentence of penal servitude has been sent to this asylum from Millbank since November last. Another asylum is contemplated for the lunatic convicts now accumulating in prison, and for such convicts as may hereafter become insane, but it is not proposed to transfer to the proposed asylum any of the convict class now confined at Broadmoor. The report as to the arrangements of this asylum are altogether very satisfactory, but the Commissioners recommend the appointment of a fourth medical officer, as the professional duties are very responsible, harassing, and hazardous.

The Hospital for Lunatic Soldiers at Netley contained 44 patients, but a want of comfort and cheerfulness is still observable in the day-room, and it is remarked that the frequent changes in the attendant staff are prejudicial to the inmates.

The Royal Naval Lunatic Hospital at Yarmouth accommodates an average of 190, and the Royal India Asylum at Ealing 119 inmates, as to both of which establishments favourable reports are made.

The seventeenth Annual Report of the General Board of Commissioners in Lunacy for Scotland shows that on the 1st of January, 1874, a total of 8069 lunatics existed in Scotland, 1455 of whom were maintained from private sources, 6563 by parochial rates, and 51 at the expense of the State. It is also estimated that nearly 2000 unreported insane are maintained by their friends in private dwellings, most of whom belong to the classes little removed from pauperism. So that the proportion of insane to population is as 228 per 100,000, the most striking feature shown being the great increase of patients detained in asylums; for gratuitous treatment in asylums is now obtained with greater ease, the institutions are more scattered over the country, and patients entering them do not require to be removed so far from home and friends. The chartered and Royal Asylums, which have been erected out of legacies and donations from charitable persons, take the place of district asylums in England and Wales. They are partially maintained also by profits derived from the care of wealthy patients, but it is much doubted whether this relief to ratepayers is desirable. A comparison of statistics shows that in Scotland the private insane are treated in public institutions to a much greater extent than is the case in England, there being in the former country a larger proportion of public establishments of a high character receiving private patients.

Correspondence.

"Audi alteram partem."

WOOD v. THE MANCHESTER, SHEFFIELD, AND LINCOLNSHIRE RAILWAY COMPANY.

To the Editor of THE LANCET.

SIR,—A letter, written by Mr. Withington, of Doncaster, and an annotation, which appeared in your issue of August 21st, are my excuse for troubling you with regard to the above. Moreover, it is due to myself, to those gentlemen who took part with me in the case, and to the Company whom I advise, that deductions from an *ex parte* statement should not remain unchallenged.

The facts of the case are briefly these. Mr. Wood, farmer, of Darfield, near Barnsley, was one of several persons injured in a collision at Conisboro' station on November 21st, 1874, caused by a light engine going at the speed of six or seven miles an hour running into a train standing in the station. On Nov. 30th I first saw Mr. Wood at his house with his medical attendant, Dr. Seaborne, of Wombwell. Mr. Wood had traces of a bruise on the left temple; his left wrist was swollen; there were marks of abrasion, nearly healed, about the left elbow; he complained of occasional headache, sleeplessness, and felt shaken. On Dec. 23rd I received a letter from Dr. Seaborne to the effect that his patient, being well, was willing to settle with the railway company. On Jan. 2nd, 1875, I received another letter from

Dr. Seaborne to say his patient had become very ill indeed, asking me to see him, and telling me that Mr. Lister, of Doncaster, had been called in. On January 6th, accompanied by Dr. Leech, I went to Wood's house, having previously advised Dr. Seaborne that I was coming (a fact hitherto unquestioned until Dr. Withington's letter). To our surprise, neither medical attendant nor consultant was present, and it was not until I met Dr. Seaborne upon a subsequent occasion that I became aware that he had misunderstood what I wrote. After waiting for Dr. Seaborne a short time, and finding that if he was sent for he could not arrive in time to meet us, having obtained permission from the family to see Wood, we went into his bed-room; he was lying in bed on his back, in a dreamy, partly delirious condition; he knew me, called me by name, shook hands with me and also with Dr. Leech. His temperature was 103·6°; his pulse 130, feeble, the beats being somewhat indistinct. His tongue had a brown streak down the centre, the edges red. He had slight sordes on his teeth. His pupils were moderately dilated, responded well to the action of light, and exhibited no symptom of intolerance of light. The abdomen was distended, there was much pain on pressure in the right iliac fossa, and there was an ill-defined rash on the lower part of the sides of the abdomen. His wife told us the excreta were voided involuntarily and had been for two days. He had subsultus tendinum. There was no complaint of headache or vomiting, though his wife said that these symptoms had been troublesome. We considered that the symptoms pointed to typhoid fever and not to cerebral mischief, and so I reported to the Railway Company. We were at that time utterly ignorant of the existence of typhoid fever in the vicinity of Wood's house. On January 10th Wood died.

On January 11th, about 10 P.M., a telegram arrived at my rooms to say a post-mortem examination would take place next day at 10 A.M. I went to Barnsley (Darfield is five miles off in the country) as early as I could, and hence was not there at the time fixed by Dr. Seaborne, of which I had such short notice. Fortunately Dr. Seaborne had waited a considerable time, and when I arrived merely the skull-cap and a small piece of the dura mater had been removed. Drs. Lancaster, Blackburne, Aitcheson of Barnsley, and myself watched the dissection of the brain and its membranes throughout, and failed to see any abnormal appearances beyond some congestion of the pia mater and choroid plexus and slight opacity of the arachnoid membrane. If Dr. Withington will refer to Gray's, or Quain's, or Wilson's "Anatomy," and read up "Glandulæ Pacchioni," he will find in my "important admission" simply a recognition of a very common well-known anatomical appearance, certainly very different from the lymph of recent meningitis. It will thus be seen that four medical men who watched intently the whole dissection of the brain coincided in the opinion that there were no signs of meningitis. It would appear from Dr. Withington's letter that I did not see sufficient of the examination of the brain to form any opinion about the existence of meningitis; as a matter of fact, however, I was present during the whole of the examination except the removal of the skull-cap and the raising up of a small portion (not over two inches square) of the dura mater. The gentlemen who conducted that part of the post-mortem adopted the somewhat remarkable plan of raising in the first place a piece of the dura mater close to the longitudinal sinus at the vertex. That he should find when he did this "strong bands of lymph," which he subsequently described as like catgut, is perhaps not so much to be wondered at, but I fail to see how these could indicate that the patient had died of acute meningitis. I may add that Dr. Aitcheson, who saw this piece of dura mater removed, is quite certain that the appearances observed were normal. Even if the report presented by the medical men acting for the family at the inquest be accepted, the appearances would hardly be compatible with death from acute meningitis, for no trace of pus or purulent lymph was described as being present. But, as above stated, four medical men who watched the post-mortem absolutely deny the existence of any lymph whatsoever, and of these one, Dr. Lancaster, was for five years assistant medical officer at the West Riding Lunatic Asylum, and thus had special opportunity of being acquainted with the normal and abnormal appearances of the brain, having during that time made numerous post-mortems in cerebral cases. I must add, in fairness to myself and friends, that at the beginning I suggested a common note-taker, and that we should go into the case together. This was at once refused and quashed by Mr. Lister and his colleagues. The rest of the post-mortem appearances were, in short, these: lungs slightly congested, old pleuritic adhesions most marked on left side; heart healthy; liver congested on anterior edge; kidneys congested; stomach, duodenum, and jejunum nothing abnormal; in the lower two or three feet of the ileum the solitary glands were enlarged; the mucous membrane generally was congested, and about seven or eight inches from the ileo-cæcal valve were three *enlarged, raised,* and *intensely congested* Peyer's patches; the spleen was enlarged, and the mesenteric glands increased in size.

I was very anxious indeed to preserve the diseased portions of the intestines, and wished that they should be at once sent, together with the spleen, to any pathologist of eminence; but the opposition to my doing so was so very strenuous I had to give in, remembering I had no *locus standi*, only being present by "courtesy."

Now, with regard to the probability of Wood having contracted typhoid fever, we have distinct proof—first, that in cottages within fifty yards of his house there were then cases of typhoid fever, and had been for some time previously, and that the epidemic existing then was the second in six months; secondly, that the sewage from the houses in which were typhoid cases drained into a tank situated between the well of the farm pump and the cottages; thirdly, that the tank was full of this sewage and overflowing; fourthly, that the water of the farm pump contained organic matter, so as to render it unfit, and was condemned by Dr. Sadler, the medical officer of health for the Barnsley district. Dr. Sadler distinctly gave it as his opinion that the contents of the tank which received the sewage from the cottages where typhoid fever existed found their way into the pump well. The pump from this well was situated within a few yards of the door of Wood's house, and it was acknowledged that the water was used for general purposes, though denied that it was used for drinking. The drinking water, it is asserted, was always drawn from a pump situated two hundred yards from the farmhouse, but it was shown that even this water contained so much organic matter that it was unfit for use; and the medical officer states that, though close to this well there was some refuse which he believed was ash-pit refuse, from which the impurities might be derived, and though there was a slight inclination in the strata from this last-named well to the tank, still, that when the tank was full, its contents might readily permeate into the well from which the drinking-water was drawn.

I shortly note to you as follows some of my reasons for advising the Railway Company to resist a claim for causing Wood's death:—1. That during life I recognised the symptoms of typhoid fever. 2. That in my opinion, and in that of three other medical men of acknowledged position who saw the post-mortem examination, the lesions observed were those of typhoid fever, and not of meningitis. 3. That when the Company submitted the whole evidence, which had been most minutely and carefully taken at an inquest lasting three days, to three such authorities as Dr. Murchison of London, Dr. Noble of Manchester, and Dr. Clifford Allbutt of Leeds, they all reported in no undecided terms that, from the evidence given, they were of opinion that Wood died of typhoid fever. In the face of these would the Railway Company have been justified in paying a heavy claim, based on the assumption that Wood had died through their neglect?

I wish, in conclusion, to allude to a few points specially raised in Dr. Withington's letter. With regard to the headache, it was not present on the 6th of January, the day I visited Wood; it was not constantly present until the time of his death. Mrs. Wood, in her evidence, stated that her husband knew her up to the time of his death. This is not compatible with a comatose state. Although Peyer's patches may be reddened and made more distinct by purgative medicine, it can hardly be believed that a sharp aperient given sixteen days before death, and an ordinary dose of calomel a few days subsequently, would produce the condition characteristic of typhoid fever described in the report of the post-mortem by a gentleman who gave evidence for the plaintiffs, as in the "early stages of ulceration." With regard to the fact that, though between fifteen and sixteen days elapsed between the first symptoms of disordered health and death, yet distinctive ulceration had not appeared, all I can say is, that though Dr. Mahomed views this as absolutely contraindicating typhoid fever, yet two physicians, Dr. Murchison and Dr. Allbutt, who have made typhoid fever a special study, do not coincide in this opinion.

I have enclosed you a copy of the shorthand notes taken at the inquest, and other papers in connexion with the case, and I submit that had the case been tried before Dr. Withington's ideal tribunal, "arbitration by competent judges," and not before a jury, the verdict would have been upon the other side.

I am, Sir, your obedient servant,

Manchester, August 25, 1875. R. Dacre Fox.

THE CASE OF GENERAL REECE, C.B.

To the Editor of The Lancet.

Sir,—My attention has been directed to the leader in your issue of the 14th inst., and Dr. Harrington Tuke's letter thereon in your paper of the 21st inst.

The question as to General Reece's sanity will, it appears, be tried in the Probate Court, his sons having determined to dispute his will. I presume Dr. Tuke was ignorant of this fact, or he would not have attempted to induce the public to prejudge the case. Suffice it for me to say that Drs. Wilks, Sillifant, and Langston are all satisfied the General was of sound disposing mind, and that five gentlemen, as fully competent as medical men generally are, who were present when the General instructed the solicitor to prepare the will, which unfortunately induced the sons to call in Dr. Tuke on the day it was executed, will all swear that General Reece was capable mentally of disposing of his estate. The case, however, opens up much more important ground to the public, and I cannot help thinking that had Dr. Tuke known all the facts he would not have expressed his opinion that "it shows very forcibly the intense jealousy of our English law of any undue influence with the liberty of the subject, and, with the present legal safeguards, proves the impossibility of any really sane man being wrongfully treated as a lunatic." On the contrary, the case, as you observe, "illustrates very forcibly the need for extreme caution in dealing with those supposed to be insane." I have known General Reece for twenty years. His married life was not happy, for very early he was separated from his wife, by whom his children were brought up. I have now before me a letter from the Rev. W. S. Reece, admitting I knew his father much more intimately and better than he did, and giving as a reason that he had seen little or nothing of him since he was seven years old. In March last I was sent for to see General Reece. I found him in apartments he had resided in for six years. He was very ill from bronchitis, and desired to make his will. He had repeatedly explained to me the manner in which he should leave his property, and had asked me to be his executor, but this I had declined. After several interviews, he wrote me he was better, and should postpone making his will until he could come to my office; but he had a severe relapse, and I then, with his solicitor, Mr. Pike (Merriman, Pike, and Merriman), attested his will. I forbear mentioning its provisions for obvious reasons, but as the General became worse, I repeatedly urged him to permit me to write to his two sons (his daughter was and is in Australia); he, however, refused, as he had a great dislike to his children knowing how he had bequeathed his property. Eventually I insisted he should let them know he was ill, and to this he assented, upon condition that they did not come to town. Subsequently I was allowed to summon them, but the General dreaded their coming, and more than once declared that he knew he should suffer in consequence. In a few days he sent for me, expressed great indignation and regret at the treatment to which he was subjected, as it confirmed his forebodings, and he determined to alter his will. Both sons were informed of this intention, and they agreed to an arrangement between themselves to divide equally, but the next day the younger one informed me that he should dispute the will, as he believed his father to be insane. I cautioned him that the result might be very disadvantageous to him pecuniarily, and his brother asked me to prepare a formal notice for his signature, intimating that if the attempt was persisted in he would not be bound by the agreement mutually entered into; and he further asked me, as he could not longer remain in town, to arrange for the removal of his father nearer to my office. On the 26th of June Dr. Broxholm was of opinion the General might be removed, but arrangements made for this purpose were frustrated by Lieutenant Reece having informed his father that he was to be taken to a lunatic asylum, and the latter then again expressed his determination to alter his will. Both Mr. Pike and I did all we could to combat this intention, and eventually the General removed his affairs from Mr. Pike, and placed them in the hands of another solicitor, by whom the new will was prepared, I, with four gentlemen, being present when the instructions were given, and on this occasion with the knowledge of Lieutenant Reece. I consented very reluctantly to act as executor, but declined to receive a legacy. This was on the 1st of July, and, by special appointment with the General, I called to see him on the 3rd of that month, when, to my great surprise, I was refused admission, and informed that Drs. Tuke and Broxholm had signed certificates of lunacy. The next day I, with Dr. Wilks, saw Dr. Broxholm, who stated that the proceedings had been taken with the authority of the Lunacy Commissioners, and he declined to allow Dr. Wilks or myself to see the General. I at once submitted a full statement of the case to the Commissioners, and in reply received from their secretary a letter as follows:—"Major-General Reece has been placed under the charge of John Wheeler, by order of his son, Lieutenant Reece. The Commissioners in Lunacy have no authority to order the detention of a private patient." I sent a copy of this to Dr. Broxholm, and again demanded admission to the General. This being refused, I consulted no less than six eminent Chancery and common-law counsel, all of whom declared the case unprecedented, and the only advice I could get was to bring an action for false imprisonment. This being obviously useless, I, at the suggestion of an eminent authority on lunacy law, applied for a writ of Habeas Corpus, and I believe Justice Denman would at once have granted one had a member of the General's family applied, but he directed a summons to be served upon Lieutenant Reece and John Wheeler, to show cause why the writ should not issue. This summons was heard before Baron Cleasby, who at once said I must have access, and I left the Chambers with the distinct understanding that this would be allowed; but it was again refused, and it was not until the 9th of July that I, in the presence of Drs. Wilks and Broxholm, saw the General. From this date until the 26th of July every device was resorted to by the sons to delay the proceedings and to prevent my seeing the General, and I did not again do so until that day, when Dr. Wilks was again present, and the General himself wrote a letter to the Judge, requesting the writ might issue, and this was accordingly done on the 28th of July. The return was that the General was insane and physically incapable of removal, but it was not until the 31st of July, although I had made repeated applications, I saw the certificates of lunacy; but Baron Cleasby, seeing the flaw in them, upon which you very properly comment, and which Dr. Tuke states arose from directions received from the Commissioners, at once declared they were no answer to the writ, and that, as regarded the state of the General's health physically, he would satisfy himself; and his lordship accordingly, with his physician and clerk, went the same day to the General's apartments. After an interview of twenty-five minutes I was called in and informed by Baron Cleasby that the General could not be removed, but that he was fully entitled to the free use of his will, and that I, his solicitor, and any friends must see him whenever we pleased; and his lordship added, "that if he did not then make a formal order, it was only because he felt sure his directions would be respected by all parties." On this occasion the General declared I had his full authority for all I had done, thanked me, and begged I would see him with the solicitor the next day, and in the presence of Baron Cleasby, and with his lordship's full assent, the General then signed an official document. Judge my surprise upon calling the next day to find that I and the solicitor were jointly refused admission to the General, although, after considerable difficulty, we were permitted to see him separately. He was then much distressed, and I have no doubt the repetition—after believing he was free—of the treatment to which he had for thirty-one days been subjected had a very prejudicial effect upon his health. He declared he should have no peace until his son and the keeper were committed for contempt, and begged me to go at once to Baron Cleasby. This I did, but, being Sunday, nothing effectual could be done, and upon returning to Huntingdon-street the solicitor, after much trouble, discovered the General was dead. I do not suppose Dr. Tuke has purposely misstated the facts, but he would lead the public to believe that upon my representation the Commissioners instituted an inquiry. I annex a copy of their last letter to me in reply to my request, after the General's death, that an inquiry might be instituted. Dr. Tuke says the imprisonment lasted twelve days. The number was thirty-two. He says that upon application "Judge's orders were freely made to give me access to the patient." The above facts speak for themselves. And he adds: "The action by the learned Judge proves how much importance he attached to the question, and the promptitude with which he would have acted if he had found it necessary;" whereas, as soon as the various obstacles thrown in the way were removed, the Judge did act, but, backed by Dr. Tuke's certificate, the son actually set the Judge at defiance. I have no doubt Dr. Tuke was imposed upon, but what would he have said if the General had made a will in favour of the persons with whom he had resided so many years, and then, in consequence of kindness shown him by his sons during his illness, he had altered it in their favour? Would Dr. Tuke have then said he was acting under "undue influence and suffering from senile imbecility?" I think he will, now that he knows the truth, regret that he signed the certificate so readily.

There are, of course, numerous other facts, but I have trespassed too much already upon your space. I will only add that I have placed all the circumstances before the Home Secretary with a view to an alteration being made in the existing law, under which, I have no hesitation in saying, any English man or woman can be locked up in his or her own house without the possibility of seeing anyone but those who have taken the proceedings or who have been selected to carry them out. I trust I have said sufficient to induce you to lend me your valuable aid to ensure an alteration in the law. I have no pecuniary interest in the case, and am acting solely as the friend and executor of the late General Reece.—I am, Sir, your obedient servant,

Parliament-street, London, August 25th, 1875. S. P. LOW.

THE WEBB TESTIMONIAL FUND.

To the Editor of THE LANCET.

SIR,—Captain Webb is the son of a medical man in this neighbourhood, who is highly respected for his remarkable integrity of character and strictly upright and honest dealing in his profession; his grandfather and uncle were also surgeons of high standing, practising extensively some years ago near Wellington, Salop, and his eldest brother has succeeded his father, who from a long and laborious practice is too much enfeebled to render any assistance.

I should be much pleased to see a fund raised by medical men, to acknowledge the unprecedented feat and undaunted bravery of the son of a professional brother, who has had a family of fourteen children, twelve of whom are living.

I enclose a P.O.O. for two guineas.

I am, Sir, yours truly,
EDWARD G. BARTLAM, F.R.C.S.

Brosley, Salop, August 30th, 1875.

⁂ We have much pleasure in inserting the above letter, and shall be most happy to receive subscriptions for the furtherance of this fund. Amounts already received:—Dr. J. G. Wakley, £2 2*s.*; Mr. John Tweedy, £2 2*s.*; Mr. E. G. Bartlam, £2 2*s.*; Mr. S. Potter, £2 2*s.*

IRELAND.

(*From our own Correspondent.*)

THE prospect of a good harvest is very general throughout this island, notwithstanding the occurrence of heavy rain in some parts of the country, the effects of which are considered injurious according to the local reports.

Foot and mouth disease has occurred in some parts of Ireland; it is hoped, however, that the extent of its ravages is not very considerable.

The loss of nearly fifty thousand sheep in Ireland last year by dogs certainly demands the attentive consideration of the authorities. Doubling the dog tax and the immediate destruction of the many mongrels, and other apparently ownerless dogs now at large in this island, appear more than ever necessary at the present time. We look on the preservation of our food supplies as a medical matter, concerning so intimately as it does the public health.

Apropos of the enlargement and rebuilding of Coombe Hospital, now rapidly approaching completion, thanks to the very important aid of Sir Arthur Guinness, Bart., we may mention that a grateful remembrance of the present Baronet's father, to whose munificence Dublin owes the restoring of St. Patrick's cathedral, in the shape of a very interesting statue by the late Mr. Foley, has just been placed on its handsome pedestal within the railing which surrounds the cathedral in Guinness-street, on the south side of the nave of the cathedral. We have just had the pleasure of inspecting this very admirable work of art, which is a faithful likeness, and which is peculiarly interesting as being, it is said, the last of the eminent artist's works which received his final touches.

At the last meeting of the Dublin Sanitary Association, a resolution of condolence with the family of the late Dr. D. T. T. Maunsell was unanimously adopted. A resolution was also unanimously adopted by the same body, expressive of the desirability for prompt action, by the local Sanitary Authorities of Dublin, under the Artisans and Labourers' Dwellings Improvement Act of 1875, in a city where those classes suffer, as they at present so much do, from the want of suitable dwellings.

Dublin, September 1st, 1875.

Obituary.

JAMES NANCE, F.R.C.S. ENG.

MR. NANCE, the only surviving son of the Rev. John Nance, D.D., rector of Hope and Old Romney, Kent, was born on 20th May, 1818. He was articled to Curtis and Son, of Dorking, in 1835; afterwards studied at University College; became M.R.C.S. Eng. and L.S.A. Lond. in 1840, and F.R.C.S.E. in 1864. He practised at Eccleshall, Staffordshire, for upwards of thirty years, and died there, on May 15th, from (1) coma and (2) irritative fever, after a fortnight's illness, aged fifty-six.

His estimable and honourable conduct gained him universal respect, while his generosity of character and kindness of heart made him many friends. His medical skill, care, and attention, were bestowed as freely on the poor as on the rich, and even more abundantly, very often in cases in which no remuneration was ever asked for or thought of.

His funeral took place at Eccleshall on May 20th, and was attended by a large number of the inhabitants of Eccleshall, together with representatives from the various clubs of which he was the medical officer, as well as by numerous friends, assembled from far and wide to show public testimony to his worth. His name will ever be treasured in the memory of his friends and in the gratitude of the poor.

JOHN THOMAS MERCER, M.B.

A YOUNG man has recently passed away, immolated at the shrine of his profession by diphtheria. Gentle, kind, and unobtrusive, he never made an enemy. To the poor his life was one continued benefaction. When they heard of his death they stood aghast in tearful groups of four or five, and each one had some past benefit to recount. His every neighbour felt that he had lost a friend, and his convalescent patients went to bed again, so great was the shock to them. It is not a little thing to make a mark like this at the age of thirty-six; yet it is a grateful tribute to the daily teachings of a well-spent life. Honour and uprightness in thought and action made him the repository of all confidence, social and material, which is rarely accorded to men of twice his age.

In his brief illness he was gentle and patient and thankful, but never hopeful of his recovery. Sir William Gull, to whom he was clinical clerk, put off his appointments that he might give his help and sympathy to a professional brother, but all availed not. He passed away like a sleeping infant, without a struggle or a sigh. Such was the end of John Thomas Mercer, M.B., on June 9th, 1875. He was interred in Norwood Cemetery, and followed by the whole of the profession in the neighbourhood.

HENRY ASHTON, L.R.C.P. EDIN.

Mr. Ashton was born on the 5th March, 1813, at Slaithwaite, Yorkshire, received his early education under the Rev. P. Steel Dale, of Heallin's Green, Cheshire, and his medical education at Manchester. In consequence of bad health, he did not obtain the L.S.A. Lond. till 1847, when he commenced practice at Ramsbottom, where he speedily obtained a good connexion; but, not liking the neighbourhood, removed to Walton le Dale in 1849, where he remained until his death on the 11th May, at the age of sixty-two. In 1859 he passed the necessary examination, and obtained the L.R.C.P. Ed., and in 1860 was unanimously elected an honorary corresponding fellow of the Edinburgh Obstetrical Society, on the nomination of the late Sir J. Y. Simpson. He was an occasional contributor to The Lancet and other medical journals, and also to the provincial press on social and sanitary matters.

Mr. Ashton was a man of great energy, and untiring in the practice of his profession, making each case a separate study, and, though somewhat brusque in manner, had a singular faculty for obtaining the confidence of his patients, which he rarely afterwards lost.

JOHN McDERMOTT, M.D.

Dr. John McDermott, son of Edmund McDermott, Esq., of Cherryfield, County Roscommon, was born on the 21st June, 1796. He studied at the school of the Royal College of Surgeons, Ireland, became M.R.C.S. Eng. in 1824, L.R.C.P. in 1846, and M.D. of the University of Glasgow in 1847. He entered the Royal Navy as Assistant-surgeon 30th December, 1825; became Acting Surgeon of H.M.S. *Sparrowhawk*, 4th of July, 1834; served on the Home Station, West Indies, and South America; was invalided from the last station in April, 1836, and subsequently quitted the service. He settled first at Tacna, in Peru, where he had an extensive practice, and afterwards at Santiago, in Chili, where he met with great success, and won the esteem and gratitude of the community. Failing health compelled his return to England in 1863, and his retirement from the exercise of his profession. He died at his residence Shrewsbury-road, Westbourne-park, on the 10th May, from senile decay, aged 78.

G. CANNEY, M.D., F.R.C.S.

We have to record the death of Dr. George Canney, which took place at his residence, High Bondgate, Bishop Auckland, a short time since from apoplexy. Deceased, who was in his fifty-sixth year, was a native of Bishop Auckland, and was the only surviving son of the late George Canney, M.D. He took his degree at University College, London, at the hospital of which he was for some time house-surgeon. He was physician to the late Dr. Maltby, Bishop of Durham, as also to Bishops Longley and Villiers. Deceased held a high position as a physician in the North of England, and during the thirty-five years he resided in Bishop Auckland had an extensive practice. He was a liberal supporter of the Mechanics' and other institutions calculated to benefit his town. The intelligence of his sudden death evoked a feeling of sorrow in the town and neighbourhood. In politics the deceased was a staunch Conservative.

CHARLES T. HUSTON, L.R.C.S.I.

Mr. Charles Todd Huston was born in the year 1823, educated at Dublin, and became a Licentiate of the Royal College of Surgeons, Ireland, in 1848. On the resignation of his father in the year 1853 he was appointed medical officer of the Tynan Dispensary district in the Armagh Union, which appointment he held up to the time of his death, which took place at Tynan on the 11th May, at the age of fifty-one. By his demise the poor have lost an attentive, kind, and generous attendant, and his numerous private patients a skilful physician and a true friend.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Aug. 26th:—

Dobbie, Robt. John Algernon, Budleigh Salterton.
Laird, John, Palace-street, Pimlico.
Lewis, Edwin Alaric, Loraine-road, Holloway.
Oldham, Samuel, Burslem, Staffordshire.
Sargent, Arthur Francis, Lancaster-place, Belsize.
Upton, Alfred, Petworth, Sussex.
Worswick, Fredk. Henry, Hulme, Manchester.

The following gentlemen passed the Primary Professional Examination on the same day:—

Robert Kendray Archer, Westminster Hospital; William Laird Cox, St. Mary's Hospital; William George Creswell, Queen's Hospital, Birmingham.

At the recent examination for the Prizes in Materia Medica and Pharmaceutical Chemistry the successful candidates were:—

1st.—Frederick Freer Leslie Robertson, St. Bartholomew's Hospital. The Gold Medal.
2nd.—Neville Scott Whitney, University College. The Silver Medal and a Book.

The library of the Obstetrical Society will be closed from September 6th to September 18th, both days inclusive.

Pharmaceutical Society of Ireland.—The following constitute the first Council of this Society:—President: Sir Dominic Corrigan. Vice-President: Aquilla Smith. Council: William Henry F. Allen, M. V. Bourke, Thomas Collins, Dominic Corrigan, William Frazer, J. Goodwin, William Goulding, William Harrington, William Hayes, John Hodges, E. M. Hodgson, J. Holmes, R. W. King, C. H. Leet, Rawdon Macnamara, J. B. Owens, J. E. Reynolds, John Ryan, Aquilla Smith, C. R. C. Tichborne, and H. Whittaker.

Donations &c., to Medical Charities.—Sir John Arnott has executed a deed of gift, vesting the sum of £20,000 in trustees for the benefit of charitable institutions in Cork. About £9000 has already been subscribed out of the £15,000 required for the new Clayton Hospital and Wakefield General Dispensary. Mrs. Gibbs, of Tyntesfield, has endowed four beds at the Weston-super-Mare Sanatorium with £50 a year each, representing a capital of £5000 and upwards. The Sussex County Hospital, Brighton, has received £500 under the will of Mrs. Blegborough.

Medical Appointments.

Attwater, A. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Wickham Urban Sanitary District.

Browne, J. W., B.A., M.D., M.R.C.S.E., has been appointed a Surgeon to the Belfast Royal Hospital, vice Dr. S. Browne, R.N., J.P., Senior Surgeon, resigned.

Browne, S., M.D., M.R.C.S.E., J.P., has been appointed Consulting Surgeon to the Belfast Royal Hospital, after twenty-five years' service.

Croly, A., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Glencullen Division of the Dundrum and Glencullen Dispensary District of the Rathdown Union, vice Sutton, resigned.

Davidson, C. M., M.R.C.S.E., L.M., has been appointed Medical Officer to the Lead Company's Workmen's Medical Union, Alston.

Evans, H., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Croydon General Hospital, vice Ilott, resigned.

Faulkner, W. I., M.D., C.M., has been appointed House-Surgeon to the North Staffordshire Infirmary, Hartshill, vice Cox.

Gill, J. B., M.D., M.R.C.P.Ed, M.R.C.S.E., L.S.A., has been appointed Medical Officer of Health for the Sandgate Urban Sanitary District, vice Howard, resigned.

Griffiths, J. T., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Llandwrog Sub-district of the Carnarvon Rural Sanitary District, vice Williams, resigned.

Hart, W. H., M.B., C.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Tullow, Co. Carlow, vice Burnett, deceased.

Hoar, C. E., M.B., L.R.C.P.L., has been appointed a Physician to the West Kent General Hospital, Maidstone.

James, C., M.R.C.S.E., L.S.A., has been appointed Medical Officer for No. 2 District of the Marlborough Union, vice Ryder, resigned.

Johnstone, C. R., L.S.A., has been appointed Assistant Medical Officer to the Haydock Lodge Retreat, Ashton, vice Anderson, appointed Senior Medical Officer to the West Derby Union Workhouse, Walton.

Leslie, E. J. L., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Hampshire Friendly Society, Holybourne District.

Morgan, E. R., M.R.C.S.E., has been appointed Assistant-Surgeon to the 15th Glamorgan Volunteers.

O'Grady, W. F., L.R.C.S.I., L.M., has been appointed Junior Assistant Medical Officer to the Workhouse Infirmary, New Bridge-street, Manchester, vice Pountney, resigned.

Oldham, S., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Norton District of the Leek Union, vice Goddard, resigned.

Renny, A. W., M.D., has been appointed House-Surgeon to the Stirling Royal Infirmary and Dispensary, vice Purves, whose appointment has expired.

Shand, J. W. F. S., M.D., L.R.C.S.Ed., has been appointed Professor of the Practice of Medicine in the University of Aberdeen, vice Mac Robin, resigned.

Shorland, E. P., M.R.C S.E., L.S.A., has been appointed Medical Officer and Public Vaccinator for No. 1 District and the Workhouse of the Westbury and Whorwellsdown Union, Wilts, vice G. Shorland, deceased.

Smith, J. P., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Resident House-Surgeon to the Loughborough Infirmary and Dispensary, vice Bailey, resigned.

Thomas, G. D. P., M.R.C.S.E., has been appointed Medical Officer of Health for the Willesden Urban Sanitary District.

Walter, W., B.A., M.B., L.M., L.K.Q.C.P.I., L.R.C.S.I., has been appointed House-Physician to the North Staffordshire Infirmary, Hartshill, vice Faulkner.

Births, Marriages, and Deaths.

BIRTHS.

Brown.—On the 26th ult., at Broadstairs, the wife of C. R. Brown, M.D., of Beckenham, prematurely, of a daughter.

Fisher.—On the 23rd ult., at Mellifont-avenue, Kingstown, the wife of J. W. Fisher, M.D., Staff Surgeon H.M.'s Ship "Vanguard," of a daughter.

Hopkins.—On the 30th ult., at Esbourn, Beckenham, the wife of Alfred B. Hopkins, M.R.C.S.E., of a son.

Lupton.—On the 13th ult., at Stratford-on-Avon, the wife of Harry Lupton, L.R.C.P.L., of a son.

Lynes.—On the 26th ult., at Priory-row, Coventry, the wife of Edward Lynes, M.D., of a son.

Marshall.—On the 24th ult., at Oak-bank, Lamberhurst, the wife of John J. Marshall, L.R.C.S.I., of a son.

MARRIAGES.

Davis—Lawson.—On the 26th ult., at St. Mary's Catholic Church, Norwood, John Norman Davis, M.D., Surgeon Army Medical Department, to Mary Emily Barron, daughter of the late John Lawson, Esq.

Kidd—Rouse.—On the 1st inst., at Balham, Joseph Kidd, M.D., to Frances Octavia, daughter of R. J. Rouse, Esq.

Pearce—Thackrah.—On the 31st ult., at Virginstow, Devon, Edward Thos. Pearce, L.R.C.P., of Holsworthy, to Mary Eden, only daughter of John Thackrah, Esq., and granddaughter of the late John Collins Browne, Solicitor, of Holsworthy.

DEATHS.

Ballenden.—On the 25th ult., at Sedgley, Staffordshire, J. H. Moffat Ballenden, M.R.C.S.E., aged 35.

Burrows.—On the 20th ult., at Normanton, Thos. Ash Burrows, L.S.A.L., aged 66.

Chilver.—On the 15th ult., at Upper Brunswick-place, Hove, Brighton, T. F. Chilver, F.R.C.S.E., aged 70.

Dillon.—On the 26th ult., at Waltham-terrace, Blackrock, Co. Dublin, Thos. Dillon, M.D.

Henry.—On the 27th ult. (at the residence of his brother, Emerson W. Henry M.D., C.M., Lowther-street, Whitehaven), George Henry, L.R.C.P.Ed., L.R.C.S.Ed., aged 29.

Mackeson.—On the 22nd ult., at Church-street, St. Peter, Brighton, H. S. Mackeson, M.R.C.S.E., aged 69.

Nunn.—On the 17th ult., at Portsea, R. M. Nunn, M.R.C.S.E., aged 73.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Cobbold: On Tapeworms.
Mr. Thomas: Diseases of the Hip, Knee, and Ankle Joints.
Octavia Hill: Homes of the London Poor.
Gregory's British Metric Arithmetic.
Dr. De Mericourt: Modern Naval Hygiene.
E. Bergmann: Die Resultate der Gelenkresectionen im Kriege.
Cyclopædia of the Practice of Medicine. Vol. X.
A Dictionary of Science, Literature, and Art. Vols. I., II., & III.
Dr. Fayrer: The Royal Tiger of Bengal.
Bancroft: The Native Races of the Pacific States of North America. Vol. III.
Rev. J. T. White: Livy, Book XXIII.
Mr. Wilson: Chemical Notes for Pharmaceutical Students.

Notes, Short Comments, and Answers to Correspondents.

THE STUDENTS' NUMBER OF THE LANCET will be published on Saturday next, Sept. 11th. Those gentlemen holding official situations connected with Medical Institutions in the United Kingdom, who have not yet forwarded the necessary information to our Office for publication in that Number, are earnestly requested to send it *without the delay of a single post.*

Baby Farming at Uxbridge.

A recent inquest on the body of an illegitimate child disclosed the fact that a married woman, living at Hillingdon Heath, near Uxbridge, had recently had under her care two infant children of domestic servants, and Dr. Diplock, the coroner, ordered her to be prosecuted, under the Infant Life Protection Act, "for receiving for hire two infants under the age of one year for the purpose of nursing, apart from their parents, for a longer period than twenty-four hours, the house not being registered in accordance with the provisions of the Act." The case was heard on the 30th of August at the Uxbridge Petty Sessions, and the magistrates, in consideration of the fact that it was the first case of the kind which had been brought before them, dismissed the summons, with a warning to the defendant that if she again received infants to nurse, without registering her house, she would render herself liable to a fine of £5, or six months' imprisonment. It is much to be regretted that these cases of baby farming usually escape notice until their fatal results appear in the death register. This being the case, it is somewhat difficult to sympathise with the extreme leniency shown to the offender in the above-mentioned case. A conviction and the infliction even of a nominal fine would at any rate have served as a more useful warning to others who, almost in ignorance of the Infant Life Protection Act, may be rendering themselves liable to penalties under its clauses. The greater publicity that is given to such cases the greater is the probability of others being brought to light.

Dr. Mackay is thanked. It shall be published soon.

The Death under Chloroform at Quarry Bank.

To the Editor of The Lancet.

Sir,—I see in the last number of The Lancet that Mr. Ker, while abandoning several of his points of attack on Mr. Ashmead, still reiterates one or two others. Having assisted at the autopsy of M. Wyatt, I should like, with your permission, to make one or two remarks.

Mr. Ker's dictum in regard to the empty condition of the heart's cavities precluding death from suffocation does not accord altogether with the teachings of forensic medicine, where the law is not so rigidly laid down. The case of Carlo Ferrari, the Italian, who was first made intoxicated and afterwards suffocated, is an example of this kind, both sides of the heart being found empty. The action of chloroform appears to me to be likely to produce a similar effect, insensibility often taking place before respiration has been interfered with, and consequently lessening in a great degree the struggles of the patient. That the violet tint was not the result of post-mortem decomposition is reasonable, as nothing approaching it was visible on any other part of the body, though Mr. Ker says that "there could be no doubt about it." Mr. Ker was present at the examination of the lungs, and appeared to be satisfied that they were in a diseased condition. He did not, although laying so much stress upon it now, make any allusion to the hydrostatic test then, and I do not think it would have been mentioned had not Mr. Ashmead stated that the deceased was a bad subject for the administration of chloroform. Notwithstanding the authority quoted of the unnamed pathologist, I would remark that the hydrostatic test is not quite free from objection, as the lungs might have floated from the effects of decomposition and the generation of gas, and therefore would not of itself have proved that they contained air. Pathology has advanced sufficiently, I deem, to show without this test whether consolidation of the lungs existed or not. Air was not squeezed out, but pus was, on making numerous sections with the knife; the texture was denser, and the colour of the surface was not that of healthy lung.

The question was put before Mr. Ker left, whether any further examination of the abdomen was wished. It was, however, further examined when securing the stomach. Mr. Ker left before the post-mortem examination was finished, and before Dr. Walker arrived. Mr. Ashmead has already admitted that he overstated the amount of pus in the abdomen, which he most certainly did.

Mr. Ker attempted in his first letter to infer the post-mortem conditions from the diagnosis—an unusual method, and with which the medical referee is not concerned. The clinical history of the case does not, however, point to healthy lung.

In conclusion, I would remind Mr. Ker that if he had anything to allege against the correctness of the tests for chloroform, the inquest was the proper place to impugn such testimony.

I am, Sir, your obedient servant,
James Bradley, M.R.C.S.

Pensnett, near Dudley, Aug. 24th, 1875.

⁂ Here this controversy must end.—Ed. L.

Mr. A. Lloyd Jones.—Full information may be obtained by addressing a communication to the Under-Secretary of State for India, at the India Office. The address referred to was not published in the columns of The Lancet.

F. H. D.—We will endeavour to comply with our correspondent's request.

THE BOARDING-OUT OF ORPHAN PAUPER CHILDREN.

THIS system meets with unmeasured condemnation at the hands of Mr. E. C. Tufnell (long known as one of the inspectors of workhouse schools) in an article in *Macmillan's Magazine* on the Education of Pauper Children, whilst the system of district schools is correspondingly lauded. The writer advances three objections, which he terms "unanswerable," to the boarding-out plan:—First, that it simply takes notice of the best conditioned children—the orphans,—and wholly neglects the casuals, from whom alone the real difficulty of pauper education arises, and who are seriously injured by the removal of the best behaved. Secondly, that it sanctions what Lord Henniker calls "the iniquitous practice of non-resident relief. Thirdly, that it is opposed to the old principle of directly encouraging independence, industry, and thrift among the labouring class, and directly discouraging their opposites. We must refer to our number of Nov. 14th last year for our views on this question, merely repeating here that the favourable results of the system already made known—e. g., in Cumberland—fully warrant its more extended trial.

Mr. W. Berry is thanked for his letter.

A MEDICAL CORONER'S INQUEST.

To the Editor of THE LANCET.

SIR,—The letter published in THE LANCET of the 28th inst., headed "A Medical Coroner's Inquest," will, I earnestly hope, direct the attention of the profession to a grievance from which others besides Mr. Chatterton have suffered. I allude to the unjustifiable imputations which are too often thrown upon medical men by coroners' juries, and sometimes by coroners themselves, without the victims being able to obtain any redress.

If a tithe of what Mr. Chatterton says be true, can anyone doubt that he has been grievously wronged? A charge of malpraxis, which, if established, would result in a criminal prosecution, is as serious a matter for a medical man as a charge of forgery would be to a banker or anyone in a position of trust. But if anyone were rash enough to insinuate the latter on the same flimsy grounds that coroners' juries base the former, it is more than likely that smart damages in an action for libel would teach the accuser the value of reticence.

I apprehend that inquests exist for the purpose of ascertaining the cause of death, and to deliver an opinion as to whether such cause be natural, suicidal, homicidal, accidental, or the result of culpable carelessness. But without a post-mortem, how is it possible to ascertain the cause of death in such cases as the above. A verdict delivered upon such insufficient grounds is absolutely worthless, and any insinuation of malpraxis is simply impertinent.

Unfortunately in some parts of England—I speak from experience—the notion prevails amongst the class from which coroners' juries are chiefly drawn that an inquest is held for the purpose of *trying somebody for culpable carelessness* or crime of some sort; and if the relatives of the deceased (who, if not on the jury themselves, are sure to have friends amongst them) take into their wise heads to differ from the medical man concerned in the case as to the propriety of his conduct and treatment, it requires very little to persuade a country jury that the medical man deserves a criminal prosecution. Now, if such cases as Mr. Chatterton's were always to be followed by similar proceedings, our lives in benighted districts would become simply unbearable, and we should have to organise a general exodus—say to Central Africa, where I understand the native "medicine men" are treated in a less heathenish manner by their sable patients.

In conclusion, I beg to say that Mr. Chatterton and the coroner are alike total strangers to me.
I am, Sir, yours &c.,
Staunton, Gloucester, Aug. 31st, 1875. C. MOSS CAMPBELL, M.D.

MISPLACED BENEVOLENCE.

WE have received a letter from *Captain Brabazon*, "Hon. Secretary to the Central London Throat and Ear Hospital, Manchester-street, Gray's-inn-road," with reference to an article in our impression of the 21st ult. under the above heading. We must decline to enter into a controversy with a lay correspondent on a matter the merits of which can only be judged from a professional stand-point. We will only say that we see nothing in Captain Brabazon's letter to modify our opinion of small special institutions such as that whose claims he advocates.

Enquirens.—If our correspondent will write to Professor Humphry, Cambridge University, he will get the information he seeks. We believe there is an examination in October.

EXTRACTION OF A BOUGIE FROM THE FEMALE BLADDER.

To the Editor of THE LANCET.

SIR,—The following case may be of interest to some of your readers, such not frequently occurring in the practice of the same country surgeon.

Aug. 14th, 1875, 3 P.M. Mrs. ——, aged eighty. Thirty years ago she was supplied by two surgeons of repute, both since dead, with a male metal bougie to pass into her bladder from time to time, owing to occasional difficult micturition, which was attributed to a small fibrous tumour at the orifice of the urethra. She has used it since till it has worn and broken to 3½ inches in length. This she passed at 3 A.M., when it slipped into the bladder. She hoped it would pass back; hence the twelve hours' delay in requesting assistance. I passed a forceps into the bladder, and after a few attempts grasped the middle of the bougie. I then put my left forefinger into the vagina, and steadied it directly across the neck of the bladder. I then loosened the blades of the forceps, and carried my right hand to the right thigh, and tightened the blades, and carried my hand to the middle line. By repeating this manipulation three or four times I could feel nothing projecting beyond the forceps on the left side. I then succeeded without difficulty in extracting the leaden bougie, 3½ inches long, No. 8 size.

15th.—4 A.M.: Removed by catheter a pint of urine stained with blood, and gave twenty grains of chloral hydrate.—9 P.M.: Has slept, and passed urine comfortably, and of normal colour.

17th.—Convalescent.
Yours truly,
Framlingham, August, 1875. GEO. E. JEAFFRESON.

Dr. Tattersall, (Clayton.)—1. Our correspondent's qualifications and the fact of his having passed the preliminary examination in Arts at Apothecaries' Hall do not exempt him from being compelled to pass the matriculation examination and the other examinations required by the University of London to obtain the M.B. degree, unless his diploma dates prior to the year 1840, in which case he will be admitted to the 1st M.B. examination direct.—2. At least one year's residence is required by the Scotch Universities. Our correspondent's best plan would be to apply to them for information. Aberdeen would be suitable.—3. To obtain the F.R.C.S., he must pass the two examinations (primary and pass) required by the College. For further particulars, see the Students' Number of THE LANCET.

A Governor.—The rule seems explicit enough. A candidate must be F. or M.R.C.S. The governing body might, of course, frame a bye-law to meet such a case as that described.

ORGANISATION OF THE MEDICAL DEPARTMENT OF THE ARMY DURING WAR.

To the Editor of THE LANCET.

SIR,—With the Army Circular of August, 1875, the authorities have issued a pamphlet, showing the "war strength and composition" of the various components that will for the future go to make up an "army corps," as the new nomenclature of war designates what, at all events as far as England is concerned, is really an army complete in every essential.

With the purely military portion of the scheme THE LANCET has little to do, except to take a general glance at the strengths of the various atoms that unite to form the one harmonious whole; but the portion relating to the medical service of the army is specially interesting to all professional readers.

The pamphlet is drawn up as follows:—First, the exact composition of a regiment of infantry and cavalry is noted; then of batteries of artillery, with the reserves, engineer, pontoon, and telegraph trains. Next is detailed the ambulance equipment, with that of field hospitals; then follows the army service corps. The composition of a brigade of cavalry and infantry is then detailed; then that of a division; and, finally, an "army corps," complete in all its parts, is given *in extenso*. The total of an infantry regiment is put down at 1097 of all ranks, with one medical officer, who is also entered as being a mounted officer. A regiment of cavalry is to have a strength of 480 horses, with a total of 549 men of all ranks. One medical officer is also allotted, with two chargers. To each battery of artillery, and to each reserve, engineer, pontoon, and telegraph troop, a surgeon is detailed, and it is specially noted that each company of the army service corps is to be so composed "as to allow at once, upon entering upon active service, of division into two companies, so that it may be locally augmented with rank and file and horses, there being sufficient trained officers and non-commissioned officers in each company for the purpose."

The details of the medical department for a field hospital then follow. Each is to contain 200 beds, with the following staff:—Medical officers, 7; captain of orderlies, 1; men of army hospital corps, 37; drivers, 12—total, 49. Hospital waggons, 4; surgery waggons, 2—total, 6; with 24 horses. The medical officers are to be detailed thus—1 medical officer in charge, 2 senior surgeons, 4 surgeons. With each cavalry brigade, consisting of three regiments of cavalry and a battery of Royal Horse Artillery and staff—in all, 2139 men,—1 field hospital will be allowed, with 4 ambulances. To each infantry brigade, consisting of three battalions and staff, with a total of 3496 men, 2 field hospitals, and 4 ambulances will be allotted. A division will consist of 10,156 men of all ranks, with 12 divisional ambulances, 3½ field hospitals, and a grand total of 73 officers of the medical department. The grand total of an army corps will consist of 36,805 men of all ranks, with a medical staff numbering 297 officers, 2195 men, 568 drivers, and 1310 horses.

The above scheme certainly reads very well; but it at once becomes a question, so far at all events as the medical establishments are concerned, where are they to come from? The medical department is to furnish 297 officers, or, omitting the officers of the army hospital corps, 280 purely medical officers. As a liberal allowance, let it be presumed that 80 surgeons accompany the corps to which they are now attached, and it leaves a balance of 200 surgeons and surgeon-majors to be supplied from the staff of the United Kingdom. A reference to the last Army List will show that there are not more than that number at present serving on the staff at home who would be eligible to proceed on active service, and, be it remembered, this would drain all the large military hospitals of every effective man, and leave the sick of the army at home and the invalids from the seat of war to be provided for as best could be done.

In addition, it is to be borne in mind that the surgeons of the militia are gradually dying out, and, of course, if there was a war, and the militia were embodied, their medical attendance would have to be provided for as well. The present scheme of the Government is understood to be as follows:—The medical charge of the militia is to devolve on the medical officers of the regular service, more particularly on those who are in charge of depôt brigades; and in time of war the main portion of the work in the field hospitals will be performed by civilians hired for the occasion, at liberal salaries, from the ranks of the profession in the United Kingdom. Is it not self-evident that such a system must fail? Granting that Government is willing to pay civilians at the rate of £1000 a year for service in military hospitals, how many men worth their salt will be found willing to throw up their practices for the chance of employment for three, six, or twelve months, knowing full well that on their return they will find their posts occupied, and themselves with nothing to look forward to except to begin life all over again?

Be it remembered the Government has made provision for reserves in every portion of the army but the medical department, and that while it can count on men of means coming forward to officer the militia and volunteers, it is impossible to calculate on getting a supply of medical officers willing to sacrifice their own future for an ungrateful country.

This organisation looks very well on paper; but when put to a practical test it will prove an utter failure as far as the medical service is concerned. The strength of the army medical department is daily growing smaller; recruits cannot be obtained on the present terms, and at the current rate of decadence the medical service of the State will become hopelessly crippled within the next few years.
Yours obediently,
August, 1875. ARMY SURGEON.

Health of Ireland.

A quarterly report of the births, deaths, &c., just issued, states that, as compared with the preceding quarter, there has been a marked improvement in the sanitary condition of the country, the deaths registered being lessened by 5214. The deaths from small-pox numbered 225, showing a slight decrease as compared with the first quarter of the year. The deaths from this disease were distributed as follows throughout the four provinces:—Leinster, 8; Munster, 0; Ulster, 13; Connaught, 204. Abundant evidence is furnished by the observations of the registrars to show that the disease has been widely spread by the pernicious practice of inoculation. Every effort is being made by the authorities to detect the inoculators; but the difficulty of procuring such evidence as would make them amenable to justice is very great. Small-pox of a most malignant type broke out in Athenry district, Loughrea Union, and proved fatal in 40 instances. The deaths of 11 persons returned as centenarians were registered, including 2 stated to have been aged 105 years, one 108, and one 118. With reference to the last-mentioned, the registrar of the district, in reply to a special query respecting the case, furnishes the following information:—"I beg to state that my informant who signed the entry in the register, as being present at the death of the old man, was the son of the deceased. He told me he had, as well as others, frequently heard his father say that he was 41 years old when the French landed in Killala, in 1798, and the truth of this statement was never questioned. This would bring his age up to exactly 118 years. I may add that there were several persons present at the time of my registering the death, all of whom coincided in the opinion that his age was not, and could not be, less than that represented to me."

Spoonfuls.

To the Editor of The Lancet.

Sir,—It must have occurred in the practice of every medical man of any standing that over-doses of important remedies have been sometimes taken by their patients, from the old-fashioned habit of ordering mixtures in spoonful doses. To avoid this as much as possible, I have for years adopted the plan of using marked bottles in every case (where I could get them of the right size), and it is easy now to get of Messrs. Maw, Son, and Thompson, from Messrs. Wright, Sellers, and Layman, or from other sources, bottles marked in teaspoonful or tablespoonful doses as may be required. And I have had sets of labels printed; "one of the marked doses to be taken every —— hours," or "half one of the marked doses to be taken three times a day," specimens of which I enclose. With these the prescriber knows exactly how far he may go with important drugs, and unpleasant consequences such as I mention may be avoided. As coincident with the case in your article, I some months since had to treat a patient complaining of tickling cough, and I sent a linctus (which I had long been in the habit of using), containing a small quantity of belladonna, to be taken in dessertspoonful doses every two or three hours. This was forwarded in a three-ounce bottle without marks. My patient sent for me late at night in great haste. He had taken three doses of the medicine, he said, and was so horribly dry about the throat that he expected instant suffocation. He could not see distinctly, and felt quite dizzy and lightheaded. He had sat down to tea, and when he tried to swallow bread-and-butter it stuck in his throat, and he was choked, until by putting his finger in his mouth he had at last set up a little vomiting, and got some slight relief. He said he thought I must have poisoned him, and he begged to have some antidote administered. Himself and friends assembled at the house were in great alarm. I could only account for his state on the supposition that much more of his remedy had been taken than I intended; so I asked to have the mixture shown me, when I found, to my astonishment, that the bottle only contained half an ounce of fluid, and that his three doses (i.e., three dessertspoonfuls) had actually amounted to two and a half fluid ounces, instead of six drachms, as it should have been. The whole thing was explained, and I was able to reassure my patient. I got him to swallow some strong tea and some ammonia, and he soon recovered, although he was days before the pain in the throat and chest left him.

I have avoided similar unpleasantness since by giving strict orders to my dispenser to use only marked bottles for such things.

I remain, Sir, yours &c.,
Stansted Montfichet, Aug. 24th, 1875. Sydney Haynes.

E. K.—In order to ascertain whether the organic impurity is due to sewage contamination, it would be necessary to submit the water to a thorough chemical analysis. This could be done only by an expert. Before going to that expense, we advise our correspondent to see if the fault does not arise from a foul condition of the cistern. When was it last cleaned out? Is it well protected from the atmosphere? Is the waste or overflow pipe disconnected from the sewers? Many of the complaints that have reached us with respect to the bad water supplied by the metropolitan Water Companies have, on investigation, been traced to neglect of the above particulars.

We are compelled to postpone the publication of an article on Sir Robert Christison and Conjoint Schemes.

Treatment of Hernia by Inversion.

To the Editor of The Lancet.

Sir,—I was called to a man on the 21st inst., with an old oblique inguinal hernia on the left side. Not being able to reduce it as he bad hitherto done, I was sent for. He had been vomiting, and was in great pain. Failing to reduce it by the taxis, I put him in the position recommended by Dr. Thornton in The Lancet of the 14th inst., directing him not to meddle with it for four hours, at which time I called, and was pleased to find he had got it back after being three hours in that posture.

Yours faithfully,
Falmouth, Aug. 23rd, 1875. T. Stokes Guppy, M.D.

An Unprepossessing Tribe.

Mr. B. F. Hartshorne, in a communication to the section of Anthropology at the British Association, gave some interesting particulars of the social condition and habits of the Weddas of Ceylon. These curious people, it seems, still depend for their means of subsistence upon bows and arrows, and pass their lives in the vast forests of the country without any habitation, and without making the rudest attempt at cultivating the soil. No flint or stone implements are to be found amongst them, and they produce a flame by rubbing two sticks together. Their intellectual capacity is so small that they are unable to count or to discriminate colours. They are almost destitute of the religious sentiment, as well as of an appreciation of personal cleanliness, for they habitually eschew ablutions; yet, singularly enough, they abhor theft and lying. But perhaps the most remarkable trait in the character of the Weddas is the apparent absence of a faculty which is held to be peculiar to the human race—laughter. It is stated that they regard the expression of merriment by others with surprise and disgust, and not one of the Weddas was ever known to laugh.

Extensive Ulceration of the Os Uteri during Pregnancy treated by Nitric Acid.

To the Editor of The Lancet.

Sir,—During the month of April I was sent for to see a patient about five and a half months pregnant, who the midwife thought was miscarrying. On making inquiries I found she had been ill for some weeks past, and that for the last four days there had been so profuse a sanguineous discharge that she had become much weakened. She was also in a very depressed state of mind. On making a vaginal examination I found the lips of the womb gaping, much thickened, soft, but resisting. I was able to pass the index-finger about an inch and a half along the cervical canal, at which point it became very contracted and firm. The membranes could not be felt. The patient was then placed in a cool bed, with the hips slightly raised, and a sulphuric acid mixture ordered for her. When seen the next day she was still in a very low state, the bleeding not having abated in the least. I then introduced a Ferguson's speculum, and found the os extensively ulcerated, with blood exuding from the raw surface. Solid nitrate of silver was applied freely, and repeated in two days, which had the effect of completely stopping the bleeding. She was now treated with strong nitric acid, which was applied with the stiff side of a quill feather, the surface of the ulcer being quickly brushed over, and the feather passed for about half an inch up the cervical canal, there being cervical leucorrhœa present. The surface was cleaned with lint before each application of the acid. This was done at intervals of a week or a fortnight, according to the appearance of the ulcer, and at the same time a weak astringent lotion given her to use night and morning. Under this treatment she rapidly picked up strength, her spirits soon returned, and she is now quite well, and within a few weeks of her confinement.

It is well not to remove the speculum too soon after the application, as the fumes from the acid are liable to cause pain.

I remain, Sir, yours &c.,
Manchester, August, 1875. C. S. Richardson, L.K.Q.C.P., &c.

Subscriber.—1. We would advise our correspondent to procure the Registration Act. It can be obtained at the Acts Office (Spottiswoode's), New street-square, E.C.—2. Any duly qualified member of the profession is eligible for such appointments. Application should be made to the chief inspector for the district.—3. It can be obtained at the same time as the other Act.

Mr. Berridge.—We will make inquiries, and will give our correspondent an answer at an early date.

Romeo should consult a surgeon.

The paper of *Dr. Grainger Stewart* shall appear in an early number.

A Medical Sick Club.

To the Editor of The Lancet.

Sir,—Would you or any of your readers kindly inform me if there exists such an institution in connexion with the medical profession as a Club or Society conducted on the principles of the ordinary Friendly Societies scattered over the country. It would be a great boon to many, especially young men who have no accumulated store to fall back upon, to have some such staff of support should sickness or injury fall suddenly upon them. If there be no Society of the kind immediately connected with our profession, I should be obliged to any of your readers who would point out to me one of the ordinary Friendly Societies likely to answer my purpose.

Yours very truly,
Greenwich, Aug. 31st, 1875. Nemo.

⁂ Similar inquiries are frequently addressed to us. We should be glad to see a good Medical Sick Club established, and have no doubt it would prove a success.—Ed. L.

Refusal to Supply a Medical Officer of Health with Returns.

Dr. Horace Swete, medical officer of health for the Droitwich urban and rural districts, on issuing his first report, writes:—

> "Of prevalent diseases I can only speak from the small amount of personal observation I have had since May, and from the registrar's and union returns, the medical men in the town refusing to give me any information. This is from no want of courtesy to myself; but they say that, from a matter of principle, they ought not to give any assistance, or do any work, beyond their contract as district medical officers, without increased pay, and argue that, as the district sub-registrars are allowed payment for information of death to the medical officer of health, so ought they to be remunerated as district medical officers. I regret that there seems to be no means in the present law of giving these district officers any extra remuneration."

"A PRIVY ATMOSPHERE."

THE Cardiff Board of Health is likely to find its energies severely taxed, if the report of its medical officer does not overstate the condition of matters with which it has to deal. The district of Canton is, it seems, in a most deplorable state, what with defective cesspools, ditches flooded with fetid water, and pestilent pools, stinking and stagnant. The house refuse appears to be carried away by the floods occasionally, but by scarcely any other scavenger. The case is pithily summed up by the medical officer in a sentence: "The whole of the sanitary district of Canton had a regular privy atmosphere when I was last there." Remembering that the port of Cardiff is frequented by a considerable number of vessels in the course of the year, and that the sailors and other persons visiting Canton, to say nothing of the resident population, are liable to contract and carry away, as well as to increase, the diseases prevalent in this salubrious district, it will be interesting to know that the "main sewer" so long desired has been at length obtained, and that the immunity of the locality from serious disease is not wholly dependent on "lime."

M.D. Lond.—We understand that an Italian translation of Professor Balfour Stewart's work on Energy has just been issued, but we have not been informed of the name of the publisher.

DOCTORS AND DRUGGISTS.

WE have received a communication from *Mr. Garman* in reply to Mr. Rugg's letter in our last issue. We think the reply should come from Mr. O'Donovan.

ERRATUM.—In the tenth line of the second paragraph of Dr. Woods' paper on Thoracic Aneurism, published in our last number, page 308, for "anterior," read *external.*

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Aveling, London; Dr. Daly, London; Mr. Searle, Brixham; Dr. Browne, Belfast; Mr. Roberts, Derby; Mr. Lithgow, Wisbeach; Dr. S. Smith, Bristol; Dr. Blanc, India; Surgeon-Major W. Curran; Dr. Senpleton, London; Dr. Vachell, Cardiff; Mr. Webb, Ironbridge; Mr. J. Sharp, Axminster; Mr. Elwin, Dover; Mr. Macrae; Mr. Dunne, Over; Mr. Walker, Crayford; Mr. Lord, Brighton; Mr. Fox, Warrington; Mr. Lawrence, London; Dr. Griffith, Penygroes; Mr. Jackson, London; Mr. J. Eastwood, Blackburn; Dr. Burnett, Chester-le-Street; Dr. Moore, Dublin; Mr. Allen, London; Dr. Grainger Stewart, Edinburgh; Mr. Bradley, Manchester; Dr. Stewart, Heidelberg; Sir Duncan Gibb, London; Mr. J. C. Leach, Sturminster Newton; Dr. Mackey, Birmingham; Dr. Chalmers, London; Mr. Berridge, London; Messrs. Keith and Co., Edinburgh; Dr. Eddison, Leeds; Dr. Campbell, Gloucester; Messrs. Blackie and Son, London; Mr. Holcroft, Macclesfield; Dr. E. T. Smith, Hounslow; Dr. Hinds, Birmingham; Mr. North, York; Messrs. Smith and Son, Dublin; Mr. Low, Sydenham; Dr. Cartwright Reed, West Indies; Mr. Hunter, Aberdeen; Dr. Woods, Walmer; Mr. Heath, Heckmondwike; Mr. Wilson, Deal; Mr. Moore, Neath; Dr. Cutbertson, Zanesville, Ohio; Mr. Maclehose, Glasgow; Mr. Cran, Wester Clova; Messrs. Hewlett and Co., London; Mr. Watkins, Worcester; Mr. Gurney, London; Mr. Spurr, Sheffield; Messrs. Richardson & Co., Leicester; Dr. Griffiths, Sheffield; Dr. Lupton, Stratford-on-Avon; Mr. Frank Cowan, Pittsburgh, U.S.A.; Mr. Johnson, Colchester; Mr. Chatterton, Hayfield; Dr. Richardson, Manchester; Mr. Morgan, Neath; Mr. Taylor, Bocking; Mr. Garman, Bow; Dr. Long, Hackney; Messrs. Macniven and Cameron, Edinburgh; Mrs. Norton, Norwood; Mr. Garrett, Castletown; Mr. Lammeman, Tunbridge Wells; Dr. Laffan, Cashel; Mr. Walter, Dublin; Enquirens; An Old Subscriber; L.F.P.S.; Omega; A Governor; A Game Bird; Enquirer; J. S.; M.D., Chester; Surgeon; W. L. H.; Alpha, Burnley; Nemo; &c. &c.

LETTERS, *each with enclosure,* are also acknowledged from — Mr. Satchell, Tunbridge Wells; Dr. Huggard, Wexford; Dr. Gaylor, Belper; Dr. White, Market Rasen; Mr. Thomas, Manchester; Mr. Cordwent, Taunton; Messrs. Simson, Wakeford, and Co., London; Mr. Pettinger, Hulme; Mr. Thorpe, Walsall; Mr. Putsey, Hull; Mr. Oldham; Mr. Coward, Huddersfield; Mr. Thomas, Shirehampton; Mrs. Maskelyne, London; Mr. Appleby, Newark; Mr. Plumer, Poynton; Mr. Chapman, Morecambe; Mr. Sharpe, Hunslet; Mr. Richardson, Bryngwy; Mr. Edwards, Furneaux Pelham; Mr. Bartlam, Brosley; Mr. Mayne, Honiton; Mr. White, Kensington; Mr. Lampson, York; Mr. Henry, Whitehaven; Dr. Simons, Boreham; Mr. Hartley, Crewe; Dr. White, Brighton; Mr. Ebegele, London; Mr. Clements, Rochester; Mr. Collins, Gloucestershire; Messrs. Bleeck and Leech, Bath; Dr. Pearce, Holsworthy; Dr. Hodgson, Preston; Dr. Williams, Whitstable; Mr. Lynes, Coventry; Mr. Collier, Sheffield; Dr. Scott, Southampton; C. H., Sheffield; T. N. D., London; R. W., London; B. O., Holloway; Delta, Newcastle-on-Tyne; L. P. H., Woolpit; Medicus, London; T. T., Oldham; M. B., Glasgow; F. W. C., Buckhurst Hill; M.D., St. Ives; Alpha, Oldham; R. S. A.; Alpha, London; Medical Aid Society's Dispensary, Macclesfield; Surgeon, Romsey; F. M. A. B., London; The Registrar, Aberdeen University; Demonstrator, London; C. D.; A. B., Leicester; Erasmus; M.D., Bury; Beta, London; M.D., Wakefield; Calb, London; Medicus, Romsey; D. B., Manchester; Z., Bangor; Medicus.

Western Morning News, Welshman, Cork Constitution, East London Observer, Manchester Guardian, Macclesfield Courier, Birmingham Morning News, Newcastle Chronicle, Surrey Advertiser, Huddersfield Chronicle, Liverpool Post, Leeds Mercury, Record, Kent Messenger, and *Brighton Guardian* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, SEPT. 2ND, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Aug. 27	30·15	W.	59	62	104	75	57	...	Overcast
„ 28	30·12	W.	57	60	84	69	59	0·32	Overcast
„ 29	29·92	E.	57	62	91	68	56	...	Cloudy
„ 30	30·12	N.W.	55	56	105	72	53	...	Cloudy
„ 31	30·03	W.	55	61	105	72	55	...	Cloudy
Sept. 1	30·31	N.W.	50	53	98	73	50	...	Fine
„ 2	30·21	W.	60	63	99	71	52	...	Overcast

Medical Diary for the ensuing Week.

Monday, Sept. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 7.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 8.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Sept. 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 11.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—

Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 11, 1875.

ADDRESS TO STUDENTS.

ONCE more the rolling year brings us near to the commencement of another session at our medical schools, and once more in our "Students' Number" we collect the information relating to the various universities, colleges, hospitals, and schools of medicine which is of interest to those about to commence or to renew their medical studies. To all such we would offer, as is our custom, a word of welcome and advice.

The change of life from the rest or preparation of the months that are past to the busy work of those that are coming will probably be unwelcome to none—will be pleasant to most. The vast possibilities of the future are brought into more tangible reality by a sudden change to contrasted occupations, such as to many the 1st of October will imply; and the present is an earnest of the future. They have already some idea of what the words "study" and "examination" mean, and the consciousness of achievement which is produced by the successful passage of a preliminary ordeal gives a more vivid tint to the anticipation of future progress. Successive steps upwards seem less hard to climb when one is felt to be already firm beneath the feet.

We would suggest no discouraging reflection when we say that the task before you will need all the ardour, all the effort, you can bring to bear upon it. Its difficulties are not perhaps those most apparent to you. That "things are not what they seem" is true in many applications. The difficulties of life are rarely those which loom vast, with shadowy outline, in the early morning light. It is not the amount which is to be learned or obtained that is the real difficulty in the student's career. It is in the path by which you are to gain the end that the chief dangers lie. We purpose to devote our space to-day to some indication of the manner in which the path, with its slippery and uneven surface, its insidious pitfalls and enticing by-ways, may best be traversed.

To the work itself there is no need you should be urged. There are perhaps none who take the trouble to read the suggestions we have to offer, who are not earnest in their resolution to tread with unhesitating step and straightforward course the student's road. It is concerning the way to direct your good-intentioned will into effectual operation that you really need advice: what to do and what to avoid in your daily occupation; how so to economise your time and spend your effort as to obtain in the short period of your curriculum the best possible education for your future work.

The suggestions we have to offer you, the advice you need, relate to a twofold subject—how to work and how to rest. Work is to be the subject of your chief thought. That which is before you, could you have its details at once visible to you, would indeed appear colossal in its proportions. About twelve distinct regions of knowledge have to be traversed, comprehended in many separate courses of instruction. Each of these has to be mastered in more or less completeness, some in theory only, others by practical study as well. Happily the positions of difficulty have not to be at once encountered, and by successive conquest may all be won by ordinary ability and well-directed energy.

To speak first, therefore, of your work. The points on which you need suggestions refer less to what you should do than how you should do it. There are perhaps few students who, at the end of their hospital career, do not look back on time, effort, and labour wasted, because at first they did not know how to work. The whole system of instruction to which the student comes is to the large majority a strange one. The transition from book study to oral teaching is one to which the mental habits are not easily accommodated. The subjects of study are strange and unfamiliar. The method of inductive reasoning, on which the scientific elaborations presented to him are founded, is itself foreign, often, to his modes of conscious thought. Happily a certain proportion of students now come up well prepared, well grounded in preliminaries, not only classical, but physical and biological. It is perhaps impossible to exaggerate the advantage which is afforded by such a knowledge of the methods of reasoning employed in the natural sciences. We are glad to believe that a constantly increasing proportion of those who begin the more stern curriculum have been thus trained.

Let your work be uniformly steady. Prevent the need for "spurts." Do not attempt too much at first. Begin as you mean to go on, and go on as you begin. How long should you work a day? This will be in some measure decided for you. You should aim at reading three hours a day, apart from the lectures you attend and the practical work you are engaged in. If you do this and persevere in it, you will, if your work is rightly directed, be not far at the end of the session from the position at which you aimed. There are two styles of work. Some men will work unremittingly at one subject at a time, mastering it, and then passing to another. Others work uniformly at all the subjects they are studying, devoting daily such a time to each as shall enable them to make sure of the portion they have that day received. There can be no question that this latter method is that which yields the best results. It may not be so successful in obtaining prizes, but it will leave you with much more satisfactory knowledge and a much more honourable position at the end.

The ultimate end of your study is to obtain a well-grounded knowledge of the three great divisions of medical science and art—medicine, surgery, and midwifery. They constitute the triple structure which you are to build, and it is to be erected on a triple foundation. Anatomy, physiology, and chemistry are the three corner stones on which the erection is to be based. Ancillary, and important in subordinate positions, are the collateral sciences of botany, comparative anatomy, and zoology. Materia medica, medical jurisprudence, and hygiene are, in effect, based on and compounded of other sciences.

All these studies differ from those which will probably have occupied your preceding attention in the circumstance that their facts are isolated in their presentation, in varying degree it is true, but more or less in all. In many other branches of study the facts are so linked together that they are repeatedly brought before the student's attention. The demonstrations of mathematics are involved in the discussion of subsequent problems, in substance and in method, to an extent which renders their retention in the memory easy. The facts of classical studies, the meaning of words, the construction of sentences are constantly recurring in fresh association but repeated similarity, so that they are indelibly imprinted on the memory and can be retained with little conscious effort on the part of the learner beyond that involved in their acquirement. With the physical, and especially with the medical, sciences it is very different. Few facts in anatomy involve any which have gone before. The result is that the student, in acquiring new facts, is constantly liable to forget the old, however well he may have learned them. Hence it is necessary to ensure, by constant, diligent, forced repetition, the retention of that which has been already acquired. There is no subject of study in which this is not necessary; but the need for it is much greater in some than in others. The disjunction of fact in some medical sciences is painfully complete, extending down to the minutest details. In others it is less so. But with respect to all it is true that, for any effectual retention of the facts acquired, frequent repetition is necessary. The student should aim at keeping fresh in his memory that which he has before learned, so that at any moment his past acquirements may be as accessible and as accurate as those of the most recent date. This is difficult, needs much perseverance, but is indispensable for successful study. It is the only system which will rob coming examinations of their terror and enable you to dispense with the help of the "grinder."

A large proportion of the knowledge you acquire has to be conveyed to you by the use of symbols. A proportion, also large and happily every day increasing, is learnt by actual observation, by obtaining evidence with the various senses of the facts in question. Different minds will appreciate in different degrees the respective methods. To all the method of actual observation is of incalculable value, impressing the facts upon the mind, and training the student to look beyond occurrence for cause, to search for the operation of the law of sequence, which is the great problem of medical practice, and which is indispensable to any efficient exercise of medical skill. In recording facts, observations, and statements made to you, vary the symbolic method you employ. Wherever you can, let a diagrammatic representation aid the written note. The roughest sketch or diagram, wholly inartistic, will prove of the greatest value in fixing on the mind a relation which no description could accurately convey.

This leads to the question how far you should take notes of the lectures you have to attend. On this no general rule can be given. Most men find that they can attend better, can carry away even in memory more of what is said to them, when they take notes than when they do not. With others it is not so; the attention, unembarrassed by any mechanical occupation, can receive, and the mind retain, far more when the hands and mind are at rest. It will vary, too, with different lecturers. The care in the collection, in the classification, in the presentation of facts which some lecturers take, renders their lectures of so much value that it is well to secure as much of them as possible. When you do take notes, endeavour to take at the time such notes as you can keep permanently. The time spent in writing out notes is often time absolutely wasted. Moreover, it is a dangerous waste of time. The student is apt to fancy, when he has written out his notes, that he has learned them. The facts have become familiar; he can, perhaps, recall the chief in detail; but as a rule, under the circumstances, they are not learned. The facts speedily vanish from the mind. Therefore, if you do write out notes a second time, take care that you learn them thoroughly as well; and do not mistake the act of writing out for the operation of learning them, similar as they may at the moment seem.

Some of the subjects of your study are to be learned in practice as well as in theory. This is the case, to the greatest extent, with anatomy. There are very few facts of anatomy which you have to learn which you cannot verify for yourselves. With physiology and chemistry it is so to a less degree. In medicine and surgery the facts are capable of verification to a great extent, but not with such completeness as in anatomy. It is one of the greatest improvements in the medical schools of the present day that practical instruction is carried to almost the highest point to which it can be brought. Many subjects which before were taught in theory only are now taught, and very thoroughly taught, in practice also. It is so in histology, normal and morbid; it is so in chemistry; and it is so in many parts of physiology. Make, therefore, the utmost possible use of your opportunities of acquiring the practical knowledge, which is so much more easily retained and so much more usefully reproduced when needed, than any mere theoretical knowledge; but be careful not to content yourself with practical work. You must study and think as well as observe. There is great danger in allowing the mechanical to take the place of the intellectual. It is so especially in anatomy. The student dissects carefully, and imagines that by careful dissection, by careful "cleaning" of his parts, he is learning their anatomy. He may be, but is not necessarily doing so. He must supplement his practical work with careful reading and thoughtful observation. He may economise much precious time by accurately observing the position and relation of that which he has dissected. But in any case dissections must be thoroughly learned. Note carefully the connexions between the different objects in the region you are dissecting. Endeavour, as far as you can, by careful systematising, to reduce everything to well arranged and ordered form. The increased power and knowledge will be much more than recompense for the additional trouble which the method gives you.

The arrangements of the curriculum will probably seem to you in many respects unreasonable. They are not perfect; but bear in mind that the parts which seem to you to be faulty have objects which you may not now perceive. Patiently endeavour, then, to make the most of what appear to you its useless provisions. Your patience will often be tried by having to listen to what seem out of place accounts of departments of knowledge as yet quite unfamiliar. Do not "cut" lectures because you do not see their value. Endeavour to attend them regularly, and to carry away as much as you can, and you will find your subsequent work in other subjects, as well as in that department, rendered easier.

With reference to the later studies of medicine and surgery we would repeat what we said of the earlier ones—embrace every opportunity of acquiring knowledge practically by direct observation. Examine patients for yourselves—touch, feel, handle, listen wherever you can. You cannot educate too carefully your senses to appreciate the signs of disease. In the majority of cases those signs may be indubitable and obvious; but in others, frequent enough, they are so obscure as to need all your knowledge, all your tact, all your practice to recognise and weigh them. These remarks, generally applicable as they are, apply with much force to the post-mortem appearances of disease. Lose no opportunity of witnessing post-mortem examinations. If you have seen the cases during life so much the better; but whether you have or not, attend the examination after death. Make yourselves thoroughly familiar with the normal appearance of organs and with the variations from the normal which may be met with apart from actual disease. It is impossible to exaggerate the importance of your present careful study in the deadhouse. You will have opportunities throughout life of keeping up and improving your clinical knowledge. Every day's work is a day of clinical practice. But when you are engaged in actual practice, opportunities for pathological observation will come rarely; but when they do come, on your knowledge and experience important issues will often depend. If the knowledge which might have been acquired during student-life is not gained, the opportunities of obtaining it will probably not recur, and the loss will be life-long.

In the wards, do not let your desire to observe for yourselves carry you, as it does with a large number, chiefly where observation is easiest. The eye is the organ most easily educated; do not give it, therefore, an exclusive share of attention. Exercise your other senses. Do not be always running after sensational cases, or hanging over the rails of the operating theatre. If you are working at surgery or medicine, examine the patients when the dressers or clerks are working, and then, having learned the signs and symptoms of the cases, attend the surgeons' and physicians' visit, to hear their remarks and note what you have failed to observe.

It follows from what we have said that you should make it one of your first objects to hold practical posts in the hospital. Despise nothing, however low, that gives you scope for the exercise and improvement of your knowledge. When you have the actual treatment of patients entrusted to you, note carefully the results of the remedies you employ. Do not prescribe and take no notice of the effect of your treatment, but look diligently for, and note the absence as well as the presence of the results you expected to follow. Above all, you should study and think over the cases you see. Read up every important case you meet with, and endeavour to fix its salient points in the memory, so as to become familiar with those that are typical of the disease.

To turn now from your work to the other object to which your time must be devoted—rest. How to rest is in importance second only to how to work. The opposition of terms is not, perhaps, that which seems most natural to the junior student. To those who are ending their work it may have a more obvious significance. "Work and play" is the usual time-worn antithesis. "Play," however, is a term which accords better with the amusements of the schoolboy than of the student. It implies an elevatiou of a pastime, a relaxation, into an object of primary importance. If you wish to be successful, to acquire fairly the knowledge needful and for which you are sent to a medical school—if you wish to fit yourselves for future work in life, you must first of all learn to subordinate, in thought and action, your recreation to your work. The recreation you take should be of such a kind as will best fulfil its end—to re-create and strengthen your powers. It is on this account, and no other, that you should choose it. What it, then, should be you must allow your strength and opportunities to decide. It should be one which provides effectual change of thought and occupation. It should give a sufficient amount of exercise, and exercise in the open air is essential for its due beneficial effect. It should leave no unpleasant after-taste, physical or moral. It should not be one which has for you any special seductive attraction, which may now or at some future time prove too powerful to be effectually repressed. You may be fonder of one amusement than of another; you may have more natural aptitude for one than for another. Beware how you allow your inclination or your aptitude to be your guide in electing your habitual recreation. In so far as you allow these, rather than its effect, to guide you, you raise recreation from its subordinate position and make it an end instead of a means.

Bear in mind at all times the responsibilities of your profession. You will hear much of them in the opening addresses, and we will not dwell upon them now. We will only urge you, above all, to cultivate tenderness to the sick under your charge, not only in action, but in word and even in thought. You will often have to inflict physical pain, sometimes to cause mental suffering; but let the latter as well as the former be as little as possible. How much pain is caused to sick persons by thoughtless, inconsiderate modes of expression is incalculable. Remember that you come in contact with the tenderest points of their nature. The expression or the gesture or the slight neglect which has in it nothing in itself blameworthy, which would cause no annoyance to a healthy person, may to them be a source of much distress, of pain as real as any you inflict upon them physically. Pain, disease, and death are hardly more than names to your subjective life; to those to whom they are the realities of the present or the nearer future they change the whole course of thought and feeling. Beware, then, how you judge the sick by the standard of the healthy. Endeavour to enter into their feelings. Bear with the irritability which may be annoying to you, the obstinacy which may vex you and render your own task needlessly difficult. Invest suffering in another with that reverence which is due to its sad mystery. It has its roots deep down beneath the surface of our life, and reaches, in each, the inner depths of calm or storm, in a region into which you cannot pass, except by tender sympathy and thoughtful care.

THE COURSE OF STUDY REQUIRED OF A MEDICAL STUDENT.

THE object held in view in the compilation of the present "Students' Number" has been to provide for those about to enter the medical profession reliable information as to the course of study required, the examinations they will have to pass, the regulations to which they will have to conform, &c. To this end we have given in the preceding and following pages the regulations of the examining bodies and the prospectuses of the several medical schools, and we propose in this article to describe the whole course of study, stating what lectures have to be attended, what appointments held, &c.

The medical student's year is divided into two sessions: one of six months, the winter session; the other of three months, the summer session. The winter session extends from October 1st to March 31st, and the summer session from May 1st to July 31st. New students usually enter a hospital or medical college on the 1st October, and this date is looked upon as rather an important one. It is the custom at most schools for an introductory address to be given to the students by some member of the staff on that day, and this often attracts a large number of old students to the hospital. These introductory addresses frequently contain much excellent advice—the offspring of their authors' experience.

Supposing, then, a new student enters on the 1st October, he will find the work of his first winter session somewhat as follows:—He will be required to attend lectures on Anatomy, Physiology, and Chemistry—all, especially the first two subjects, of extreme importance. Anatomy and Physiology are sciences an accurate knowledge of which is essential to every medical man. We therefore earnestly recommend the student to pay great attention to the study of anatomy and physiology. The first part of anatomy which he will have to learn will be the "bones," and these he should thoroughly master, as an accurate acquaintance with them will simplify greatly the acquisition of a knowledge of the other structures of the body. The student should also take the first opportunity of dissecting, and he should be careful, while dissecting, not to be content merely with using his forceps and scalpel, but to read up diligently the anatomy of the part on which he is engaged, and make himself thoroughly familiar with the relations of the different organs and structures. Physiology should be taken hand-in-hand with anatomy, of which it is the complement, teaching us the peculiarities, structure, and functions of those organs of which anatomy teaches us the form and situation. It is a science of the very greatest importance as a foundation of medical knowledge, and without an acquaintance with it no man can become a competent medical practitioner. Of the importance of Chemistry we must also speak highly, though we think it would be an excellent custom for students to obtain a knowledge of chemistry before commencing their regular medical course. At any rate it is a science a knowledge of which is essential, and which therefore must be studied assiduously. In addition to attending these three courses of lectures, there will be the out-patient departments of the hospital to be visited, where the student will find excellent opportunities of gaining a practical acquaintance with the simpler and more common forms of disease. He must be careful, however, not to allow himself to be beguiled into spending too much time in these seductive departments, but must consider that the dissecting-room should be the home of the first-year's man.

The next session is the first summer, and the lectures of this period are on Botany, Materia Medica, and Practical Chemistry. These are important subjects in their way, Materia Medica particularly so, as it is of the greatest importance that the medical man should be thoroughly acquainted with the action and effects of the remedies placed in his hands. It should be remembered that during the past few generations the various departments of purely medical knowledge have made enormous strides, and immensely extended their boundaries, so that the student of to-day is compelled to learn a vast deal more than was the student of fifty years ago. On this account every subject not absolutely necessary should be omitted from the medical course. Practical Chemistry is of importance, as it teaches us the art of analysis, and thus becomes essential in the conduct of various medico-legal inquiries, in the investigation of questions of purity of water-supply, and in other sanitary considerations.

The first summer session over, the student should, if possible, get a good holiday and change of air, in order that he may come back invigorated and strengthened for his second winter, as this session will involve very hard work, and will test his strength and energies to a considerable extent. He will again attend lectures on Anatomy and Physiology (if he is working for the London degree, on Chemistry), and on Medicine and Surgery. He will also have to dissect and to dissect diligently, and to read hard at the same time, as at the end of this session will be the time for him to present himself for his primary examination, known among London students as the "first College." It is, we think, important to the student that he should, if possible, take up his examinations at their proper time. By doing so he is enabled to follow a regular scheme of work, and to study each subject in its proper time and place without confusion or crowding up together, and this renders the work easier and less irksome to him. Especially would we recommend him to pass his primary examination after his second winter. The passing of this examination forms a kind of landmark, as it were, in his course, and is, in fact, the division between what may be looked upon in some sense as the preparatory or foundational portion of his studies, and the more decidedly practical portion. The "first College" passed, the student is more free to pursue the study of medicine and surgery, both systematic and clinical. During his second winter, in addition to attending the lectures we have named and studying his anatomy, he will be expected to appear in the wards and out-patient department of his hospital, and to attend the clinical lectures. We should not advise him to take any appointment as dresser or clinical clerk until the "primary" has been passed. Altogether, the second winter is a session of almost incessant work, and is, in fact, the hardest part of the course.

The second summer session also brings with it plenty of occupation, especially for the candidate for the London University degree, as at the end of it will be the time for his first M.B. examination. The lectures of the second summer are those on Midwifery, Medical Jurisprudence, and Pathology; in some schools this last subject is taken later. This session is the time for the student to take some hospital appointment as out-patient, dresser, or clinical clerk, since, not having many courses of lectures to attend, he will be able to spend plenty of time at his duties, and in the wards and post-mortem room. We would strongly impress on the student the immense advantages which may be gained by hospital appointments if the opportunities they afford are rightly used, and if he is not content with merely going through his duties *as duties*, but takes a real interest in the cases, and endeavours always to gather knowledge and experience from them. The greater the number of appointments a man can hold the more thorough and varied will be his knowledge of his profession, and he should endeavour to gain acquaintance with all the special branches by holding dresserships and clerkships in the ophthalmic, aural, dental, and cutaneous departments.

The second summer session over, the student now settles down to the practical study of medicine and surgery. He has studied the auxiliary and collateral branches and now comes to the actual practical application of the principles which he has learned. He should therefore be diligent in his attendance at the hospital practice and clinical lectures, and also at the descriptive and systematic courses on medicine and surgery.

At the end of the third winter some students present themselves for their pass examinations; this, however, can only be done by those who have spent a year in study, after passing the preliminary and registering, before entering at a hospital.

If the commencement of professional education and the commencement of hospital work were synchronous, the four years must be completed before the student is eligible for his diploma. This fourth year some students spend in performing the duties of assistant to some medical practitioner, while others prefer to continue in attendance at the hospital. We think the latter is the better course; the hospital presents facilities for learning which can never be found in private practice, and therefore the student should get as much of it as he possibly can.

At the end of the fourth year the student will be eligible for his final examinations; and here we will leave him, and trust that the few remarks we have made may serve as a guide to those about to enter our profession, and, by showing what is expected from them, enable them to make the most of the opportunities afforded them, and spend their time to the best advantage. And now we will conclude by wishing all our readers a brilliant career as students, and a bright and prosperous future as practitioners of the medical art.

CHANGES AT THE METROPOLITAN MEDICAL SCHOOLS.

The changes in the tutorial departments of the metropolitan medical schools and hospitals have not been very numerous or important during the past year. Beyond the usual wear and tear of time, matters have remained in a condition somewhat similar to that in which they were last year. With the lamentable exception of the premature decease of Dr. Anstie, the hand of death has had no part in the recent changes, which have been mostly wrought by the migration of teachers from one school to another, or by retirement and the filling up of vacancies.

Although no new professorship or lectureship of any importance has been established during the past twelve months, there has evidently been an urgent desire on the part of the authorities of all the medical schools to increase the attractions, and, what is more, to enhance the tutorial value of the institutions with which they are connected.

At *Charing-cross* Dr. J. Pearson Irvine has succeeded Dr. Dowson as lecturer on Botany, and has also been appointed lecturer on Diseases of Children in place of Dr. Mitchell Bruce, who is now associated with Dr. Silver as lecturer on Theoretical and Practical Physiology. This hospital and medical school has sustained a serious loss in the resignation of Dr. Vivian Poore, who, as will be seen below, has returned to his *alma mater*, University College. In consequence of Dr. Poore's resignation, the lectureship on Forensic Medicine, and one of the joint lectureships on Public Health are vacant, as well as one of the assistant-physicianships to the hospital. Mr. J. F. Blake has succeeded Mr. Garrod in the chair of Comparative Anatomy. Mr. Bolas is demonstrator of Chemistry. In the hospital, with the exception of the vacancy caused by Dr. Poore's resignation, the only change is that Mr. A. Duncan, M.B., has been appointed medical registrar.

At *Guy's*, owing to the retirement of Mr. John Birkett, Mr. Cooper Forster takes the rank of senior surgeon, and Mr. Howse has been promoted to a full surgeoncy, while Messrs. Lucas and Golding Bird have been appointed assistant-surgeons. Mr. Thomas Bryant and Mr. Durham have succeeded Mr. Birkett and Mr. Cooper Forster as lecturers on Surgery. Mr. Howse and Mr. Davies-Colley are now the lecturers on Anatomy. Mr. Jacobson has succeeded Dr. Pye-Smith in the chair of Comparative Anatomy.

At *King's College* the vacant Professorship of Physiology, caused by Dr. Rutherford's migration to the Edinburgh University, has been filled by the appointment of Dr. Gerald F. Yeo, and Mr. S. Hamilton Cartwright has been appointed professor of Dental Surgery. In the hospital Dr. J. Curnow and Dr. E. B. Baxter have been appointed assistant-physicians. Mr. Hamilton Cartwright has been made dental surgeon, and Messrs. Batterbury and A. B. Barrow have been appointed Sambrooke registrars.

At the *London Hospital*, by the retirement of Dr. Head, Dr. Palfrey has become sole obstetric physician, also lecturer on Midwifery and Diseases of Women. Dr. Herbert Davies and Dr. S. Fenwick have succeeded Dr. Ramskill and Dr. Langdon Down as lecturers on Medicine. Mr. E. B. Aveling has been appointed to the chair of Comparative Anatomy.

At *Middlesex* Mr. Hulke has been appointed joint lecturer on Surgery with Mr. De Morgan. Dr. Arthur Edis will give practical demonstrations on Diseases of Women and Children, and Mr. Karop has been appointed one of the demonstrators of Anatomy. The Chemistry chair is vacant. At the hospital Dr. Coupland has been made curator of the museum and pathologist, and Dr. Henry Humphreys and Dr. R. W. Lyell are the registrars.

At *St. Bartholomew's*, by the retirement of Dr. Harris, Dr. Church has become full physician, Dr. Brunton having been appointed to the post of assistant-physician. Dr. Godson has been made the new assistant obstetric physician, and Dr. Hall and Dr. Moore casualty physicians. Mr. Mills is the special administrator of chloroform. Dr. Moore has succeeded Dr. Church as lecturer on Comparative Anatomy. Several complimentary exchanges appear to have been made by the demonstrators of special subjects. Mr. Willett, for instance, is announced in one part of the prospectus to have given up Orthopædic Surgery to Mr. Langton, in order that he might relieve Dr. Duckworth of the demonstrations on Diseases of the Skin. On the other hand, it is stated that in order that Mr. Langton may conduct the demonstrations on Orthopædic Surgery, he has transferred patients with diseases of the ear to Mr. Morrant Baker, who, curiously enough, is also advertised to take charge of patients suffering from diseases of the skin. Mr. Willett's case is especially trying, for in addition to his duties as demonstrator of Diseases of the Skin, and surgeon in charge of orthopædic patients, he has to give demonstrations in Practical Surgery.

At *St. George's* Drs. Ogle and Dickinson are the lecturers on Clinical Medicine, *vice* Drs. Wadham and Dickinson. Messrs. Pollock and Rouse are the lecturers on Clinical Surgery, in place of Messrs. Prescott Hewett and Henry Lee. Mr. Pick is the lecturer on Anatomy, *vice* Mr. Rouse; Dr. Ralfe the lecturer on Physiological Chemistry, in place of Mr. M. S. Moore; while Dr. R. J. Lee has succeeded Mr. J. W. Haward as lecturer on Morbid Anatomy. Dr. Barnes has been appointed successor to Dr. John Clarke in the chair of Midwifery and Diseases of Children. Mr. Haward conducts the class of Practical Surgery, and Dr. Brailey has succeeded Dr. Cavafy as lecturer on Comparative Anatomy. At the hospital Dr. Barnes has been made obstetric physician. Mr. Prescott Hewett, who recently retired from the working staff, has been made consulting surgeon, and Mr. Rouse has been promoted to a full surgeoncy, while Mr. Pollock takes rank as senior surgeon. Mr. Haward has been elected to the assistant-surgeoncy thus rendered vacant.

At *St. Mary's* very few changes have taken place. Mr. A. B. Prowse has been appointed assistant-demonstrator of Anatomy, and Dr. Mahomed demonstrator of Morbid Anatomy, and medical tutor and pathologist.

At *St. Thomas's* Dr. Gervis has succeeded Dr. Barnes as lecturer on Midwifery. Dr. Stone is the sole lecturer in Forensic Medicine, and Dr. Greenfield is associated with Mr. Henry Arnott in the lectureship on Morbid Anatomy and Practical Pathology. At the hospital Dr. Stone has been appointed to the post of physician, rendered vacant by Dr. Clapton's retirement; Dr. Gervis has become obstetric physician, and Dr. Cory assistant obstetric physician. Mr. W. Verdon has succeeded Dr. Greenfield as medical registrar; while Mr. MacKellar is now associated with Mr. Croft as demonstrator of Practical and Manipulative Surgery.

In *University College* Dr. Ray Lankester has been elected professor of Comparative Anatomy and Zoology, and Mr. Maclean and Mr. A. P. Gould have been appointed demonstrators of Anatomy. At the hospital the changes have been more numerous and more important. By the resignation of Sir Henry Thompson, and the partial retirement of Mr. Erichsen, two vacancies were caused in the surgical staff, to fill which Mr. Christopher Heath and Mr. Berkeley Hill were appointed to the charge of in-patients, and Mr. A. E. Barker, of Dublin, was elected assistant-surgeon. In consequence of the new arrangement, under which Sir W. Jenner and Dr. Reynolds visit the hospital by turns in the winter and summer sessions, Dr. Ringer has been appointed to the charge of in-patients, and Dr. Vivian Poore has been elected assistant-physician, while Dr. Gowers has been appointed assistant teacher of Clinical Medicine.

The changes at the *Westminster* School cannot be better described than in the words of the report of the Dean, Mr. Cowell:—"Shortly before the beginning of the winter session the school had to lament the loss of Francis Edmund Anstie, one of the distinguished physicians of the hospital, and its able Lecturer on Medicine. He was cut off suddenly, in the prime of life, a victim to the profession he loved so enthusiastically and well, and in which he had gained a high reputation. It is not easy to give expression in words to the high sense which both colleagues and pupils entertained of the ability, energy, and kindliness which he ever evinced in his intercourse with them, and in promoting the interests of the school. Neither will it be easy to forget that September morning and the throng of sad faces in the country churchyard of Friern-Barnet, where Dr. Anstie rests. The gap thus made in the hospital staff was filled by the promotion of Dr. Gibb, and Dr. Donkin was appointed to the post of assistant-physician. A few changes in the school have also been necessary. In the emergency last winter session, Dr. Basham and Dr. Fincham kindly undertook to deliver the lectures on Medicine. The chair has now been filled up by the appointment of Dr. Fincham and Dr. Sturges as joint-lecturers on Medicine. Dr. Phillips has succeeded to the chair of Materia Medica, and Mr. Malcolm Smith, M.B. and Master of Surgery of the University of Edinburgh, has been appointed the sole demonstrator of Anatomy. He will attend daily in the dissecting-room, and, under the lecturer, thoroughly superintend the practical study of anatomy. Further steps have been taken to complete the Dental department by the appointment of Dr. Allchin to teach Dental Anatomy, Physiology, and Histology, during the summer session, and of Dr. Dupré, F.R.S., to teach Mineralogy during the latter half of the winter session. Mr. Walker will continue to lecture on Dental Surgery and Pathology during the former half of the winter session, and a second dental surgeon will be appointed to attend at the hospital once or twice a week, and to teach Dental Mechanics during the summer session." Dr. F. De Havilland Hall has been appointed medical registrar.

SESSION 1875-76.

GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

Registration of Medical Students.—The following regulations have been adopted by the General Medical Council in reference to the registration of students of medicine:—1. Every medical student shall be registered in the manner prescribed by the General Medical Council. 2. No medical student shall be registered until he has passed a preliminary examination, as required by the Medical Council. 3. The commencement of the course of professional study recognised by any of the qualifying bodies shall not be reckoned as dating earlier than fifteen days before the date of registration. 4. The registration of medical students shall be placed under the charge of the branch registrars. 5. Each of the branch registrars shall keep a register of medical students according to the prescribed form. 6. Every person desirous of being registered as a medical student shall apply to the branch registrar of the division of the United Kingdom in which he is residing, and shall produce or forward to the branch registrar a certificate of his having passed a preliminary examination as required by the Medical Council, and a statement of his place of medical study. 7. The branch registrar shall enter the applicant's name and other particulars in the Students' Register, and shall give him a certificate of such registration. 8. Each of the branch registrars shall supply to the several qualifying bodies, medical schools, and hospitals, in that part of the United Kingdom of which he is registrar, a sufficient number of blank forms of application for the registration of medical students. 9. The several Branch Councils shall have power to admit special exceptions to the foregoing regulations as to registration, for reasons which shall appear to them satisfactory. 10. A copy of the Register of Medical Students, prepared by each of the branch registrars, shall be transmitted, on or before December 31st in each year, to the registrar of the General Council, who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an alphabetical list of all students registered in the preceding year, and supply copies of such authorised list to each of the bodies enumerated in Schedule A to the Medical Acts, and through the branch registrars to the several medical schools and hospitals. 11. The several qualifying bodies are recommended not to admit, after October, 1870, to the final examination for a qualification under the Medical Acts, any candidate (not exempted from registration) whose name has not been entered in the Medical Students' Register at least four years previously.

REGULATIONS
OF THE
MEDICAL EXAMINING BOARDS IN THE UNITED KINGDOM.

UNIVERSITY OF OXFORD.

Every student must reside in one or other of the Colleges or Halls, or in licensed lodgings, for a period of three years, passing at least two examinations in Arts, and one in either Mathematics, Natural Science, Law, Modern History, or Theology, when, if he obtain a first, second, or third class, he can take his B.A. degree; if he do not gain such honour he has to pass a third examination in *Literis Humanioribus*.

A student deciding to graduate in Medicine must pass the requisite examinations for the degree of B.A., and afterwards spend two years in study* prior to the first or scientific examination for the degree of Bachelor of Medicine, and two years more prior to the final or practical examination for the same degree. Evidence must be brought to show that he has studied the practical parts of his profession in a first-class hospital.

A dissertation has to be publicly read, three years after the M.B., for the M.D.

The instruction in Natural Science is carried on at the Museum, where there is practical instruction in Physics, Chemistry, Anatomy, and several other departments of natural science, together with courses of lectures and of practical instruction and work, by the several professors. Large collections illustrate the various subjects. There is a pathological series, including the collection of Schroeder Van der Kolk, in the medical department, and a medical and public health laboratory. The Radcliffe Library, containing above 20,000 scientific volumes, is open to all students daily from ten to four, and on certain evenings during term. There are also lectures and practical instruction in Botany at the Botanical Gardens, and clinical instruction at the Infirmary.

The medical examinations take place annually in the Michaelmas term.

Scholarships of about the value of £75 are obtainable at Christ Church, Magdalen, and other colleges, by competitive examination in Natural Science. Every year a Radcliffe Travelling Fellowship is competed for by any who, having taken a first class in any of the schools, or having obtained a University prize or scholarship, propose to study Medicine. The Travelling Fellows receive £200 a year for three years, half this period being spent in study abroad.

More detailed information may be obtained from the University Calendar; from the Regius Professor of Medicine; from the professors in the several departments; from E. Chapman, Esq., M.A., Frewin Hall; and from the Sub-Librarian in the Radcliffe Library, or the Museum.†

UNIVERSITY OF CAMBRIDGE.

The student must enter at one of the Colleges, or as a non-collegiate student, and keep terms for three years by residence in the University. He must pass the previous examination in Classics and Mathematics, which may be done in the first or second term of residence, or, through the Oxford and Cambridge Schools Examination Board, before commencing residence. He may then devote himself to medical study in the University, attending the hospital and the medical lectures, dissecting, &c. Or he may proceed to take a degree in Arts, either continuing mathematical and classical study, and passing the ordinary examinations for B.A., or going out in one of the Honour Triposes. The Natural Science Tripos is preferred by most medical students, some of the subjects for this Tripos examination (Chemistry, Botany, and Comparative Anatomy) forming part of the series of medical study.

The expenses of residence, lectures, &c., at a college are about £150 per annum; but these are in many cases lessened by scholarships, ranging in value from £20 to £80 a year, which are very numerous, and obtainable by most students of industry and ability. They are chiefly given for mathematical and classical proficiency. Some may be obtained at once, even before entering; and notices of the times of examination for these are given from time to time, under the head of "University Intelligence," in *The Times* and other newspapers. Scholarships are given for Natural Science in Trinity, St. John's, St. Peter's, Clare, Christ's, Sidney, Pembroke, Caius, and Downing Colleges; the examinations being at Easter, and in June and October.*

Non-collegiate students can reside at less expense than those who enter a College. They are allowed to attend certain of the College lectures and all the professors' lectures, and have the same University status and privileges as the other students. They are under the superintendence of the Rev. R. B. Somerset, Orford House, Cambridge, from whom further information may be obtained.

For the degree of *Bachelor in Medicine* five years of medical study are required, except in the case of medical students who have graduated with honours as Bachelors of Arts, four years being then sufficient. This time may be spent in Cambridge or elsewhere. The earlier part of it is usually spent in Cambridge, the student remaining in the University till he has passed the examination for the Natural Sciences Tripos and the first and second examinations for M.B.

There are three examinations for M.B. The *first* in Mechanics and Hydrostatics, Chemistry (with heat and electricity), and Botany. The *second* in Anatomy and Physiology (Human and Comparative) and Pharmacology. The *third* (at the conclusion of medical study) in Pathology and the Practice of Physic, Clinical Medicine, and Medical Jurisprudence. The examinations are partly in writing and partly oral, in the hospital, in the dissecting-room, and in the laboratories. They take place twice annually (in June and December).

An Act has to be kept, which consists in reading an original thesis and passing a *vivâ voce* examination on the subject of the thesis and on other subjects.

Previously to the first examination, lectures must have been attended on Chemistry (with manipulations) and Botany. Previously to the second examination the student must have attended lectures on Anatomy and Physiology (Human and Comparative), Materia Medica and Pharmacy, and Pathology; have Dissected one season; and attended Hospital Practice one year. Previously to the third examination lectures must have been attended on the Principles and Practice of Physic, Clinical Medicine, Clinical Surgery, Midwifery, and Medical Jurisprudence; also Hospital Practice for three years. The candidate must also have been a clinical clerk, or have had special charge of patients in a hospital, dispensary, or parochial union, for six months.

The degree of *Doctor in Medicine* may be taken three years after M.B. An Act has to be kept, with *vivâ voce* examination; and an extempore essay has to be written on some subject relating to physiology, pathology, the practice of medicine, or State medicine. A Master of Arts proceeding to M.D. is required to produce the same certificates and pass the same examinations as for M.B.

For the degree of *Master in Surgery* the candidate must have passed the three examinations for M.B., and have attended lectures on Human Anatomy (a second course), on the Principles and Practice of Surgery, Clinical Surgery, Midwifery (with ten cases); he must have dissected a second season, have attended the Surgical Practice at a recognised hospital for three years, and have held a house-surgeoncy or dressership for six months. He is then required to pass an examination in Surgical Anatomy, Pathology and the Principles and Practice of Surgery, and Clinical Surgery.

An examination in so much of State Medicine as is comprised in the functions of Officers of Health will be held in Cambridge in October, 1875, beginning on Oct. 5. Any person whose name is on the Medical Register of the United Kingdom may present himself for this examination provided he is twenty-four years of age. The examination will be in two parts. All applications for admission to this examination or for information respecting it, should be addressed to Professor Liveing, Cambridge.

The following is a summary of the course which a student (commencing at the University, say, in October, 1875) may follow:—He enters at any one of the colleges, or as a non-collegiate student, and passes the previous examination (in Classics and Mathematics) in October, 1875, or in April, 1876, unless he has already passed the equivalent examination under the Oxford and Cambridge Schools Examination Board. He is then registered as a student of medicine. Medical study in the University for two years. Natural Sciences Tripos examination (in Comparative Anatomy, Chemistry, and Botany), June and December, 1878; this admits to B.A. degree in June, 1878. Second examination for M.B. (in Human Anatomy and Physiology, and Materia Medica), May, 1879. Third examination for M.B. (in Pathology and Practice of Physic, Clinical Medicine, and Medical Jurisprudence), November, 1880. Examination for M.C. (in Surgical Anatomy, Pathology, and the Principles and Practice of Surgery, Clinical Surgery, and Midwifery), November, 1880. Degree of M.B. or M.C., November, 1880. Part of the period of medical study is thus spent in Cambridge, and part (say after the second examination) in London or elsewhere.

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* If he have taken the higher honours in the Natural Science School he may go in for the first M.B. examination on the first opportunity, and so have a longer period of practical study before the second M.B. examination.

† Regius Professor of Medicine—H. W. Acland, M.D., LL.D., F.R.S.
Professor of Geometry—H. S. Smith, M.A., F.R.S.
Professor of Natural Philosophy—Rev. B. Price, M.A., F.R.S.
Professor of Experimental Physics—S. Clifton, M.A., F.R.S.
Linacre Professor of Physiology—G. Rolleston, M.D., F.R.S.
Professor of Chemistry—W. Odling, M.A., F.R.S.
Professor of Zoology—J. O. Westwood, M.A.; F.L.S.
Professor of Botany—M. Lawson, M.A.
Professor of Mineralogy—N. S. Maskelyne, M.A., F.R.S.
Lee's Reader in Anatomy—J. B. Thompson, B.A.
Demonstrator in Anatomy—Charles Robertson, Esq.
Demonstrator of Chemistry—T. H. G. Wyndham, M.A.
Analyst in Health Laboratory—W. F. Donkin, M.A.

* For an account of the Scholarships see THE LANCET of the 12th of April, 1862; and for an account of the Scholarships for Natural Science see *Nature* in the early part of each year. Further information may be obtained by application to the tutor of either of the Colleges.

This University now grants degrees in State Medicine.

Attendance at the hospital and on the lectures on Anatomy, Chemistry, &c., is recognised by the Universities of Cambridge and London, and by the College of Surgeons.

The students usually remain in Cambridge during part of the long vacation (July and August) and part of the Christmas vacation, as well as during the terms.

UNIVERSITY OF LONDON.

The *Preliminary Scientific (M.B.) Examination* takes place once in each year, commencing on the third Monday in July. The candidate must have completed his seventeenth year, and have either passed the Matriculation examination or taken degree in Arts in either of the universities of Sydney, Melbourne, Calcutta, or Madras. Fourteen days' notice of his intention to present himself must be given to the registrar previous to the examination. Candidates are examined in the following subjects: Mechanical and Natural Philosophy; Inorganic Chemistry; Botany and Vegetable Physiology; Zoology. Candidates will not be approved by the examiners unless they show a competent knowledge in all the subjects of examination, and also in Practical Chemistry. Fee for this examination, £5.

Any candidate who has passed the Preliminary Scientific (M.B.)Examination may be examined for honours in Experimental Physics, Chemistry, Botany and Zoology. These examinations will commence in the second week after the Pass Examination.

The *First M.B. Examination* takes place once in each year, commencing on the last Monday in July.

A candidate is admitted to this examination on producing the following certificates:—1. Of having completed his nineteenth year. 2. Of having passed the Preliminary Scientific Examination at least one year previously.* 3. That subsequently to having taken a degree in Arts or passed the Matriculation Examination he has been a student during two years at one or more of the medical institutions or schools recognised by this University; and that he has attended a course of lectures on each of three of the subjects in the following list: Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Obstetric Medicine and Diseases peculiar to Women and Infants, Surgery, Medicine. 4. That subsequently to having taken a degree in Arts or passed the Matriculation Examination he has dissected during two winter sessions. 5. That subsequently to having taken a degree in Arts or passed the Matriculation Examination he has attended a course of Practical Chemistry, comprehending practical exercises in conducting the more important processes of General and Pharmaceutical Chemistry, in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 6. That he has attended to Practical Pharmacy, and acquired a practical knowledge of the preparation of medicines. These certificates must be transmitted to the registrar at least fourteen days before the commencement of the examination.

Candidates are examined in Anatomy, Physiology,* Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry, partly by printed papers and partly *vivâ voce* and by experiments and demonstrations. The fee for this examination is £5. If a candidate withdraw or fail to pass the examination, the fee shall not be returned to him; but he shall be admissible to any two subsequent First M.B. Examinations without the payment of any additional fee, provided that he give notice to the registrar at least fourteen days before the commencement of the examination.

The examinations for Honours take place in the week following that in which the Pass Examination commenced. If sufficient merit be evinced, the candidates most distinguishing themselves will receive three exhibitions of £40 per annum for the next two years, payable in quarterly instalments, provided that on receiving each instalment the candidate declare his intention of presenting himself at the Second M.B. Examination within three years from the time of his passing the First M.B. Examination. Under the same circumstances, the first and second candidates in each subject receive each a gold medal of the value of £5.

The *Second M.B. Examination*† takes place once in each year, commencing on the first Monday in November.

No candidate is admitted to this examination within two academical years of the time of his passing the first examination, nor without producing certificates—1. Of having passed the First M.B. Examination. 2. That subsequently to having passed the First M.B. Examination he has attended a course of lectures on each of two of the subjects specified, and for which he had not presented certificates at that examination. 3. Of having conducted at least twenty labours. (Certificates on this subject will be received from any legally qualified practitioner in medicine.) 4. Of having attended the surgical practice of a recognised hospital or hospitals during two years, with clinical instruction and lectures on Clinical Surgery. 5. Of having attended the medical practice of a recognised hospital or hospitals during two years, with clinical instruction, and lectures on Clinical Medicine.‡ 6. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine, surgery, or obstetric medicine, with special charge of patients, in a hospital, infirmary, dispensary, or parochial union, during six months. 7. Of having acquired proficiency in Vaccination. (Certificates on this subject will be received only from the authorised vaccinators appointed by the Privy Council.)

Candidates must also produce certificates of moral character from a teacher in the last school or institution at which they have studied. These certificates must be transmitted to the registrar at least fourteen days before the examination.

Candidates are examined in General Pathology, General Therapeutics and Hygiene, Surgery, Medicine, Obstetric Medicine, and Forensic Medicine. The examinations include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry; and are partly in writing and partly oral. They also include examination and report on cases of medical patients, demonstrations from specimens and preparations, practical examinations in Forensic Medicine, and on the use of instruments and apparatus, and writing prescriptions in Latin without abbreviations. The fee for this examination is £5[*]

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* Candidates are strongly recommended by the Senate to pass the Preliminary Scientific Examination before commencing their regular medical studies.

* Any candidate is allowed, if he so prefer, to postpone his examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects until the First M.B. Examination in the next or any subsequent year; but he cannot in that case be admitted to compete for Honours on either occasion; and he cannot be admitted as a candidate at the Second M.B. Examination until after the lapse of at least twelve months from the time of his passing the examination in Physiology.

† Any candidate for the Second M.B. Examination who has passed the First M.B. Examination under the former regulations is required to have also passed the Examination in Physiology at some previous First M.B. Examination carried on under the present regulations, at which examination he is not allowed to compete for Honours.

‡ The student's attendance on the Surgical and on the Medical Hospital Practice may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that in every case his attendance on Surgical and Medical Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. Attendance during three months in the wards of a Lunatic Asylum recognised by the University, with Clinical Instruction, may be substituted for a like period of attendance on Medical Hospital Practice. The Senate regard it as highly desirable that candidates for the degree of M.B. should practically acquaint themselves with the different forms of Insanity by attendance in a Lunatic Asylum.

Any candidate who has passed the Second M.B. Examination may be examined for Honours in Medicine, Obstetric Medicine, and Forensic Medicine. These examinations commence in the week following that in which the Pass Examination commenced. If sufficient merit be evinced, the candidates who most distinguish themselves in this examination will receive respectively—in Medicine, £50 per annum for the next two years, with the style of University Scholar in Medicine; in Obstetric Medicine, £30 per annum for the next two years, with the style of University Scholar in Obstetric Medicine; in Forensic Medicine, £30 per annum for the next two years, with the style of University Scholar in Forensic Medicine. Also the first and second candidates in each of the preceding subjects will each receive a gold medal of the value of £5.

Bachelor of Surgery.—The examination for this degree takes place once a year, commencing on the Tuesday following the fourth Monday in November. A candidate is admitted to this examination on producing certificates—(1) of having passed the Second Examination for the degree of M.B. in this University; (2) of having attended a course of instruction in Operative Surgery, and having operated on the dead subject. These certificates must be transmitted to the registrar at least fourteen days before the examination begins. The examinations are conducted by means of printed papers, by *vivâ voce* interrogation, examination and report on cases of surgical patients, Surgical Anatomy, the application of surgical apparatus, and by the performance of surgical operations on the dead subject. The fee for this examination is £5.

Any candidate who has passed the B.S. Examination may be examined for Honours in Surgery on Tuesday in the week following the Pass Examination. If sufficient merit be evinced, the candidate who distinguishes himself the most will receive £50 per annum for the next two years, with the style of University Scholar in Surgery. The first and second candidates also receive a gold medal of the value of £5.

Master in Surgery.—The examination for this degree takes place once a year, commencing on the fourth Monday in November. A candidate is admitted to this examination on producing certificates—1. Of having taken the degree of B.S.[†] in this University. 2. Of having attended subsequently to taking the degree of B.S. in this University, to Clinical or Practical Surgery during two years in a hospital or medical institution recognised by this University; or to Clinical or Practical Surgery during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession; or of having been engaged during five years in the practice of his profession, either before or after taking the degree of B.S. in this University.[‡] 3. Of moral character, signed by two persons of respectability. These certificates must be transmitted to the registrar at least fourteen days before the examination begins. Candidates are examined in Logic and Moral Philosophy,[||] and in Surgery. The examination is conducted by means of printed papers and *vivâ voce* examination, as well as by dissection and the performance of surgical operations. The fee for this degree is £5.

If sufficient merit be evinced, the candidate who distinguishes himself the most in Surgery will receive a gold medal of the value of £20.

Doctor of Medicine.—The examination for this degree takes place once a year, commencing on the fourth Monday in November.

A candidate is admitted to this examination on producing certificates to the following effect:—1. Of having taken the degree of M.B. in this University. 2. Of having attended, subsequently to taking the degree of M.B. in this University, (*a*) to Clinical or Practical Medicine during two years in a hospital or medical institution recognised by this University; (*b*) or to Clinical or Practical Medicine during one year in a hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession; (*c*) or of having been engaged during five years in the practice of his profession either before or after taking the degree of M.B. in the University. One year of attendance on Clinical or Practical Medicine, or two years of practice, is dispensed with in the case of those candidates who at the second examination were placed in the first division. 3. Of moral character, signed by two persons of respectability.

The certificates to be transmitted to the registrar at least fourteen days before the examination. Candidates are examined in Logic and Moral Philosophy, and in Medicine. The fee for this degree is £5, excepting to such as, having taken their M.B. degree under the former regulations, shall not have paid the fee of £5 at the Preliminary Scientific Examination, and to whom therefore the fee for the M.D. degree is still £10. If sufficient merit be evinced, the candidate who distinguishes himself the most in Medicine shall receive a gold medal of the value of £20.

UNIVERSITY OF DURHAM.

Registration and Examination.—The name of every student in Medicine is placed on a register kept by the registrar of the University; and every student who has thus been registered is regarded as a matriculated student of the University in the Faculty of Medicine, receiving a certificate of his registration, for which he has to pay 5*s*.

The Registration Examination at Durham is held twice a year: shortly before the winter session, and shortly before the summer session, of the University College of Medicine, Newcastle-upon-Tyne. Every candidate for the Registration Examination must send in his name, one month at least before the day of examination, to A. Beanlands, Esq., Durham, and pay at the same time a fee of £1.

One of the University Medical Scholarships, value £25 per annum, tenable for four years, will be awarded after examination, commencing on Wednesday, the 13th of October.

The following examinations are accepted as qualifications for registration:—Durham Senior and Junior Examinations of persons not members of the University; Durham Examination for Students in Arts in their first year.

Students who matriculate are enabled to proceed to a licence in Medicine, and then to the degrees of M.B., M.D., and M.C.

Licence and Degrees.—No grace for a *Licence in Medicine* will be granted unless the petitioner is of the age of twenty-one years, has since his registration spent four years in medical study at one or more of the schools recognised by the licensing bodies named in Schedule A of the Medical Act of 1858 (one of the said four years having been spent at the University's College of Medicine, Newcastle-on-Tyne), and has passed two public examinations. No one will be admitted to the *first* of these examinations unless he has spent two years, nor to the *second* unless he has spent four years, at least, in medical study as above prescribed, and has passed the first examination; and no one will be admitted to either of these examinations unless he has produced satisfactory testimonials of conduct, and such certificates of attendance on lectures and hospital practice as the Warden and Senate shall require.

No grace for a degree of *Bachelor in Medicine* will be granted unless the petitioner is of the standing of three terms at least as a Licentiate in Medicine, and of eighteen terms (six years) at least from the date of his registration or matriculation. No one who is not a Bachelor of Arts will be admitted to the degree of Bachelor of Medicine unless he has kept one year's residence in Arts either at Durham, in the University, or at Newcastle-upon-Tyne, in the Durham University College of Medicine, and has passed both the final examination for the degree of Bachelor of

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[*] *The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of "Doctor of Medicine."*

[†] Candidates who have taken the degree of Bachelor of Medicine previously to 1866 will be admitted to the examination for the degree of Master in Surgery without having taken the degree of Bachelor of Surgery; and in the case of such candidates the attendance on surgical practice may commence from the date of the M.B degree.

[‡] One year of attendance on Clinical or Practical Surgery, or two years of practice, is dispensed with in the case of those candidates who at the B.S. examination were placed in the first division.

[||] Any candidate who has taken the degree either of B.A. or B.Sc. in this University is exempted from this part of the examination; and any candidate who has passed the second M.B. examination may at any subsequent M.S. or M.D. examination present himself for Logic and Moral Philosophy alone, if he so prefer; thereby gaining exemption, if he should pass, from an examination in that subject when he presents himself to be examined for the degree of Master in Surgery or Doctor of Medicine.

Arts, or an equivalent to it, and also the examination for the degree of Bachelor of Medicine.

No grace for the degree of *Doctor of Medicine* will be granted unless the petitioner is a Bachelor of Medicine of the standing of twenty-one terms (seven years) at least from his registration or matriculation, and of three terms at least from his admission to the degree of Bachelor of Medicine, nor unless he has performed the required exercises.

No grace for a *Licence in Surgery* will be granted unless the petitioner is of the age of twenty-one years, has spent four years in medical and surgical study since his registration as a student in medicine in some one or more of the schools recognised by the licensing bodies named in Schedule A of the Medical Act of 1858 (one of the said four years having been spent at the University's College of Medicine, Newcastle-upon-Tyne), and has passed two public examinations. The first of these examinations will be the first examination appointed for students in medicine. No one will be admitted to it who has not spent two years in medical and surgical study as above prescribed. The second of these examinations will be partly the same as the second examination appointed for students in medicine, and partly in surgical subjects. No one will be admitted to it who has not spent four years at least in medical and surgical study as above prescribed, and passed the first examination. No one will be admitted to either of these examinations unless he has produced satisfactory testimonials of conduct, and such certificates of attendance on lectures and hospital practice as the Warden and Senate shall require. The second examination for a Licence in Surgery may or may not be passed at the same time with the second examination for a Licence in Medicine.

No grace for the degree of *Master in Surgery* will be granted unless the petitioner is a Licentiate in Surgery and also a Licentiate in Medicine, and is of the standing of eighteen terms (six years) at least from the date of his registration or matriculation, and of three terms at least from the date of his admission to the Licence in Surgery. No one who is not a Bachelor of Arts will be admitted to the degree of Master in Surgery unless he has kept one year's residence in Arts either at Durham, in the University, or at Newcastle-on-Tyne, in the Durham University College of Medicine, and has passed the final examination for the degree of Bachelor of Arts, or an equivalent to it, besides the examination for the degree of Master in Surgery.

The Warden and Senate have authority to arrange for students in the Faculty of Medicine an examination equivalent to that for the degree of Bachelor of Arts by substituting for the theological part of it an examination in Hippocrates, Galen, or such other ancient medical author or authors as they may think fit.

Any student in medicine who was registered before Easter term, 1868, will be entitled to be admitted to the degree of Master in Surgery on the same conditions as are required for a Licence in Surgery.

UNIVERSITY OF EDINBURGH.

The session of 1875-76 will be opened on Monday, the 1st of November, at 2 P.M., with an address by the Principal.

Three medical degrees are conferred by the University of Edinburgh—namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The degree of C.M. is not conferred on any person who does not also at the same time obtain the degree of M.B.

1. The preliminary branches of extra-professional education are English, Latin, Arithmetic, the elements of Mathematics, and the elements of Mechanics; and the proficiency of students in these branches is ascertained by examination prior to the commencement of their medical study.

2. No candidate is admitted to a professional examination who has not passed a satisfactory examination in at least two of the following subjects, in addition to the subjects mentioned above—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place before the candidate has entered on his medical curriculum.

3. A degree in Arts (not being an honorary degree) in any one of the universities of England, Scotland, or Ireland, or in any foreign or colonial university specially recognised for this purpose by the University Court, exempts from all preliminary examination; and an examination in Arts by any corporate body whose examination has been recognised as qualifying for entrance on medical study by resolution of the General Medical Council of the United Kingdom, provided the said examination by the said corporate body shall also be approved by the University Court, shall exempt from preliminary examination in Arts, on all subjects comprised in the said examination of the said corporate body.

4. No one is admitted to the degree of Bachelor of Medicine or Master in Surgery who has not been engaged in medical and surgical study for four years. The medical session of each year, or *annus medicus*, is constituted by at least two courses of not less than a hundred lectures each, or by one such course and two courses of not less than fifty lectures each; with the exception of the clinical courses, in which lectures are to be given at least twice a week during the prescribed periods.

5. Every candidate for the degree of M.B. and C.M. must give sufficient evidence by certificates—1. That he has studied each of the following departments of medical science—viz., Anatomy, Chemistry, Materia Medica, Institutes of Medicine or Physiology, Practice of Medicine, Surgery, Midwifery and the Diseases peculiar to Women and Children, and General Pathology, each during courses including not less than one hundred lectures; Practical Anatomy, six months; Practical Chemistry, three months; Practical Midwifery, three months; Clinical Medicine and Clinical Surgery, each during courses of six months; Medical Jurisprudence, Botany, Natural History (including Zoology), during courses including not less than fifty lectures. 2. That he has attended, for at least two years, the medical and surgical practice of a general hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of physicians and surgeons. 3. That he has been engaged, for at least three months, by apprenticeship or otherwise, in compounding and dispensing drugs. 4. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of a hospital, or the practice of a dispensary, physician, surgeon, or member of the London or Dublin Society of Apothecaries.

6. The studies of candidates for the degrees of Bachelor of Medicine and Master in Surgery are subject to the following regulations:—1. One of the four years of medical and surgical study required by Section 4 must be in the University of Edinburgh. 2. Another of such four years must be either in the University of Edinburgh or in some other university entitled to give the degree of M.D. 3. Attendance during at least six winter months on the medical or surgical practice of a general hospital which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy, may be reckoned as one of such four years. 4. One year's attendance on lectures in the hospital schools of London, or in the school of the College of Surgeons in Dublin, or of such teachers of medicine in Edinburgh, or elsewhere, as shall from time to time be recognised by the University Court, may be reckoned as one of such four years. 5. Candidates may, to the extent of four of the departments of medical study required by Section 5, sub-section 1, attend, in such year or years of their medical and surgical studies as may be most convenient to them, the lectures of teachers of medicine above specified. 6. All candidates, not students of the University, availing themselves of the permission to attend the lectures of extra-academical teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept by the University for that purpose on payment of the corresponding matriculation fee.

7. Every candidate must deliver, before the 31st day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—1. A declaration, in his own handwriting, that he has completed his twenty-first year, or that he shall have done so on or before the day of graduation, and that he will not be on the day of graduation under articles of apprenticeship to any surgeon or other master. 2. A statement of his studies, as well in Literature and Philosophy as in Medicine, accompanied by proper certificates.

8. Each candidate is examined both in writing and *vivâ voce*—1st, on Chemistry, Botany, and Natural History; 2nd, on Anatomy, Institutes of Medicine, Materia Medica including Practical Pharmacy, and Pathology; 3rd, on Sur-

gery, Practice of Medicine, Midwifery, and Medical Jurisprudence; 4th, clinically on Medicine and on Surgery in a hospital.

9. Students who are ready to submit to an examination on the first division of these subjects at the end of their second year may be admitted to examination at that time.

10. Students who have passed their examination on the first division of these subjects may be admitted to examination on the second division at the end of their third year.

11. The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *annus medicus*.

12. Candidates may be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of their fourth year.

13. Candidates at these examinations found unqualified cannot be again admitted to examination unless they have studied during another year two of the prescribed subjects, either in the University or in some other school of medicine.

14. After the candidate has satisfied the medical examiners, he will be admitted on the 1st day of August, or, if that day be Sunday, then on the following day, to the degree.

15. The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degree of Bachelor of Medicine, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the degree of Bachelor of Medicine, for at least two years in attendance on a hospital, or the Military or Naval Medical Service, or in medical and surgical practice; provided always that the degree of Doctor of Medicine shall not be conferred on any person unless he be a graduate in Arts of one of the universities of England, Scotland, or Ireland, or of such other universities as are above specified, or unless he shall, before or at the time of his obtaining the degree of Bachelor of Medicine, or thereafter, have passed a satisfactory examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects—namely, French, German, Higher Mathematics, and Natural Philosophy; and provided also that the candidate for the degree of Doctor in Medicine shall, on or before the 30th day of April in the year in which he proposes to graduate, submit to the Medical Faculty a thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the degree of Bachelor of Medicine which he may have made a subject of study after having received that degree. No thesis will be approved by the Medical Faculty which does not contain either the results of original observations in Practical Medicine, Surgery, Midwifery, or some of the sciences embraced in the curriculum for the Bachelor's degree; or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the candidate, accompanied by precise references to the publications quoted, so that due verification may be facilitated. Those who have, under former regulations, given in theses when taking the degree of M.B. require no theses for M.D.

Each candidate for a degree in Medicine must produce at his final examination a certificate from a dispensary, or other public institution where vaccination is practised, attesting that he has been practically instructed in the operation, and is acquainted with the appearances which follow its performance.

Notices to Candidates for Degrees.—Candidates who commenced their medical studies by attendance on qualifying classes before February 4th, 1861, are entitled to appear for examination for the degree of Doctor of Medicine after four years' study, on completing their twenty-first year, and without having taken the degree of Bachelor of Medicine. They are also exempted from the preliminary examinations mentioned in sects. 1 and 2, and require only to undergo an examination in Latin. They are also exempted from attendance on Practical Chemistry and Practical Midwifery, and require only three months of Clinical Surgery and eighteen months of hospital attendance.

An *annus medicus* is constituted by at least two winter courses of 100 lectures each, or by one such course and two summer courses of 50 lectures each, all being duly certified.

Four *anni medici* are required for graduates in Medicine. Two at least of these years must be passed at a university which grants degrees in Medicine, one of the two being at Edinburgh. One or two of the *anni medici* may be taken at qualified extra-academical schools. In University College, in King's College, in the hospital schools of London, in the extra-academical schools of Edinburgh, in the school of the College of Surgeons of Dublin, and in certain medical schools where at least two lecturers have been qualified by the University Court, a candidate may make two *anni medici*—one of which must be constituted by hospital attendance and Practical Anatomy, the other by at least two courses of 100 lectures, or one such course and two courses of fifty lectures. The classes at these schools only qualify to the extent of four, and one of the four must be Practical Anatomy. In provincial schools, where there are no lecturers qualified by the University Court, a candidate can make one *annus medicus* only, and this is constituted by attendance on a qualified hospital, along with a course of Practical Anatomy.

The Edinburgh extra-academical classes only qualify if the fee paid at the commencement of the session is the same as that paid to the professors in the University.

All the classes mentioned must be taken at a university, except the four selected by the candidate; and those so selected must be qualifying courses as regards subjects and extent.

Three months' courses of Materia Medica, Pathology, and Midwifery do not qualify. For each of these subjects one course of 100 lectures is required.

Every candidate for a degree in Medicine must be a matriculated student of the University for the year in which he appears for examination or graduation.

Specimens of the examination papers for 1874–75 are given in the Calendar.

Candidates who appear for examination must produce certificates of having attended *complete* courses of the subjects on which they are to be examined.

Candidates, settled for a period of years in foreign parts, who have complied with all the regulations for the degree of M.D., but who cannot appear personally to receive the degree, may, on satisfying the Senatus to that effect, by production of sufficient official testimonials, have the degree conferred on them in absence.

The fees for examination are: For the Preliminary Examination each non-matriculated student pays a fee of 10*s.* (this fee allows the candidate to appear at the Preliminary Examination during one academic year); for the degree of M.B., three examinations, £5 5*s.* each (£15 15*s.*); for the degree of C.M., £5 5*s.* additional; for the degree of M.D., £5 5*s.* additional to that for M.B., exclusive of £10 Government stamp. The graduation fees must all be paid on or before the 15th July in the year in which candidates propose to graduate.

UNIVERSITY OF GLASGOW.

Three degrees in Medicine are granted—viz., Bachelor of Medicine, Master in Surgery, and Doctor of Medicine. The curricula of study and the examinations for the several degrees conferred are nearly the same as in the University of Edinburgh. The annual terms for conferring medical and surgical degrees are the 1st May and the 1st August. The Preliminary Examinations of medical students in branches of general education take place on the 8th October, 1875, and on the 2nd April, 1876.

The fees for the degrees are as follows:—For the degree of M.B. (for each of three examinations, £5 5*s.*) £15 15*s.*; for that of C.M. (in addition to the fee of M.B.), £5 5*s.*; for the M.D. (in addition to the fee for M.B.), £5 5*s.*; and Government stamp for diploma, £10 3*s.*

The regulations under which the above degrees are granted and the notices of the subjects of examination, may be obtained by application to the registrar of the University.

Bursaries tenable by Medical Students.—The Brisbane Bursary, of £50 yearly, held for four years by a student of medicine who is a Master of Arts. The Walton Bursary, of £36 yearly, held by a medical student (a native of England being preferred) for four years. The Logan Bursary, of £16 yearly, tenable by a medical student for four years. Two Rainy Bursaries, value £20 per annum each, open to medical students who have just completed the second year of professional study, and tenable for two years. The Armagh Bursaries, three in number, amounting each to £25 yearly, for three years, open to students of Divinity, Law, and Medicine, who have taken the degree of M.A. The Macfarlane

Bursary, value £40 per annum, and tenable for three years, open to students who have attended the first session of their professional study in the University of Glasgow, and who have passed in all the seven subjects of the Preliminary Examination for M.B.

UNIVERSITY OF ABERDEEN.

The curricula for the several degrees conferred are nearly the same as in the University of Edinburgh.

Professional Examinations will be held twice in each year—namely, in April and July, directly after the close of the winter and summer sessions.

The fees for graduation are the same as in the University of Edinburgh. Matriculation fee, including all dues, for the winter and summer sessions, £1; summer session alone, 10*s*.

Candidates who commenced their medical studies before November, 1861, are entitled to appear for examination for the degree of M.D. after four years' study, one of which must have been in the University of Aberdeen.

Besides the Royal Infirmary, students have the opportunity of attending the following institutions:—General Dispensary, and Lying-in and Vaccine Institutions: daily. Royal Lunatic Asylum: Clinical instruction is given for three months in the year. Eye Institution: Clinical instruction is given on the Diseases of the Eye, and on the application of the Ophthalmoscope for their diagnosis.

Application for further information should be addressed to Professor Brazier, Secretary of the Medical Faculty.

UNIVERSITY OF ST. ANDREWS.

Three degrees of Medicine are granted—namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D. The curricula for these degrees, and the regulations under which they are conferred, differ from those of the University of Edinburgh only in the particulars noticed below.

The degree of *Doctor of Medicine* may be conferred by the University of St. Andrews on any registered medical practitioner above the age of forty years whose professional position and experience are such as, in the estimation of the University, to entitle him to that degree, and who shall, on examination, satisfy the medical examiners of the sufficiency of his professional knowledge; provided always, that degrees will not be conferred, under this section, to a greater number than ten in any one year. The examinations are held yearly, towards the end of April. Candidates must lodge with the Dean of the Medical Faculty the following certificates along with application for admission to examination:—1. A certificate of age, being a baptismal certificate or an affidavit of age. 2. Holograph certificates from at least three medical men of acknowledged reputation in the medical profession or in the medical schools, recommending the candidate to the Senatus for the degree, and testifying to his professional skill and position. As only ten can graduate yearly, candidates will be selected whose service and certificates seem to the Medical Faculty to present the highest professional claims, and where these seem equal, preference will be given to age and priority of application. 3. Candidates, when notified for examination, shall remit a portion of the graduation fee (viz., £15 15*s.*) This sum shall be forfeited should the candidate fail to appear, or to graduate, at the time appointed. 4. A satisfactory examination, written and *vivâ voce*, must be passed in the following departments—viz., Materia Medica and General Therapeutics, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, Midwifery and Diseases of Women and Children.

No one will be received as a candidate for the degree of *Bachelor of Medicine* or *Master in Surgery* unless two years at least of his four years of medical and surgical study shall have been in one or more of the following universities or colleges—viz., the Universities of St. Andrews, Glasgow, Aberdeen, Edinburgh, Oxford, and Cambridge; Trinity College, Dublin; Queen's College, Belfast; Queen's College, Cork; and Queen's College, Galway.

Subject always to the condition here specified, the studies for candidates for the degrees of Bachelor of Medicine and Mastery in Surgery will be under the following regulations: The remaining years of medical and surgical study may be either in one or more of the universities and colleges above specified, or in the hospital schools of London, or in the school of the College of Surgeons in Dublin, or under such private teachers of medicine as may from time to time receive recognition from the University Court. Attendance during at least six winter months on the medical or surgical practice of a general hospital which accommodates at least eighty patients, and during the same period on a course of Practical Anatomy, may be reckoned as one of such remaining years. Attendance on the lectures of any private teacher in Edinburgh, Glasgow, or Aberdeen, will not be reckoned for graduation in St. Andrews, if the fee for such lectures be of less amount than is charged for the like course of lectures in the University of Edinburgh, of Glasgow, or of Aberdeen, according as the teacher lectures in those places respectively.

Every candidate for examination for the degree of M.B. and C.M. is required to lodge a declaration of age, a statement of his course of study, his inaugural dissertation, and all his certificates, with the Dean of the Medical Faculty, on or before the 25th of March in each year.

No candidate offering himself for examination on the first two divisions of the subjects specified in Clause 12 of the Regulations will be considered to have passed in the second if he fails in the first; and no candidate offering himself for examination on the three divisions shall be considered to have passed in the third if he fails either in the first or second division.

Every candidate who fails to pass in any of the divisions will, for a first failure, in any and each of the divisions, forfeit the sum of £2 2*s.*, and £1 1*s.* for every subsequent failure in each.

UNIVERSITY OF DUBLIN (TRINITY COLLEGE).

Matriculation.—All students of the School of Physic intending to practise Physic must be matriculated, for which a fee of 5*s.* is payable. No student can be admitted for the winter courses after Nov. 25th.

Previous Medical Examination.—Candidates for degrees and licences in Medicine and Surgery are required to pass a previous examination in Physics, Chemistry, Botany, Materia Medica and Pharmacy, and Descriptive Anatomy, previous to their degree examination.

Bachelor in Medicine.—A candidate for the degree of Bachelor in Medicine must be a graduate in Arts, and may obtain the degree of Bachelor in Medicine at the same commencement as that at which he receives his degree of B.A., or at any subsequent commencement. The medical education of a Bachelor in Medicine is of four years' duration, and comprises attendance on a single course of each of the following lectures:—Anatomy, Practical Anatomy, Surgery, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, Practice of Medicine, Midwifery, Botany, Medical Jurisprudence, Heat, Electricity, Magnetism, Comparative Anatomy. Three courses of nine months' attendance on the clinical lectures of Sir Patrick Dun's or other metropolitan hospital recognised by the Board of Trinity College. Six months' instruction in Practical Midwifery, including Clinical Lectures. A certificate of personal attendance on Fever cases, with names and dates of cases. Six months' Dissections are required. Three months' Laboratory instruction in Chemistry is required. Any of the above-named courses may be attended at any medical school in Dublin recognised by the Provost and senior Fellows. The fee for the *Liceat ad Examinandum* is £5; for the M.B. degree, £11.

Doctor in Medicine.—A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the degree of M.B. for three years, and must perform exercises for the degree before the Regius Professor of Physic, in accordance with the rules and statutes of the University. Total amount of fees for this degree, £13.

Bachelor in Surgery.—A Bachelor in Surgery must be a Bachelor in Arts, and have spent four years in the study of Surgery and Anatomy. He must also pass a public examination in the Hall before the Professors of the School of Physic, having previously completed the prescribed curriculum of study.*

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* Students in the School of Physic who matriculated before June 22nd, 1872, may obtain the degree of Master in Surgery, according to the regulations in force previous to the creation of the degree of Bachelor in Surgery.

Candidates are required to perform surgical operations on the dead subject.

Candidates for the degree of Bachelor in Surgery, who have already passed the examination for the degree of Bachelor in Medicine, will be examined in Anatomy and Surgery only.

Fee for the *Liceat ad Examinandum*, £5; fee for the degree of Bachelor in Surgery, £1.

*Master in Surgery.** — A Master in Surgery must be a Bachelor in Surgery of three years' standing, or have been qualified to take the degree of Bachelor in Surgery for three years; and must read two theses publicly before the Regius Professor of Surgery, or undergo an examination before the Regius Professor, according to regulations to be approved by the Provost and Senior Fellows.

Fee for the degree of Master in Surgery, £11.

University Licences.—Candidates for the Licences in Medicine or Surgery must be matriculated in Medicine, and must have completed two years in Arts and four years in medical studies.

Licentiate in Medicine.—The medical course and examination necessary for the Licence in Medicine are the same as for the degree of M.B.

A Licentiate in Medicine, on completing his course in Arts, and proceeding to the degree of B.A., may become a Bachelor in Medicine, on paying the degree fees, without further examination in Medicine. Fee for the *Liceat ad Examinandum*, £5; for the Licence in Medicine, £5.

Licentiate in Surgery.—The surgical course and examination necessary for the Licence in Surgery are the same as for the degree of Bachelor in Surgery. Fee for the *Liceat ad Examinandum*, £5; for the Licence in Surgery, £5.

Medical Scholarships.—Two Medical Scholarships will be given annually, tenable for two years, with a salary of £20 per annum, on the condition of the successful candidates proceeding regularly for two years with the medical course in the University.

Qualification in State Medicine.—Doctors in Medicine of Dublin, Oxford, or Cambridge, who wish to obtain from the University a Certificate of Qualification in State Medicine, can do so on passing an examination in a limited course of the following subjects:—1. Law, comprehending sanitary legislation and the laws relating to the conduct and duties of medical men. 2. Engineering in its sanitary aspects. 3. Pathology, including the laws of epidemics, vaccination, insanity, &c. 4. Vital and sanitary statistics. 5. Chemistry in relation to air, water, gaseous poisons, deodorisation, and disinfection. 6. Meteorology. 7. Medical Jurisprudence.

The total cost of the education and first degrees in Medicine and Surgery is as follows, in addition to the fees for education in Arts and B.A. degree (£83 4*s*); Medical and Surgical Lectures, £52 15*s.*; Hospitals, £33 12*s.*; Medical and Surgical Examinations and Degrees, £22.

THE QUEEN'S UNIVERSITY IN IRELAND.

Granting the degrees of *Doctor in Medicine* and *Master in Surgery*, and diplomas in Midwifery, includes three Colleges—the Queen's Colleges of Belfast, Cork, and Galway—each of which possesses a Faculty of Medicine. The curriculum of medical study extends over a period of four years, and is divided into two periods of two years each. The first period comprises attendance on Chemistry, Natural History, Anatomy and Physiology, Practical Anatomy, Materia Medica and Pharmacy. The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery and Diseases of Women and Children, Theory and Practice of Medicine, and Medical Jurisprudence. At least two of the above courses of lectures must be attended in some one of the Queen's Colleges; the remainder may be taken, at the option of the candidate, in any university, college, or school recognised by the Senate of the Queen's University. Candidates are required to have also attended, in one of the Colleges of the Queen's University, lectures on Experimental Physics and on one Modern Language, and to have passed the Matriculation Examination. They are further required to attend, during the first period, Practical Chemistry in a recognised laboratory, and the practice during six months of a recognised medico-chirurgical hospital, containing at least sixty beds, together with the clinical lectures delivered therein; and to attend, during the second period, a recognised midwifery hospital, with the clinical lectures therein delivered, for a period of three months; or a midwifery dispensary for the same period; or ten cases of labour, under the superintendence of the medical officer of any hospital or dispensary where cases of labour are treated; and eighteen months' practice of a recognised medico-chirurgical hospital containing at least sixty beds, and in which clinical instruction is delivered. There are three University Examinations: the First University Examination, the Second University Examination, and the Degree Examination. The degree of Master in Surgery and the diploma in Midwifery are only conferred upon candidates who already hold the degree of Doctor in Medicine, and who have also passed a special examination in surgery or medicine. The University Examinations are held twice in each year—in June and September. Candidates who commence their medical studies elsewhere are admitted to the First University Examination before proceeding to College. Further information will be found in the "Queen's University Calendar," or may be obtained by application to the Secretary, Queen's University, Dublin Castle.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

Members.—1. The members of the College, present and future, shall be alone eligible to the fellowship. They shall have the use of the library and museum, and shall be admitted to all lectures.

2. All persons who have been admitted before Feb. 16th, 1859, licentiates of the College, shall be entitled to be admitted members of the College, provided that they have, since their admission as licentiates, obeyed the bye-laws.

3. Any extra-licentiate who shall have produced testimonials as to character satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of pharmacy, and who shall comply with the bye-laws, may be proposed to the College to be admitted a member of the College.

4. Any person who shall have satisfied the College touching his acquirements in general science and literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the bye-laws, may be proposed to be admitted a member of the College.

5. Every candidate for the membership of the College under the last bye-law, who shall have commenced his professional studies after September, 1861, shall satisfy the Censors' Board that, previous to the commencement of his professional studies, he has obtained a degree in Arts from some university of the United Kingdom or of the colonies, or from some other university specially recognised by the Medical Council, or that he has passed examinations equivalent to those required for a degree in Arts. All other candidates for membership shall be examined on the subjects of general education by the President and Censors of the College.

6. Every candidate for membership shall furnish proof that he has attained the age of twenty-five years.

7. Every candidate shall produce a testimonial from a fellow or member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a member of the College.

8. Every candidate (except such as shall be admissible under the provisions of sections 15 and 16) shall produce proof of his having been engaged in professional studies during a period of five years, of which four years at least shall have been passed at a medical school or schools recognised by the College.

9. Every candidate (except such as shall be admissible under the provisions of Sections 15 and 16) shall produce evidence, satisfactory to the Censors' Board, of his having studied the following subjects: — Anatomy (with Dissections) and Physiology, during two winter sessions; Chemistry, six months; Practical Chemistry, Materia Medica, Practical Pharmacy, and Botany, three months each; Morbid Anatomy, six months; Principles and Practice of Medicine and Principles and Practice of Surgery, during two winter sessions; Clinical Medicine during three

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* N.B.—After the year 1874, Masters in Surgery must be of the standing of Masters in Arts.

winter sessions and three summer sessions; Clinical Surgery, two winter and two summer sessions; Midwifery and the Diseases peculiar to Women, and Forensic Medicine, three months each. Of having attended diligently during three winter and three summer sessions the medical practice, and during three winter and two summer sessions the surgical practice, of a hospital containing at least 100 beds. Of having been engaged during six months in the clinical study of diseases peculiar to women; and of having served the office of clinical clerk in the medical wards during at least six months.

10. Every candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding bye-law (except such as shall be admissible under the provisions of Section 16), shall, nevertheless, bring proof of his having attended during at least twelve months the medical practice of a hospital in the United Kingdom containing at least 100 beds.

11. If the Censors' Board doubt the sufficiency of the certificates and testimonials produced by any candidate, or his fitness in any respect for admission to examination, they may submit the case to a general meeting of the Fellows.

12. No candidate shall be admitted to examination who is engaged in trade, or who dispenses medicine, or makes any engagement with a chemist or any other person for the supply of medicines; or who practises medicine or surgery in partnership, by deed or otherwise, so long as that partnership continues.

13. No candidate shall be admitted to examination who refuses to make known, when required by the President and Censors, the nature and composition of any remedy he uses.

14. Every candidate (except in cases specially exempted under Sections 15 and 16) shall give proof of his acquirements by written answers to questions placed before him, and shall be examined *vivâ voce* at three separate examinations, and shall be approved by the President and Censors, or by the major part of them. The First Examination, on Anatomy and Physiology, will be conducted by written questions, and also *vivâ voce*, on Dissections and Preparations. The Second Examination will comprise Surgical Anatomy, Principles and Practice of Surgery, Materia Medica, Chemistry in its application to Pathology, Pharmacy and Toxicology, Midwifery and Diseases peculiar to Women. This examination will be conducted partly by written questions, and partly in a practical manner. The Third or Pass Examination will include Medical Anatomy, Principles and Practice of Medicine (including the Principles of Public Health), and Psychological Medicine.

Examinations of candidates for the Membership of the College will take place in January, April, July, and October, further particulars of which, if needed, can be obtained on application at the College.

Candidates will not be admitted to the First Examination until after the termination of the second winter session of professional study at a recognised medical school, nor to the Second Examination until after the termination of four years of professional study, nor to the Third or Pass Examination until after the completion of the required course of professional study. Any candidate who shall be rejected at the First Examination will not be readmitted to examination until after the lapse of three months, and will be required to produce a certificate of the performance of dissections, or other professional study satisfactory to the examiners, during that time. Any candidate who shall be rejected at the Second Examination will not be readmitted to examination until after the lapse of three months, and will be required to produce a certificate of attendance on the practice of a recognised hospital during that time, and also of attendance on clinical lectures. Any candidate not approved by the Censors' Board at the Third or Pass Examination will not (except by special permission of the College) be readmitted to examination until after the lapse of a year. Every candidate must give fourteen days' notice in writing to the Registrar of the College of his intention to present himself for examination, at the same time transmitting the following certificates:—For the Primary Examination: Evidence of having passed an Arts Examination; of having been duly registered as a medical student; and of having completed the second winter session of professional study at a recognised medical school. For the Second Examination: Evidence of having completed four years of professional study; of having attained the age of twenty-one years; of instruction and proficiency in the practice of Vaccination; and of having attended not less than twenty labours. For the Pass Examination: Proof of having attained the age of twenty-five years; a testimonial from a fellow or member of the College; evidence of having completed the required course of professional study.

15. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at a university in the United Kingdom, wherein the courses of study and the examinations to be undergone by the students previously to graduations shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the examinations hereinbefore described, except such as relate to the Third or Pass Examination; the nature and extent of which examination shall, in the case of each candidate, be determined by the Censors' Board. Every candidate for the membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages.

16. If any candidate who has attained the age of forty years shall produce testimonials not merely satisfactory as to his moral character and conduct, and his general and professional acquirements, but further showing that he has improved the art or extended the science of medicine, or has at least distinguished himself highly as a medical practitioner, the Censors' Board, having well weighed and considered these testimonials, may, if they see fit, submit them to the Fellows at a general meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the candidate shall be admitted to examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient.

17. Any candidate who shall produce satisfactory evidence of having passed an examination in Anatomy and Physiology, conducted by any of the bodies named in Schedule A to the Medical Act, and recognised by the College as requiring a course of study and an examination satisfactory to the College, will be exempt from re-examination on the subjects of the Primary Examination.

18. Any candidate who shall have obtained a degree in Surgery at a university in the United Kingdom, after a course of study and an examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy and the Principles and Practice of Surgery.

19. Any candidate who shall have passed the examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a course of study and an examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy and on the Principles and Practice of Surgery.

The fee to be paid for admission is £31 10s.

Licentiates.—The Licence of this College is a qualification to practise Medicine, Surgery, and Midwifery, and is recognised by the Poor-law Board as a qualification in Surgery as well as in Medicine. Every candidate for the College licence (except when otherwise provided by the bye-laws) is required to produce satisfactory evidence to the following effect:—1. Of having attained the age of twenty-one years. 2. Of moral character. 3. Of having passed, before the commencement of professional study, an examination in the subjects of general education recognised by the College. 4. Of having been registered as a medical student in the manner prescribed by the General Medical Council. 5. Of having been engaged in professional studies during four years, of which at least three winter sessions and two summer sessions shall have been passed at a recognised medical school or schools; and one winter session and two summer sessions in one or other of the following ways:—Attending the practice of a hospital or other institution recognised by the College for that purpose. Receiving instruction as the pupil of a legally qualified practitioner holding any public appointment which affords opportunities, satisfactory to the examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery. Attending lectures on any of the required subjects of professional study at a recognised place of instruction. Professional studies commenced *before* the candidate shall have passed an examination in the subjects of general education will not be recognised by the College.

6. Of having attended, during three winter sessions and two summer sessions, the medical and surgical practice at a recognised hospital or hospitals; of having discharged the duties of clinical clerk at a recognised hospital for a period of not less than three months; of having performed the duties of dresser at a recognised hospital for a period of not less than three months; and of having been engaged during six months in the clinical study of Diseases peculiar to Women. 7. Of having studied the subjects particularised in Section 9 of the regulations given above relating to members. 8. Of having passed the Professional Examinations.

Examinations for the Licence.—Every candidate for the College licence, before he is admitted to examination, is required to sign a declaration stating whether he has or has not been rejected within three months by any of the examining boards.

The First and Second Examinations, and the Second or Pass Examination, embrace the same subjects, and are conducted similarly to the First and Second Examinations for the membership. The exemptions also from re-examination differ only in the following respects:—Any candidate who shall have obtained a degree in Medicine at a university recognised by the College, after a course of study, and an examination satisfactory to the College, shall be exempt from re-examination on the subjects of the Primary Examination. Any "registered medical practitioner" whose qualification or qualifications shall have been obtained before the 1st day of January, 1861, having been, with the consent of the College, admitted a candidate for the licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the professional examinations as his qualifications may seem to the examiners to render unnecessary.

The fee for the College licence is fifteen guineas, of which five guineas are to be paid on admission to the First Examination, which fee will not be returned to any candidate rejected at this examination, but will be allowed in the fee for the licence, and he will be admitted to one subsequent First Examination without additional payment.

Any candidate who shall be rejected at the Second or Pass Examination will have the fee paid on admission to this examination returned to him, less three guineas.

Examinations of candidates for the College licence will take place in February, April, July, October, and December.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF MEMBER.

Preliminary General Education and Examination.—Candidates who commenced their professional education on or after 1st January, 1861, will be required to produce one or other of the certificates of proficiency granted by the educational bodies specified in the recommendations of the General Medical Council (see *ante*). Candidates who shall not be able to produce one or other of those certificates will be required to pass an examination* in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.

Each candidate is required to pay a fee of £2 on the morning of the first day of the examination prior to his admission thereto. The next examination will be held on or about the third Tuesday or Wednesday in December. The exact dates of the examinations will be duly advertised, when fixed, in the medical journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the examination.

Professional Education.—Professional studies prior to the date at which the candidate shall have passed an examination in general knowledge, in conformity with the preceding regulation, are not recognised.

The following will be considered as the commencement of professional education:—Attendance on the practice of a hospital or other public institution recognised by this College for that purpose. Instruction as the pupil of a legally qualified surgeon, holding the appointment of surgeon to a hospital, general dispensary, or union workhouse, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council. Attendance on lectures on Anatomy, Physiology, or Chemistry, by lecturers recognised by this College.

The commencement of professional study otherwise than by attendance on lectures in recognised medical schools, or by attendance on the practice of recognised hospitals, will not be admitted until a certificate thereof shall be furnished to the secretary for registration at the College by the practitioner whose pupil the candidate shall have become, or by the medical superintendent of the hospital or other institution to the practice of which he shall have entered, and will consequently date only from the reception of such certificate by the secretary; the certificate to be accompanied by proof of having passed the necessary preliminary examination in general knowledge.

Candidates will be required to produce the following other certificates:—1. Of being twenty-one years of age. 2. Of having been engaged, subsequently to the date of passing the Preliminary Examination, during four years, or during a period extending over not less than four winter and four summer sessions, in the acquirement of professional knowledge. 3. Of having attended lectures on Anatomy during two winter sessions. 4. Of having performed Dissections during not less than two winter sessions. 5. Of having attended lectures on General Anatomy and Physiology during one winter session. 6. Of having attended a practical course of General Anatomy and Physiology during another winter or a summer session, consisting of not less than thirty meetings of the class. 7. Of having attended lectures on Surgery during one winter session. 8. Of having attended a course of Practical Surgery during a period occupying not less than six months prior or subsequent to the course required by the preceding clause 7. 9. Of having attended one course of lectures on each of the following subjects—namely, Chemistry, Materia Medica, Medicine, Forensic Medicine, Midwifery (with practical instruction, and a certificate of having personally conducted not less than ten labours), Pathological Anatomy during not less than three months. 10. Of have studied Practical Pharmacy during three months. 11. Of having attended a three months' course of Practical Chemistry (with manipulations) in its application to medical study. 12. Of instruction and proficiency in the practice of Vaccination. 13. Of having attended at a recognised hospital or hospitals the Practice of Surgery during three winter and two summer sessions. 14. Of having been individually engaged, at least twice in each week, in the observation and examination of patients at a recognised hospital or hospitals, under the direction of a recognised teacher, during not less than three months. 15. Of having, subsequently to the first winter session of attendance on Surgical Hospital Practice, attended, at a recognised hospital or hospitals, Clinical Lectures on Surgery, during two winter and two summer sessions. 16. Of having been a Dresser at a recognised hospital, or of having, subsequently to the completion of one year's professional education, taken charge of patients under the superintendence of a surgeon during not less than six months, at a hospital, general dispensary, or parochial or union infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery. 17. Of having attended during the whole period of attendance on Surgical Hospital Practice (see Clause 13) demonstrations in the post-mortem room of a recognised hospital. 18. Of having attended, at a recognised hospital or hospitals, the Practice of Medicine, and Clinical Lectures on Medicine, during one winter and one summer session.

Blank forms of the required certificates may be obtained on application to the Secretary, and all necessary certificates will be retained at the College.

Certificates will not be received on more than one branch of science from one and the same lecturer; but Anatomy and Dissections will be considered as one branch of science.

Certificates will not be recognised from any hospital in the United Kingdom unless the surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such school be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such school be members of one of the legally constituted Colleges of Surgeons in the United Kingdom.

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* The subjects of this examination during the years 1875-76 may be obtained by application at the College.

No metropolitan hospital will be recognised by this College which contains less than 150, and no provincial or colonial hospital which contains less than 100 patients.

Certificates of attendance upon the practice of a recognised provincial or colonial hospital unconnected with, or not in convenient proximity to, a recognised medical school, will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College; and in such cases clinical lectures will not be necessary, but a certificate of having acted as dresser for the period of at least six months will be required.

Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on lectures and hospital practice within fifteen days from the commencement of the session; nor from candidates who have studied in the provincial schools of England, unless their names shall be duly returned from their respective schools.

At their first registration in October, candidates will be required to produce a certificate of having passed one or other of the recognised preliminary examinations.

Those candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the several certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland, from candidates for their diploma, together with a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of professional knowledge; and in the case of candidates who shall have pursued the whole of their studies at recognised foreign or colonial universities, upon the production of the several certificates required for their degree by the authorities of such universities, together with a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of professional knowledge.

Members or licentiates of any legally-constituted College of Surgeons in the United Kingdom, and graduates in Surgery of any university recognised for this purpose by this College, will be admitted to examination on producing their diploma, licence, or degree, together with proof of being twenty-one years of age, a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four years in the acquirement of professional knowledge.

Graduates in Medicine of any legally-constituted college or university, recognised for this purpose by this College, will be admitted to examination on adducing, together with their diploma or degree, proof of being twenty-one years of age, a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of professional knowledge.

Professional Examination.—This examination is divided into two parts. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected subject, and on prepared parts of the human body. The Second or Pass Examination, on Surgical Anatomy and the Principles and Practice of Surgery and Medicine,* is partly written, partly oral, and partly on the practical use of surgical apparatus and the practical examination of patients. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. Candidates will not be admitted to the Primary Examination until after the termination of the second winter session of their attendance at a recognised school or schools; nor to the Pass or Surgical Examination until after the termination of the fourth year of their professional education. The fee of five guineas, paid prior to the Primary Examination, and allowed on the whole fee of £22 payable for the diploma, is retained; and after any two consecutive failures at the Primary Examination the candidate is required to pay an *additional* fee of five guineas prior to being again admitted to that examination, which *additional* fee is also retained. Five guineas, part of the sum of £16 15*s.*, the balance of the whole fee due for the diploma, and paid prior to the Pass Examination, is retained; and after any two consecutive failures at the Pass Examination the candidate is required to pay an *additional* fee of £5 5*s.* prior to being again admitted to the Pass Examination, which *additional* fee is also retained. A candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for examination within the period of three months from the date at which he shall have so failed to attend. A candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a certificate of the performance of dissections during not less than three months, subsequently to the date of his reference. A candidate referred on the Pass Examination is required, prior to his admission to re-examination, to produce a certificate of at least six months' further attendance on the surgical practice of a recognised hospital, together with lectures on Clinical Surgery, subsequently to the date of his reference.

For the diploma of Fellow, the regulations as to the *Preliminary Examination* are very nearly the same as for the Membership.

THE CERTIFICATE OF QUALIFICATION IN MIDWIFERY.

The examinations for this certificate are held in the months of February, May, August, and December.

The fee for the certificate is as follows—namely: Persons who were fellows or members of this College prior to the 1st of January, 1853, two guineas. Persons admitted fellows or members of this College subsequently to the 1st of January, 1853, three guineas. Persons producing any other diploma or certificate of degree which may be considered by the Council to afford satisfactory proof of sufficient surgical and medical education, three guineas. All other persons, ten guineas.

THE DIPLOMA IN DENTAL SURGERY.

Examination.—The examination is partly written and partly oral. The written examination comprises General Anatomy and Physiology, and General Pathology and Surgery, with especial reference to the practice of the dental profession. The oral practical examination comprises the several subjects included in the curriculum of professional education, and is conducted by the use of preparations, casts, drawings, &c. Members of the College, in the written examination, will have to answer only those questions set by the section of the Board consisting of persons skilled in dental surgery; and in the oral examination will be examined only by that section. A candidate whose qualifications shall be found insufficient will be referred back to his studies, and will not be admitted to re-examination within the period of six months, unless the Board shall otherwise determine. Examinations will be held in January and June. The fee for the diploma is ten guineas, over and above any stamp duty.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

The Licence.—No one can obtain the licence of the College until he has completed the age of twenty-one years.

Every applicant for the licence must produce a certificate that he has studied Vaccination under a recognised teacher.

The Preliminary Examination in General Education prescribed by the General Medical Council must have been passed by each applicant, and his name inscribed in the Register of Medical Students, previous to the commencement of his medical studies. Masters and Bachelors of Arts of any British or foreign university, whose course of study may from time to time be approved by the College, will be exempted from the Preliminary Examination; also those who have passed the examination of the national educational bodies, or of any recognised licensing board.

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* Candidates can claim exemption from examination in Medicine under the following conditions—viz.: 1. The production by the candidate of a degree, diploma, or licence in Medicine entitling him to register under the Medical Act of 1858; or a degree, diploma, or licence in Medicine of a colonial or foreign university approved by the Council of the College. 2. A declaration by the candidate, prior to his admission to the Final Examination for Membership or Fellowship, that it is his intention to obtain either of the medical qualifications mentioned in the foregoing paragraph, in which case the diploma of the College will not be issued to him until he shall produce either the said medical qualification or proof of having passed the several examinations entitling him to receive the same.

The Professional Examination will be divided into two parts, according to the following arrangement of subjects:—1. Anatomy, Physiology, Chemistry. 2. Materia Medica and Pharmacy, Pathology and Pathological Anatomy, Practice of Medicine, Surgery, Midwifery, Medical Jurisprudence, Clinical Medicine. No candidate will be admitted to the first examination until the end of his second winter session, or to the second until he has completed four years of professional study. The examinations will be partly oral, partly in writing.

Candidates for the licence of the College who have passed the First Professional Examination before a qualifying body (provided it be as extensive as that required by this College) will be at once admitted to the second part of the examination.

Meetings for the examination of candidates who already possess a qualification from a recognised licensing body will be held on the first Wednesday of every month (except September and October), and, if necessary, on the following days. Candidates are required to communicate with the secretary to the College not less than eight days before the date of the examination at which they propose to appear.

No candidate is admissible to examination who has been rejected by any licensing board within three months previous to his examination.

The fee payable by a licentiate is £10 10*s*. In the event of a candidate being unsuccessful at his examination, the sum of £2 2*s*. will be retained to defray expenses.

Candidates may be admitted to special examination, on days other than those appointed above, on bringing forward reasons satisfactory to the Council, and on paying an extra fee of £5 5*s*. Should the candidate be unsuccessful, the sum of £8 8*s*. will be returned to him.

The Membership.—Any licentiate of a College of Physicians, or graduate of a British or Irish university, with whose knowledge of medical and general science the College may be satisfied, may be admitted a member of the College, provided he shall have attained the age of twenty-four years.

The Fellowship.—No one can be elected a Fellow of the College until he has been at least one year a member thereof, and has attained the age of twenty-five years.

The fee to be paid by a member is £31 10*s*. When a licentiate is raised to the rank of a member, he pays £21. When a member is raised to the rank of a fellow, the fee is £31 10*s*., exclusive of stamp duty, which amounts to £25. All candidates for fellowship or membership must lodge their fees, and the amount of stamp duty payable at the time to Government, with the treasurer, previously to presenting their petitions.

Qualification in Public Health.—The College now confers certificates of competency in Public Health. Examinations are held in April and October. Fee for certificate £10 10*s*.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

Every candidate for a surgical diploma must have followed his course of study in a university, or in an established school of medicine, or in a provincial school specially recognised by the College of Surgeons of that division of the United Kingdom in which it is situate.

Preliminary Examination.—All students who intend becoming candidates for the diploma of the College must have passed the complete examination in general education as prescribed by the General Medical Council (see *ante*), and have had their names inscribed in the Register of Medical Students at the commencement of their professional studies. Testimonials of proficiency granted by educational bodies recognised by the Medical Council exempt students from the Preliminary Examination.

Professional Education.—Candidates commencing professional study after Oct. 1st, 1866, must have been engaged, during four years after the examination in general education, in professional study, which shall include not less than four winter sessions', or three winter and two summer sessions' attendance at a recognised medical school.

Professional Examination.—Candidates are subjected to two Professional Examinations, conducted at separate sittings, partly in writing and partly orally.

The First Examination embraces Anatomy, Physiology, and Chemistry.

Candidates who desire to pass the First Professional Examination must apply to the Secretary on or before the Saturday preceding the day of examination, and must produce tickets and certificates of attendance in regard to all those courses of study which have reference to the subjects of that examination. They must also produce evidence of having passed the Preliminary Examination.

The sum of £4 must be paid to the treasurer of the College for this examination not later than 10 A.M. of the day preceding it. This sum will be considered as paid to account of the entire fee of £10 payable for the diploma.

In the case of a candidate being unsuccessful at this examination, £2 will be returned to him, the remaining £2 being retained to meet the expenses of the examination.

The Second Examination embraces Surgery and Surgical Anatomy; also Medicine, Midwifery, Materia Medica, and Medical Jurisprudence; and does not take place before the termination of the winter session of the last year of study. In the case of candidates who began their course of study after 16th October, 1866, it will not take place till four years after the examination in general education.

Application for examination must be made to the secretary not later than the Tuesday previous to the day of the First Examination.

Every candidate must produce to the secretary—1. Satisfactory evidence of his having attained the age of twenty-one years, and of having been duly registered. 2. The tickets and certificates of his classes. 3. The certificate of his having passed the First Professional Examination. And 4. A tabular statement (for which a printed form will be furnished by the officer) exhibiting the full amount of his professional education, and distinguishing the classes, hospitals, and dispensaries attended during each session of his studies. If he have been an apprentice, he must also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature, and will be preserved by the College.

If the candidate have been an apprentice to a Fellow of the College, he must also produce his discharged indenture.

The remaining fee payable to the College (being £6), together with the receipt for the fee paid for the First Professional Examination, must be lodged not later than 10 A.M. of the day preceding the examination day in the hands of the treasurer, who will certify this upon the secretary's letter. £4 will be returned to unsuccessful candidates.

Candidates who have passed the First Examination in Anatomy, Physiology, and Chemistry, at any of the licensing boards recognised by the Medical Act, will be admissible to the Second Professional Examination on producing certificates of the whole course of study, of having passed their Preliminary and First Professional Examinations, and of having been registered. If any of the three subjects of the first examination have been omitted, such candidates will have to undergo an examination on the omitted subjects; and none of the subjects set down will be omitted at the second examination, even if some of them should have formed part of the first examination by another board. The fee will be £10. Unsuccessful candidates under this regulation will receive back £8.

In order to test more effectually the practical knowledge of candidates, recent dissections, anatomical specimens, and articles of the materia medica will be employed during the examinations; and all candidates will be required to write out formulæ of prescriptions. They will also be subjected to a practical clinical examination in the surgical hospital, including the application of surgical apparatus, bandages, &c.

No candidate shall be admissible to examination who has been rejected by any other licensing board within the three months preceding his application to be examined.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

The Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh, while they still continue to give their diplomas separately, under separate regulations, have made arrangements by which, after one series of examinations, the student may obtain the diplomas of both Colleges. The general principle of this joint examination is, that it shall be conducted by a board in which each body is represented in those branches which are common to both medicine and surgery; but that the College of Physicians shall take exclusive charge of the examination in Medicine and the College of Surgeons of the examination in Surgery. The object of the joint examination is to give to students facilities for obtaining from two separate bodies, and at less expense, a qualification in Medicine and a qualification in Surgery. Students passing that examination successfully will be enabled to register two qualifications under the Medical Act—Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh. The arrangement for thus conferring a double qualification by the co-operation of the two Colleges is in conformity with Section 19 of the Medical Act, and has received the special sanction of the General Council of Medical Education and Registration.

The regulations as to professional education, and the examinations for the double qualification, are almost identical with those prescribed for the single diploma of the Royal College of Surgeons of Edinburgh; the fees, however, differ to some extent.

Candidates may obtain all necessary information from Dr. Gairdner, Inspector and Treasurer of the Double Qualification, at 45, Northumberland-street, Edinburgh.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

Preliminary Examinations in General Literature, in accordance with the regulations of the General Council, will be held in the Faculty Hall during the session 1875–76 on the following days, commencing at 11 o'clock—namely, Friday, Oct. 8th, and Friday, Oct. 22nd, 1875; Friday, April 21st, 1876; Friday, July 21st, and Friday, 15th Sept., 1876; and on each occasion the examination will be continued on the succeeding day. Those who are unsuccessful may appear at one subsequent examination without paying a second fee. The fee for the examination and certificate is 10*s*., payable to the secretary previous to the examination.

The course of study for the diploma and the regulations generally correspond with those required by the Royal College of Surgeons of Edinburgh.

The examination is held on the second Tuesday of every month, August excepted, and extends over the subsequent day. Candidates will not be admitted to the final examination until the expiry of four years from the date of registration, which period must embrace at least three winter and two summer sessions, or four winter sessions, of study at a medical school.

The regulations regarding special examinations are nearly similar to those of the Royal College of Surgeons of Edinburgh.

The fee for the diploma is £10—£4 for the first and £6 for the second examination.

REGULATIONS REGARDING THE DOUBLE QUALIFICATION.

The Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians, Edinburgh, grant their diplomas conjointly before a board of examiners in which each body is represented, the object being to give to students facilities for obtaining from two separate bodies, and at less expense, a double qualification in Medicine and Surgery. Students passing this examination successfully will be enabled to register two qualifications under the Medical Act—namely, Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and Licentiate of the Royal College of Physicians of Edinburgh. The curriculum of study embraces a course of Medicine, in addition to the subjects required for a diploma of the Faculty. The fee for the first examination is £6; for the second, £10.

The Examination for the Double Qualification will be held in the Faculty Hall, Glasgow, at the following periods—namely, First Examination, October 7th, 1875, January 12th, April 1st, May 4th and 6th, and July 27th, 1876. The Second Examination will take place, the written part on each of the above days, and the clinical and oral parts on the succeeding day.

Applications to be admitted to either the first or second examination must be made to the Secretary of the Faculty not later than the Monday preceding the examination.

The other regulations are nearly the same as those for the diploma of the Faculty.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Candidates for the Licence in Medicine are required to give proof of having been engaged during a period of four years in the study of Medicine, and also to produce evidence of having studied, at a school or schools recognised by the College, the following subjects:—Anatomy, Physiology, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Botany, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, Midwifery; and of having attended a medico-chirurgical hospital in which regular courses of clinical lectures are delivered, together with clincal instruction, for twenty-seven months, or such hospital for eighteen months, with nine months' attendance on a medical hospital, and similar courses of clinical lectures and clinical instruction, the attendance in each case being for not more than nine months in any year, and the attendance on a medico-chirurgical hospital and medical hospital not being taken out in the same year; and of having attended Practical Midwifery for six months at a recognised lying-in hospital, or produce evidence satisfactory to the College, in each individual case, of having attended Practical Midwifery. Candidates must also produce certificates of character from two registered physicians or surgeons.

The examinations are held on the second Tuesday and two following days in each month, except August and September.

Gentlemen holding a Medical or Surgical qualification, who may desire to obtain the licence in Midwifery, will be required to undergo a special examination.

The fee for the Licence is £15 15*s*. Fee for the Midwifery diploma, £3 3*s*.; for the licences in Medicine and Midwifery, if taken out within an interval of a month, £16.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Letters Testimonial.—Every person requiring to be registered as a pupil on the College books must first pay a registry fee of five guineas. Registered pupils are admitted to the Preliminary Examination at any period previous to the examination for Letters Testimonial. Students who are not registered pupils are also admitted to the Preliminary Examination upon payment of a matriculation fee of ten shillings; but they are not enrolled as registered pupils, or entitled to the privileges reserved for such pupils, until they have paid the full registration fee of five guineas.

Examinations are held quarterly, on the second Tuesday in January, April, July, and December, at which candidates are divided into two classes—junior and senior.

The junior class must produce certificates of having attended three courses of lectures on Anatomy and Physiology, three courses of lectures on Practical Anatomy, with dissections; two courses of lectures on Chemistry, one course of lectures on Materia Medica, one course of lectures on Botany, and one course of lectures on Forensic Medicine. This class is examined in Anatomy, Physiology, and Materia Medica.

The senior class must produce certificates of having attended three courses of lectures on the Theory and Practice of Surgery, one course of lectures on the Practice of Medicine, and one course of lectures on Midwifery; also of attendance on a recognised hospital for three winter and three summer sessions. This class is examined in Surgery, Operative Surgery, Practice of Medicine, and forms of Prescription.

The fees are: 10*s*. for Preliminary Examination; £5 5*s*. as registered pupil of the College; £5 5*s*. for the Junior Class Examination, which is not returned in case of rejection, but is allowed in the fee for his second examination; £15 15*s*. for the Senior Class Examination—total £26 15*s*. In addition to the foregoing, a fee of £1 1*s*. is to be paid to the registrar on handing each licentiate his diploma.

Every candidate rejected at the quarterly examination is required to pay to the College the sum of £2 2*s*. on applying for re-examination.

Fellowship.—A registered pupil or licentiate is admitted to examination for the Fellowship if he shall have laid before the Council the following documents:—A receipt showing that he has lodged in the Bank of Ireland, for the use of the College, if he be a licentiate, the sum of twenty guineas, or thirty-five in case he be a registered pupil, provided in either case he intends to reside beyond ten miles from Dublin. Should the candidate intend to reside in Dublin, or within ten miles thereof, he shall lodge, if he be a licentiate, thirty guineas; or, if he be a registered pupil, forty-five guineas. Fellows entering on the country list, who may subsequently settle as practitioners in Dublin, or within ten miles thereof, shall pay ten guineas to the College. Certificates that he is twenty-five years of age; that he is a Bachelor of Arts of some university, or that he has been examined in such a manner as the Council may from time to time direct, with a view to ascertain that he has obtained a liberal preliminary education; of good general conduct during his professional education; that he has been engaged in the acquisition of professional knowledge for a period of not less than six years, during three of which he must have studied in one or more of the schools and hospitals recognised by the Council. He may have studied for the other three years in any school or schools of the United Kingdom which shall be approved by the Council, or in any foreign school of repute. It is also required that the candidate shall have had opportunities of practical instruction as house-surgeon or dressers in a recognised hospital. Certificates of attendance on the several courses of lectures required to be attended by candidates for Letters Testimonial, together with one course of lectures on Comparative Anatomy, and one course of lectures on Natural Philosophy. A thesis on some medical subject or clinical reports, with observations of six or more medical or surgical cases taken by himself.

Midwifery.—Any Fellow or Licentiate of the College may be admitted to an examination for the diploma in Midwifery upon laying before the Council the following documents:—A certificate showing that he has attended one course of lectures on Midwifery and Diseases of Women and Children, delivered by a professor or lecturer in some school of medicine or surgery recognised by the Council. A certificate showing that he has attended the practice of a lying-in hospital, recognised by the Council, for a period of six months, or the practice of a dispensary for lying-in women and children recognised by the Council, and devoted to this branch of surgery alone. A certificate showing that he has conducted thirty labour cases at least.

Candidates for the Midwifery diploma are publicly examined on the Organisation of the Female, the Growth and Peculiarities of the Fœtus, the Practice of Midwifery, and the Diseases of Women and Children; and, if approved of, shall receive a licence or diploma certifying the same.

The candidate pays £1 6*s.* for the Midwifery diploma, provided he takes it out within one month from the date of his Letters Testimonial; after that date, £2 2*s.*

THE SOCIETY OF APOTHECARIES, LONDON.

Every candidate for a Certificate of Qualification to practise as an Apothecary will be required to produce testimonials—Of having passed a Preliminary Examination in Arts, as a test of general education. Of having attained the full age of twenty-one years. Of good moral conduct. Of having had three months' Practical Pharmacy from some recognised hospital or dispensary, or from a qualified practitioner; the apprenticeship not being required. And of having pursued a course of medical study in conformity with the regulations of the Court. Of having served the office of clinical clerk at a recognised hospital during the period of six weeks at least; and also that they have been examined at the class examinations instituted by the various lecturers and professors of their respective medical schools and colleges.

Course of Study.—Every candidate must attend the following lectures and medical practice during not less than three winter and two summer sessions; each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

First Year.—Winter Session: Chemistry, Anatomy and Physiology, Dissections. Summer Session: Botany, Materia Medica and Therapeutics, Practical Chemistry.[*]

Second Year.—Winter Session: Anatomy and Physiology, including Dissections and Demonstrations; Principles and Practice of Medicine; Clinical Medical Practice. Summer Session: Midwifery and Diseases of Women and Children, and Vaccination;[†] Forensic Medicine and Toxicology; Clinical Medical Practice.

Third Year.—Winter Session: Principles and Practice of Medicine, Clinical Medical Lectures, Morbid Anatomy, Clinical Medical Practice.

No certificates of lectures or of anatomical instructions delivered in private to particular students, apart from the ordinary classes of recognised public medical schools, can be received by the Court of Examiners.

All students are required personally to register the several tickets of admission to lectures and medical practice within the first fifteen days of the months of October and May.

Examination in Arts.—An Examination in Arts will take place at the Hall three times in the year—viz., on the last Friday and Saturday in the months of January, April, and September.[‡] Candidates applying to be admitted to any examination must pay the fee (one guinea) at least one week before the examination, and must sign their names in the candidates' book before 10 A.M. and 4 P.M. o'clock not later than the previous Thursday. If a candidate fail to pass the examination, the fee will not be returned to him, but he will be admissible to either or both of the two next following examinations in Arts without the payment of an additional fee, upon giving at least one week's notice, and signing the candidates' book. Testimonials of Proficiency in General Education will be received as exempting from the Examination in Arts at the Hall from the national, colonial, and foreign educational bodies recognised by the General Council, and also from any of the recognised licensing bodies.

Professional Examinations.—The Court of Examiners meet in the Hall every Wednesday and Thursday, where candidates are required to attend at 4.30 P.M. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previous to the day of examination, and must at the same time deposit all the required testimonials (as before specified), with the fee, at the office of the Beadle, where attendance is given every day except Sunday, from 10 to 4 o'clock, and Saturdays from 10 to 2. The examination of candidates is divided into two parts, and is conducted partly in writing and partly *vivâ voce.*

The written examination will take place on Wednesdays, and the *vivâ voce* examination on Thursdays.

First Examination, which may be passed after the second winter session, embraces the following subjects:—The Latin of Physicians' Prescriptions and Pharmacy, Anatomy and Physiology, General and Practical Chemistry, Botany and Materia Medica.

Second or Pass Examination, after the third winter session (the four years' course of study being completed):—Principles and Practice of Medicine, Pathology, Therapeutics, Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

1. All graduates in Medicine of British universities will be admitted to a clinical and practical examination in the Practice of Medicine and Midwifery.

2. Licentiates of the Royal College of Physicians, London; of the Royal College of Physicians, Edinburgh; of

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[*] By Practical Chemistry is intended a specific course of instruction in the Laboratory, with an opportunity of personal manipulation in the ordinary processes of Chemistry, and of acquiring a knowledge of the various reagents for poisons.

[†] A certificate of attendance on not less than twenty cases will be received from a legally qualified practitioner.

[‡] The following is the syllabus of subjects for examination in 1876:—1. *The English Language:* The leading features of its History; its Structure and Grammar. English Composition. 2. *The Latin Language:* January Examination—Virgil; Æneid, Book IV. April Examination—Horace; Odes, Book I. September Examination—Cicero; De Senectute. Retranslation of easy sentences. Grammatical Questions will be introduced into the Latin Paper, and each candidate will be expected to give satisfactory answers to these. 3. *Mathematics:* The Ordinary Rules of Arithmetic. Vulgar and Decimal Fractions. Addition, Substraction, Multiplication, and Division of Algebraical Quantities. Simple Equations. The First Two Books of Euclid. 4. (*a*) *Greek:* Xenophon; Anabasis, Books I. and II. Grammatical Questions. (*b*) *French:* Molière; L'Avare. Translation from English into French. Grammatical Questions. (*c*) *German:* Fouqué; Undine. Translation from English into German. Grammatical Questions. (*d*) *Natural Philosophy:* Mechanics. Hydrostatics and Pneumatics. [The books recommended for study in this subject are Smith's "Statics," and Smith's "Hydrostatics," or Newth's "Natural Philosophy."]

the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall, Dublin, will be admitted to a clinical and practical examination in the Practice of Medicine, Midwifery, Forensic Medicine, and Toxicology.

3. Any candidate who has passed his first examination for the licence of the King and Queen's College of Physicians, Ireland; the joint licence of the Royal Colleges of Physicians and Surgeons, Edinburgh; or for the single licence of the College of Physicians, Edinburgh; the licence of the Faculty of Physicians and Surgeons, Glasgow; the first Professional Examination for the degree of M.B., or Master in Surgery in the Universities of Oxford, Cambridge, or London; or the second part of the Professional Examination for the degree of M.B. or Master in Surgery in the Universities of Edinburgh, Aberdeen, St. Andrews, and Glasgow; or the first Examination for medical and surgical degrees in the Irish universities; or the first Examination for the licence of the Apothecaries' Company, Dublin, will be admitted to a single examination in Anatomy and Materia Medica (*to those candidates who have not undergone an examination in those subjects*), Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicology, which examination will be partly written and partly *vivâ voce*.

4. Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland; and all candidates who have passed the First Anatomical Examination of the Royal College of Surgeons, London; the Royal College of Surgeons, Edinburgh; and the Royal College of Surgeons, Ireland, are exempt from *writing* on Anatomy and Physiology *only* in their first examination.

5. Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland; and all candidates who have passed the First Anatomical Examination of the Royal College of Surgeons, London; the Royal College of Surgeons, Edinburgh; the Royal College of Surgeons, Ireland, are exempt from *writing* on Anatomy and Physiology *only* in their first examination.

All candidates, unless registered, will be required to produce their diploma.

The examination of candidates for certificates of qualification to act as Assistant, in compounding and dispensing medicines, will be as follows:—In translating Physicians' Prescriptions; in the British Pharmacopœia; in Pharmacy, Pharmaceutical Chemistry, Materia Medica, and Botany.

Any candidate who presents himself for the first examination, and is rejected, may be admitted to re-examination at the expiration of three months. A candidate who presents himself for the second or Pass Examination, and is rejected, cannot be admitted to re-examination until the expiration of six months. No rejected candidate can be re-examined as an Assistant until the expiration of three months.

Fees.—For a Certificate of Qualification to practise, six guineas, half of which is retained in case of rejection, to be accounted for at a subsequent examination. For the First Examination, three guineas. For an Assistant's Certificate, two guineas. Both of these sums are retained in case of rejection, and accounted for subsequently.

Students' Prizes.—The Society of Apothecaries annually offer two prizes for proficiency in the knowledge of Botany, and also two prizes for proficiency in the knowledge of Materia Medica and Pharmaceutical Chemistry. The prizes consist of a Gold Medal, awarded to the candidate who distinguishes himself the most in the examination; and of a Silver Medal and a Book to the candidate who does so in the next degree. Regulations of competitors for the prizes can be had on application.

The Society's Botanic Garden at Chelsea is open daily (except Sunday) from 10 till 5 P.M. Tickets of admission may be had at the Beadle's Office, Apothecaries' Hall, Blackfriars, E.C.

APOTHECARIES' HALL OF IRELAND.

A Preliminary Examination will be held at the Hall four times in the year—namely, on the third Thursday in the months of January, April, July, and October, at 12 o'clock. Subjects: English, Mathematics, French or German, Latin, Greek, Natural Philosophy, Natural History.

Professional Education and Examination.—Every candidate for the licence to practise must produce certificates to the following effect:—1. Of having passed an examination in Arts, previously to entering on professional study. 2. Of being registered as a student in Medicine. 3. Of being at least twenty-one years of age, and of good moral character. 4. Of apprenticeship to a qualified apothecary, or of having been engaged in Practical Pharmacy with an apothecary for three years subsequently to having passed the examination in Arts. 5. Of having spent four years in professional study. 6. Of having attended the following courses—namely: Chemistry, during one winter session; Anatomy and Physiology, during two winter sessions; Demonstrations and Dissections, during two winter sessions; Botany and Natural History, during one summer session; Practical Pharmacy and Practical Chemistry (in a recognised laboratory), each during three months; Principles and Practice of Medicine, and Therapeutics, during one winter session; Midwifery and Diseases of Women and Children, during six months; Practical Midwifery at a recognised hospital (attendance upon twenty cases); Surgery, during one winter session; Medical Jurisprudence, during one summer session; instruction in the practice of Vaccination. 7. Of having attended at a recognised hospital or hospitals the Practice of Medicine and Clinical Lectures on Medicine during two winter and two summer sessions; also the Practice of Surgery and Clinical Lectures on Surgery during one winter and one summer session.

The *Professional Examinations* will be held quarterly, and will commence on the first Monday in the months of January, April, July, and October. They will be divided into two parts: the first comprehending Chemistry, Botany, Anatomy, Physiology, and Pharmacy; the second, Medicine, Therapeutics, Surgery, Pathology, Midwifery, Forensic Medicine, and Hygiene.

Candidates for the licence must lodge their testimonials, and enrol their names and addresses, with the clerk at the Hall, in Dublin, a week prior to the day of examination.

Candidates who fail to pass the first part of the Professional Examination will be remitted to their studies for three months, and unsuccessful candidates at the Pass Examination will not be readmitted until after the expiration of six months.

Doctors of Medicine of any of the universities of the United Kingdom, and Licentiates of a Royal College of Physicians, or Surgeons of any of the Royal Colleges of Surgeons, whose qualifications as such appear in the Medical Register, and who, having first passed an examination in Arts, have also served an apprenticeship, or the required term at Practical Pharmacy, to a qualified apothecary, may obtain the licence of the Hall by undergoing an examination—the former in Pharmacy, and the latter in Medicine and Pharmacy. Licentiates of the Society of Apothecaries of London are admitted *ad eundum*.

An Honour Examination for Apprentices is held at the Hall in the first week of May annually, upon some subject of Medical or Pharmaceutical Chemistry, which is announced by the Council of the Hall at the commencement of the previous winter session, and a prize of five guineas is awarded to the successful competitor.

ARMY MEDICAL DEPARTMENT,

6, Whitehall-yard, S.W.

Every candidate desirous of presenting himself for admission to the Army Medical Service must be unmarried, and not under twenty-one nor over twenty-eight years of age. He must produce certificates of date of birth and of moral character.

The candidate must make a declaration that both his parents are of unmixed European blood, and he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate. His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. The Board must also certify that he is free from organic or other disease, and from constitutional disability likely to unfit him for military service in any country.

The candidate must possess two diplomas or licences, one to practise Medicine and the other Surgery in Great Britain or Ireland, and must be registered under the Medical Act in force at the time of his appointment.

Certificates of registration, character, and age must accompany the form of application.

After complying with the foregoing regulations, candidates will be examined by the Examining Board in the following compulsory subjects:—Anatomy and Physiology; Surgery; Medicine (including Therapeutics and the Diseases of Women and Children); Chemistry and Pharmacy, and a practical knowledge of drugs. The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside.

The eligibility of each candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only.

Examinations will also be held in the following voluntary subjects—French, German, and Natural Sciences.

The knowledge of modern languages being considered of great importance, all intending competitors are urged to qualify in French and German.

The Natural Sciences will include Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to Materia Medica.

The number of marks gained in both the voluntary subjects will be added to the total number of marks obtained by those who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of modern languages and natural sciences.

After passing this examination, every candidate will be required to attend one entire course of practical instruction at the Army Medical School on—Hygiene, Clinical and Military Medicine, Clinical and Military Surgery, Pathology of Diseases and Injuries incident to Military Service. At its conclusion the candidate will be required to pass an examination on the subjects taught in the school. If he gives satisfactory evidence of being qualified for the practical duties of an army medical officer, he will be eligible for a commission as surgeon.

During the period of his residence at the Army Medical School each candidate will receive an allowance of 5*s.* per diem with quarters, or 7*s.* per diem without quarters, to cover all cost of maintenance; and he will be required to provide himself with uniform (viz., the regulation undress uniform of a surgeon, but without the sword).

ARMY MEDICAL SCHOOL.

Royal Victoria Hospital, Netley.

All gentlemen who have been successful in the competitive examinations, held twice a year (February and August), in London, for appointments in the medical services of the Army (British and Indian) and of the Navy, attend subsequently, at the Royal Victoria Hospital, a course of practical instruction in the duties they will have to perform in the public services. The course lasts four months; at the end of the session an examination is held to ascertain the progress made by the candidates, who are afterwards gazetted as surgeons, taking their seniority according to the aggregate number of marks then gained at both the London and the Netley examinations. The lectures on Military Surgery include gunshot and other wounds; arrangement for the transport of wounded; duties of army surgeons in the field, during sieges, on transports, &c.; and other special subjects. Those on Military Medicine refer to the tropical and other diseases of the British possessions and colonies, and to the losses by disease in peace and war, at home and abroad. The lectures on Hygiene comprise the examination of water and air, of food, clothing, &c., of the soldier, his duties and exercise, and the circumstances affecting his health; the subjects of meteorology, statistics, and the prevention of the different diseases met with in the army, on home or foreign service. The lectures on Pathology have reference chiefly to Morbid Anatomy and the scientific examination of tropical diseases, and of other complaints which the army surgeon is especially called on to investigate. The candidates also attend the wards of the hospital to study the diseases of invalids under the Professors of Medicine and Surgery, the system of recruiting, and the modes of keeping the army medical returns and records. They are also called on to make post-mortem examinations, to operate on the dead body, and pass through courses of practical instruction in the laboratory on the modes of recognising the qualities and adulterations of food, and in the microscope-room on the modes of microscopic examination of morbid tissues and of adulterations of food, &c. Visits are also paid at stated intervals to the lunatic hospital attached to the Royal Victoria Hospital, and instruction is given by the surgeon-major in charge.

INDIAN MEDICAL SERVICE.

India Office, St. James's-park, S.W.

All natural-born subjects of her Majesty, between twenty-two and twenty-eight years of age at the date of examination, and of sound bodily health, may be candidates for the appointment of Surgeon in her Majesty's Indian Medical Service. They may be married or unmarried.

They must subscribe and send in to the Military Secretary, India Office, Westminster, proofs of their qualification similar to those required by the Army Medical Department.

Degrees, diplomas, licences, and certificates of their registration in accordance with the Medical Act of 1858, must be lodged at the India Office, for examination and registry, at least one fortnight before the candidate appears for examination. The regulations, subjects, and times for examination are the same as for the Army Medical Department. Passage allowance to India on appointment will be given, or a passage provided. When passages are provided on board the Indian troop-ships, a charge for messing will be made at the rate laid down in the Royal Passage Warrant of 1865. Pay at 10*s.* a day will be allowed from date of passing Final Examination at the Army Medical School.

Indian allowances and time of service for pension will reckon from the date of arrival in India. The period of residence at the Army Medical School will reckon as service for the full-pay pension only.

Surgical instruments are provided in India by the Government for the use of medical officers.

NAVAL MEDICAL SERVICE.

Admiralty, 9, New-street, Spring-gardens, S.W.

Every candidate desirous of presenting himself for admission to the Naval Medical Service must not be under twenty-one nor over twenty-eight years of age. He must produce a certificate from the district registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must also produce a certificate of moral character. The candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate. He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so. The candidate must be registered under the Medical Act in force at the time of his appointment as licensed to practise medicine and surgery in Great Britain or Ireland.

Candidates will be examined by the Examining Board in the following subjects:—Anatomy and Physiology; Surgery; Medicine (including Therapeutics and the Diseases of Women and Children); Chemistry and Pharmacy, and a practical knowledge of drugs. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside). The eligibility of each candidate for the Naval Medical Service will be determined by the result of the examinations in these subjects only.

Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to Materia Medica, also in French and German, and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the examination by candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science.

The Medical Student's Class Guide.

TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS FOR THE SESSION 1875–76.

LECTURES, ETC.	ST. BARTHOLOMEW'S HOSP. & COL.					CHARING-CROSS HOSPITAL & COLL.					ST. GEORGE'S HOSPITAL.				
			FEES.					FEES.					FEES.		
	LECTURERS.	Days and Hours.	One Course.	Two Courses.	Per-petual.	LECTURERS.	Days and Hours.	One Session.	Two Sessions	Full Period.	LECTURERS.	Days and Hours.	One Course.	Two Courses.	Per-petual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
ANATOMY AND PHYSIOLOGY	Mr. M. Baker Dr. Klein	M. Tu. Th. 2½	7 7	...	10 10	Dr. Silver Dr. Bruce	M. Tu. W. F. 3	4 4	6 6	7 7	Dr. Cavafy	Tu. Th. 3 F. 11	6 6	...	7 7*
ANATOMY, DESCRIPTIVE & SURGICAL	Mr. T. Smith Mr. Langton	Tu. W. Th. F. 9	7 7	...	10 10	Mr. Bellamy	M. W. Th. F. 9 A.M.	4 4	6 6	7 7	Mr. Pick	M. W. F. 3	6 6	...	7 7
ANATOMICAL DEMONSTRATIONS	Mess. Cumberbatch, Furner, & Walsham	Daily, 10½ to 4	3 3	5 5	...	Mr. R. J. Godlee	Daily	3 3	5 5	...	Mr. Dunbar	Daily	...	...	...
CHEMISTRY	Dr. Russell	M. W. F. 9	5 5	...	7 7	Mr. Heaton	M.Th.F.11	5 5	6 6	7 7	Dr. H. M. Noad	T.Th.S.11½	6 6	...	8 8
MEDICINE	Dr. Black Dr. Andrew	M. Tu. Th. 3½	5 5	...	7 7	Dr. Pollock	M. W. F. 4	4 4	6 6	7 7	Dr. Barclay	Tu.Th.S. 9	6 6	...	7 7
SURGERY	Mr. Savory Mr. Callender	W. F. 2½ S. 9½	5 5	...	7 7	Mr. Canton	Tu. Th. S. 9 to 10	3 3	5 5	6 6	Mr. Holmes Mr. B. Carter (*Ophthal.*)	M. W. F. 9 M. 10	6 6	...	7 7
HOSPITAL PRACTICE: PHYSICIANS...	Dr. Black Dr. Andrew Dr. Southey Dr. Church Dr Greenhalgh & Dr. Godson (*Obstet.*)	Tu. Th. S. M. Tu. Th. Tu. Th. S. M. Tu. Th. F. S. Th. 1½ S. 9	6 mths 12 12	12 mths 18 18	Per-pet. 26 5	Dr. Pollock Dr. Silver Dr. Green	Daily, 1	6 mths 10 10	12 mths 15 15	21 0	Dr. Barclay Dr. J. W. Ogle Dr. Wadham Dr. Dickinson	Daily, 1	6 mths 8 8	12 mths 16 16	Per-pet. 25 4
ASSISTANT-PHYSICIANS ...	Dr. Gee Dr. Duckworth Dr. Hensley Dr. Brunton	T. F. 11 W. S. 11 M. Th. 11	...	...	...	Dr. R. D. Powell Dr. Bruce Dr. Irvine	W. S, M. Th. W. S.	...	...	...	Dr Whipham Dr. Cavafy *Obst. Phys.:* Dr. Barnes	...	...	...	...
SURGEONS	Mr. Holden Mr. Savory Mr. Callender Mr. T. Smith	Daily M. Th. F. S. Tu. F. S. Daily	6 mths 15 15	12 mths 21 0	Per-pet. 26 5	Mr. E. Canton Mr. Hird Mr. Barwell	Daily, 1 1 to 2	6 mths 10 10	12 mths 15 15	21 0	Mr. Pollock Mr. H. Lee Mr. Holmes Mr. Rouse	Daily, 1	6 mths 15 15	12 mths 21 0	Per-pet. 42 0
ASSISTANT-SURGEONS... ...	Messrs Willett, Langton, M. Baker, & Marsh *Ophth.-Surgs.:* Mr. Power Mr. Vernon *Dental Surg.:* Mr. Coleman	W. S. 12 M. Th. 12 Tu. F. 12 Tu. Th. S. 1½	...	...	...	Mr. Bellamy Mr. W. F. Clarke Mr. Bloxam	1 to 2	...	...	...	Mr. Pick Mr. Haward *Ophth. Surg.:* Mr. B. Carter	...	...	...	...
CLINICAL MEDICINE... ...	Drs. Black, Andrew, Southey, and Church	... Times of Clinical Lectures	...	...	...	Dr. Silver	Weekly	...	...	...	Dr. Ogle Dr. Dickinson Dr. Barclay (in Summer)	M. 2 M. 2	... ...	... ...	... ...
CLINICAL SURGERY	Sir J. Paget, Messrs Holden, Savory, Callender, & T. Smith	arranged in accordance with other work	...	...	...	Mr. Hancock Mr. Canton Mr. Hird Mr. Barwell	Weekly	...	...	...	Mr. Pollock Mr. H. Lee Mr. Holmes (in Summer)	Tu. 2 Tu. 2	... ...	... ...	... ...
CLINICAL MIDWIFERY, &c.	Dr. Greenhalgh	...	...	...	...	Dr. Black	...	...	...	...	Dr. Barnes	F. 2	...	...	...
DENTAL SURGERY	Mr. Coleman	S. 10	...	...	...	Mr. Fairbank	...	...	...	...	Mr. Vasey	...	...	...	...
	[*Hygiene:* Dr. Southey F. 3½]	Operations W. & S. 1½ Post-mort. exam. daily at 12 & 2½					Operations Sat. at 2					Operations Thurs. at 1 Operations on the Eye, F. 1¼			
SUMMER SESSION.															
MATERIA MEDICA, &c. ...	Dr. Farre Dr. Brunton	Tu. Th. S. 10, W. 11½	5 5	...	6 6	Dr. Powell	T. Th. S. 9¾	3 3	5 5	6 6	Dr. Dickinson	M. W. F. 3	4 4	...	5 5
MIDWIFERY, &c.	Dr. Greenhalgh	T.W.F.S 8½	5 5	...	6 6	Dr. Black	Tu. F.	3 3	5 5	6 6	Dr. Barnes	M. W. F. 9	5 5	...	6 6
BOTANY	Rev G. Henslow	M. W. F. 10	3 3	...	4 4	Dr. Irvine	Tu.Th.S.11	3 3	3 3	4 4	Dr. Whipham	W.Th.F.12	3 3	...	4 4
MEDICAL JURISPRUDENCE	Dr. Southey	M. Tu. S. 9	3 3	...	4 4	...	M. W. F. 9	3 3	3 3	4 4	Dr. Wadham	Tu. Th. S. 9	4 4	...	5 5
PATHOLOGICAL ANATOMY	Dr. Gee	W. 9½	2 2	...	3 3	...	...	...	...	...	Dr. R. J. Lee	...	...	...	...
PRACTICAL CHEMISTRY ...	Dr. Russell	M. Tu. F. 11 to 1	2 2	...	3 3	Mr. Heaton Mr. Bolas	M. F. 10 to 1	2 2	...	...	Dr. Noad	Daily, 10	4 4	...	...
COMPARATIVE ANATOMY...	Dr. Moore	M. Th. 11	2 2	...	3 3	Mr. Blake	Tu. F. 4	...	...	4 4	Dr. Brailey	M. F. 4½	...	...	...
PATHOLOGY & MORB. ANAT.	Dr Legg & Surg. Registrars	1, 2½	...	...	...	Dr. T. H. Green	Tu. F. 3 W. 4	3 3	...	...	Dr. Dickinson (in Winter)	Th. 3	...	...	...
OPHTHALMIC SURGERY ...	Mr. Power Mr. Vernon In Winter	Tu. W. 12¾ W. 2	...	...	...	... *Public Health:* Mr. Heaton & Mr. Eassie	...	...	...	...	Mr. B. Carter	W. 10	...	...	...
PSYCHOLOGY	Dr. Claye Shaw	...	2 2	...	3 3	Dr. Hunt	M.	...	...	...	Dr. Blandford	Tu. 3	...	...	...
DENTAL SURGERY	Mr. Coleman	...	...	...	...	Mr. Fairbank	...	...	...	...	Mr. Vasey	Tu. 10	...	...	...
PRACTICAL SURGERY... ...	Mr. Willett (and in Winter)	...	...	...	...	Mr. Bellamy Mr. F. Clarke Mr. Bloxam	...	...	...	...	Mr. Haward	M. W. F. 3	...	...	...
PRACTICAL PHYSIOLOGY...	Mr. Symons (and in Winter)	...	...	...	...	Dr. Silver Dr. Bruce	...	...	...	...	Mr. H. Watney	Tu.Th.S 10	...	...	...
PRACTICAL PHARMACY ...	Apoth. Depart.	...	....	...	...	Mr. Whitney	...	...	...	...	...	...	3 3	...	...
OPERATIVE SURG. (DEMONST.)	Mess. Cumberbatch, Furner, & Walsham	...	4 4	...	...	Mr. Bellamy *Micro. Anat.:* Dr. Silver	...	...	...	...	Mr. Haward	In Summer	2 2	...	...
DISEASES OF THE EAR ...	Mr. Langton	F. 2½	...	...	...	Mr. Bloxam	...	...	...	...	Mr. Dalby	W. 3	...	...	...
DISEASES OF THE SKIN ...	Mr. M. Baker	F. 1½	...	...	...	Dr. Sparks	...	...	...	...	Dr. Whipham	Th. 2	...	...	...
ORTHOPÆDIC SURGERY ...	Mr. Willett	F. 12½	...	...	...	...	...	...	...	..	...	...	...	...	...
FEE for all Lectures and Hosp. Med. and Surg. Practice ...	...	...	...	...	105 0	...	...	...	...	80 7	...	...	...	94 10	105 0

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* This fee includes also *Physiological Chemistry* (Dr. Ralfe, on Mon., Wed., and Fri., at 10 A.M.), and *Histology* (Mr. H. Watney, on Tues., Thurs., and Sat., at 10 A.M.)

TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1875–76—(CONTINUED.)

	GUY'S HOSPITAL.				KING'S COLLEGE AND HOSPITAL.				
LECTURES, ETC.	LECTURERS.	Days and Hours.	FEES.		LECTURERS.	Days and Hours.	FEES.		
			One Course.	—			One Course.	—	Perpetual.
WINTER SESSION.			£ s.				£ s.	£ s.	£ s.
PHYSIOLOGY	Dr. Pavy Dr. Pye-Smith	M. W. F. 4¼	5 5	For the entire of the Lectures and Hospital Practice—In the first year, £40; second year, £40; third year, £30; perpetual to the whole, 100 guineas.	Dr. Gerald Yeo	M. W. Th. F. 4	7 7	...	10 10
ANATOMY, DESCRIPTIVE & SURGICAL	Mr. Howse Mr. Davies-Colley	Tu. W. Th. F. 9	5 5		Dr. Curnow	Daily, 9	7 7	...	10 10
ANATOMICAL DEMONSTRATIONS... ...	Mr. Lucas Mr. Golding-Bird Mr. Jacobson	Daily, 9 to 4	5 5		Dr. Curnow	Daily	...	...	...
CHEMISTRY	Dr. Debus Dr. Stevenson	Tu. Th. S. 11	5 5		Mr. Bloxam Mr. Hartley Mr. Thompson	M. W. Th. S. 10½	7 7	...	10 10
MEDICINE	Dr. Habershon Dr. Wilks	M. W. F. 3	5 5		Dr. Johnson	Tu. 4 Th. F. 5	7 7	...	7 7
SURGERY AND PRACTICAL SURGERY	Mr. Bryant Mr. A. E. Durham	Tu. Th. 3½ S. 2¾	5 5		Mr. Wood	M. Tu. W. 5	6 6	...	7 7
HOSPITAL PRACTICE:	Sir W. Gull and DrOwen Rees (*cons.*)	...	...		Dr. G. Johnson Dr. Beale	M. Th. 2 Tu. S. 2	6 mths 10 10	18 mths 15 15	Per-pet. 21 0
PHYSICIANS...	Drs. Habershon, Wilks, Pavy, and Moxon Dr. Hicks (*obst.*)	M. Th. M. Th. S. M. W. F. M. Th. F. } 1½	6 mths 15 15		Dr. Duffin Dr. Playfair (*acc.*)	W. F. 2 Tu. Th. S. 1½			
ASSISTANT-PHYSICIANS	Dr. Fagge Dr. Pye-Smith Dr. F. Taylor Dr. Galabin (*obst.*)	F. W. M. } Out-patnts. at 12 Th. S. 12	Per-pet. 26 5		Drs. Burney Yeo, Ferrier, Curnow, & Baxter Dr. Hayes (*accou.*)	M. Th. 1 Tu. F. 1 W. S. 1 M. W. F. 1½	...	...	...
SURGEONS	Messrs. Hilton, Cock (*cons.*), Forster, Bryant, Durham, & Howse Mr. Bader (*oph.*) Mr. Higgens (*asst.*) Mr. Salter (*dent.*) Mr. Moon (*assist.*) MrL.Purves(*aural*)	M. Th. S. M. Th. M. Th. W. S. M. Th. } 1½ Tu. F. Th. Th.	6 mths 15 15 Per-pet. 26 5		Sir W. Fergusson Mr. Wood Mr. H. Smith Mr. S.H.Cartwright (*surg.-dentist*) Mr. Soelberg Wells (*ophthalmic*)	Tu. Th. S. 1½ M. W. F. 1½ Tu. Th. S. 1 Tu. F. 10 Tu. Th. S. 1	6 mths 15 15	21 mths 21 0	Per-pet. 26 5
ASSISTANT-SURGEONS	Mr. Davies-Colley Mr. Lucas Mr. Golding-Bird	W. Th. M. } Out-patients at 12			Mr. Bell	M. W. F. 1	...	...	...
CLINICAL MEDICINE	Dr. Habershon Dr. Wilks Dr. Pavy Dr. Moxon *In Summer:* Drs. Fagge, Pye-Smith, & F. Taylor	S. 1½ W. 1½	... ...		Dr. Duffin Dr. G. Johnson Dr. Beale	Alt. W. 3 Alt. M. 3 Alt. Tu. F. 3	...	...	...
CLINICAL SURGERY	Mr. Forster Mr. Bryant Mr. Durham Mr. Howse *In Summer:* Mr. Davies-Colley Mr. Lucas Mr. Golding-Bird	W. 1½ F. 1½	...		Sir W. Fergusson Mr. Wood	Alt. W. 3 Alt. F. 3	...	...	...
CLINICAL MIDWIFERY	Dr. Hicks Dr. Galabin	W. 1½ Operations Tu. at 1½ On the Eye, M. Th. 1½	...	...	Dr. Playfair	Alt. Th. 3	...	...	...
						Operations Sat. at 1½	To Med. & Surgical Practice	}	£31 10 or £36 15
SUMMER SESSION.									
MATERIA MEDICA & THERAPEUTICS	Dr. Moxon	Tu. Th. F. 3	4 4	...	Dr. Baxter	Tu. W. Th. F. 8	4 4	...	5 5
MIDWIFERY, &c.	Dr. Hicks	Tu. W. Th. F. 9 A.M.	5 5	...	Dr. Playfair	Tu. W. Th. F. 9	4 4	...	5 5
BOTANY	Dr. Paul Stokoe	Tu. Th. S. 11½	4 4	...	Mr. Bentley	M. Tu. Th. F. 12¼	4 4	...	5 5
MEDICAL JURISPRUDENCE	Dr. A. S. Taylor	Tu. Th. S. 10	4 4	...	Dr. Ferrier	M. Tu. W. F. 3	4 4	...	5 5
DISEASES OF WOMEN	Dr. Galabin	M. 3	...	...	Dr. Playfair	...	...	...	...
PRACTICAL CHEMISTRY	Dr. Debus	M. W. F. 10 to 1	4 4	...	Mr. C. L. Bloxam Mr. Hartley Mr. Thompson	M. W. F. 10½	5 5	...	8 8
PRACTICAL PHYSIOLOGY...	Dr. Pye-Smith (in Winter)	M. Th. F. 1½	...	...	Dr. Gerald Yeo	Tu. S. 11¼	5 5	...	8 8
NATURAL PHILOSOPHY	Mr. Reinold	M. 11	...	...	Prof. Adams	M. W. Th. 10½ Tu. F. 11¾	3 3	...	...
COMPARATIVE ANATOMY...	Mr. Jacobson (with Zoology)	M. W. 1½	4 4	...	Mr. A. H. Garrod	M. W. F. 4	3 3	...	4 4
PATHOLOGY AND MORBID ANATOMY	Dr. Fagge Dr. Goodhart	Daily, 2½ (in Sum., S. 9)	...	...	Dr. Beale	Tu. Th. 4	2 2	...	...
OPERATIVE SURGERY...	Mr. Davies-Colley	...	...	...	Mr. Wood	...	6 6	...	...
HISTOLOGY	Mr. Howse	W. S. 1	...	...	Dr. Beale	...	...	...	...
OPHTHALMIC SURGERY	Mr. Bader	F. 3	...	...	Mr. Wells	M. Tu. W. Th. 9	3 3	...	...
PSYCHOLOGICAL MEDICINE	Dr. Savage	Tu. F. 11½	...	...	Dr. Sheppard	...	...	...	...
DENTAL SURGERY	Mr. Salter	Th. 12	...	...	Mr. S.H.Cartwright	Tu. F. 9	6 6	...	8 8
AURAL SURGERY	Mr. L. Purves	Tu. 12	...	...	...	...	...	...	...
DEMONST. OF CUTANEOUS DISEASES	Dr. F. Taylor	Tu. 12	...	...	...	...	...	...	...
VACCINATION	...	...	...	...	Mr. Dunn	M. 10½	...	...	...
HYGIENE	Dr. F. Taylor	W. 12¼	4 4	...	...	...	...	...	...
PRACTICAL PHARMACY	...	...	5 5	...	...	...	...	...	...
FEE for Lectures, and Hospital Medical and Surgical Practice	...	...	...	£105	...	...	...	...	£100

TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS, AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1875-76—(continued.)

LECTURES, ETC.	LONDON HOSPITAL.					ST. MARY'S HOSPITAL.					MIDDLESEX HOSPITAL.				
	Lecturers.	Days and Hours.	Fees. One Session.	Fees. —	Fees. Per-petual.	Lecturers.	Days and Hours.	Fees. One Session.	Fees. —	Fees. Per-petual.	Lecturers.	Days and Hours.	Fees. One Session.	Fees. Two Courses.	Fees. Per-petual.
WINTER SESSION.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.			£ s.	£ s.	£ s.
PHYSIOLOGY	Mr. McCarthy	M. Th. S. 10 A.M.	4 4	...	6 6	Dr. Lawson	M. W. S. 12	3 3	...	4 4	Mr. Lowne	M. Tu. S. 9	6 6	...	8 8
EXPERIMENTAL PHYSIOL.	Mr. McCarthy	S. morn.	...	...	...	Dr. Shepherd	TuW.F.10	3 3	...	4 4	Mr. Lowne (in Summer)	M. W. Th. 9	...	...	...
ANATOMY, DESCRIPTIVE & SURGICAL.	Mr. Rivington	M.Tu.Th. F. 3	5 5	...	8 8	Mr. Norton	M.Tu.Th. F. 2¾	6 6	...	8 8	Mr. H. Morris	M. W. Th. F. 10	8 8	...	12 12
ANATOMICAL DEMONSTRATIONS.	Mr. Jas. Adams Mr. H. A. Reeves	Daily, 10 to 3 (exc W. S. aft.)	5 5	...	8 8	Mr. Edm. Owen Mr. Prowse (*asst. demonst.*)	Daily	3 3	...	...	Mr. Hensman	Daily.	6 6	...	8 8
CHEMISTRY	Dr. Letheby Dr. Tidy	M. W. F. 10½	7 7	...	7 7	Dr. C. R. A. Wright	M.Tu.Th. F. 9	5 5	...	7 7	Vacant	M. W. Th. F. 3	6 6	...	8 8
MEDICINE	Dr. Davies Dr. Fenwick	Tu. F. 9¼ bef. Chris. Tu. F. 4	5 5	...	6 6	Dr. Chambers Dr. Broadbent	M. W. Th. 4 P.M.	4 4	...	6 6	Dr. Greenhow	M. W. F. 9	6 6	...	8 8
SURGERY	Mr. Couper	M. Th. S. 9 A.M.	5 5	...	6 6	Mr. J. R. Lane Mr. Gascoyen	Tu. F. 4 W. 3	4 4	...	6 6	Mr. de Morgan Mr. Hulke	Tu. W. S. 9	6 6	...	8 8
PRACTICAL SURGERY... ...	...	...	...	...	...	...	...	...	...	...	Mr. Lawson Mr. Morris	...	6 6	...	...
HOSPITAL PRACTICE:															
Physicians	Dr. A. Clark Dr. Ramskill Dr. Down Dr. Jackson Dr. Sutton Dr. Palfrey (*obstet.*)	Daily, 2 M. Th. 1½	6 mths 6 6	12 mths 11 11	Per-pet. 21 0	Dr. H. Jones Dr. Sieveking Dr. Broadbent Dr. A. Meadows (*obst.*)	M. Th. 1¼ Tu. F. 1¼ W. S. 1¼ Tu. F. 9½	6 mths 7 7	12 mths 12 12	Per-pet. 21 0	Dr. H. Thompson Dr. Greenhow Dr. R. Liveing Dr. J. H. Davis (*obst.*)	Daily, 1 Daily, 1½ W. S. 1½	3 mths 5 5	12 mths 8 8	Perp. for Med. & Surg. Prac. 26 5
Assistant-Physicians ...	Dr. Fenwick Dr. Woodman Dr S. Mackenzie Dr A. E. Sansom	Daily, 1½	...	...	...	Drs. Cheadle, Lawson, Shepherd, and Wiltshire (*obs.*)	Tu. F. 1 W. S. 1 M. Th. 1 Tu. F. 1½	...	...	...	Dr. Cayley Dr. R. King Dr. G. H. Evans	M. W. 8½ Tu. 4, F. 8½ Th. 8½, S. 4	...	...	...
Surgeons	Mr Hutchinson Mr. Maunder Mr. Couper Mr. Rivington Mr. Barrett (*dental*)	Daily, 2	6 mths 8 8 12 mths 12 12	18 mths 18 18	3 years 26 5	Mr. Sp. Smith Mr. H. Walton Mr. J. R. Lane Mr. H. Walton (*ophthalmic*) Mr. Field (*aur.*) Mr. Hayward (*dental*)	M. Th. 1¼ W. S. 1¼ Tu. F. 1¼ M. Th. 1½ Tu. F. 2 W. S. 9½	6 mths 9 9	12 mths 21 0	Per-pet. 31 10	Mr. de Morgan Mr. Nunn Mr. Hulke Mr. G. Lawson Mr. Turner (*dental*) Mr. Hulke (*ophth.*)	M. F. 1 Tu. F. M. Th. Th. S. Daily, 9 A.M. T. F. 8½	3 mths 5 5 ...	12 mths 8 8 ...	Per-pet. 25 0 5 5
Assistant-Surgeons...	Mr. J. E. Adams Mr. W. Tay Mr. McCarthy Mr. Reeves	Daily, 1½	...	...	...	Mr. Gascoyen Mr. Norton & Mr. Edm. Owen, Dr. H. Jones & Dr. Cheadle (*skin dis.*) Mr. Norton (*throat dis.*)	M. Th. 1 W. S. 1 Tu. F. 1 Tu. Th. 1½ W. S. 12½	...	...	...	Mr. H. Morris Mr. Andr. Clark	M. F. 1 Th. S. 1			
CLINICAL MEDICINE	The Physicians and Asst.-Phys.	...	...	...	...	Dr. H. Jones Dr. Sieveking Dr. Broadbent	twice wk.	3 3	...	4 4	The Physicians	F. 3	...	...	...
CLINICAL SURGERY	The Surgeons and Asst.-Surg.	...	...	...	...	Mr. Sp. Smith Mr. H. Walton Mr. J. R. Lane	twice wk.	3 3	...	4 4	The Surgeons	Tu. 3	...	...	...
		Operations, W. at 2					Operatns. W. 1½ P.M. ex. 2				Superintend. of P.-M. exam.: Dr. Coupland	Operatns. W. at 1 P.M. at 2 daily			
SUMMER SESSION.															
MATERIA MEDICA...	Dr. James	Tu. Th. F. 4	3 3	...	4 4	Dr. Farquharson	Tu. W. F. S. 12	4 4	...	6 6	Dr Thorowgood	M. W. F. 3	4 4	...	5 5
MIDWIFERY, &c.	Dr. Palfrey	M. Th. 8 T. W. F. 9	4 4	...	6 6	Dr. A. Meadows Dr. Wiltshire	Tu. W. Th. F. 9	4 4	...	6 6	Dr. J. H. Davis	Tu. Th. S. 9	4 4	...	5 5
BOTANY	Mr. J. G. Baker	M. W. F. 11	3 3	...	4 4	Dr. Trimen	M. W. F. 10½	3 3	...	4 4	Mr. Hensman	M. W. F. 10	4 4	...	5 5
MEDICAL JURISPRUDENCE	Mr. Rodgers Dr. Tidy	Daily, (ex. S.) 10	3 3	...	4 4	Dr. Randall	M. W. Th. 10	3 3	...	4 4	Dr. King	M. W. F. 9	4 4	...	5 5
PRACTICAL CHEMISTRY ...	Dr. Letheby	M. Th. S. 9	2 2	...	3 3	Dr. C. R. A. Wright	Tu. F. S. 9	3 3	...	...	Vacant	M. W. F. 4	3 3	...	...
											[*Psycho. Med.*: Dr. H. Rayner]	...	3 3		
COMPARATIVE ANATOMY...	Mr. E. B. Aveling	Tu. 8, S. 10	...	...	...	Mr. St. Geo. Mivart	Tu. Th. 11	2 2	...	3 3	Mr. Hensman	Tu. Th. 4	3 3	...	...
PATHOLOGY and MORBID ANATOMY.	Dr. Sutton	Th. 12½	3 3	...	6 6	Dr. Cheadle (in Winter)	M. Th. 3	3 3	...	4 4	Dr. Cayley	M. Th. 4	3 3	...	4 4
OPERATIVE SURGERY ...	Mr. Maunder														
PRACTICAL PHYSIOLOGY...	...	...	...	...	...	...	...	...	...	}	Mr. Lowne (in Summer)	Tu. W. Th. 3	4 4	...	...
HISTOLOGY and the MICROSCOPE.	Mr. McCarthy	Tu. Th. 11	3 3	...	4 4	Dr. Shepherd (in Winter)	Tu. W. F. 10	...	...	}					
OPHTHALMIC SURGERY ...	Mr. Couper	Tu. F. 8 A.M.	...	...	...	Mr. H. Walton	Th. 2¾	2 2	...	...	Mr. Hulke	Tu. F. 8½	...	...	10 10
AURAL SURGERY	...	...	...	...	...	Mr. Field	F. 3	2 2	...	...	Mr. Andr. Clark	Tu. 9	...	...	...
DENTAL SURGERY	Mr. Barrett	...	2 2	...	...	Mr. Hayward (in Winter)	...	2 2	...	...	Mr. Turner	Daily, 9 A.M.	...	...	5 5
DISEASES of the SKIN ...	Mr Hutchinson	...	...	...	...	Dr. Cheadle (in Summer)	Th. 3	...	...	...	Dr. R. Liveing	Th. 4	...	...	...
DISEASES OF THE THROAT	Dr. Mackenzie	Tu. F. 5	2 2	...	3 3	...	...	...	...	...	Mr. Andr. Clark	Tu. 9	...	...	...
PRACT. PHARM. & DISPENS.	Mr. Robertson	...	...	...	...	...	...	3 3	6 6	10 10	Mr. Lucas [*Pub. Health*: Dr. G. H. Evans]	...	5 5	8 8	...
Fee for all the Lectures required by the Colleges and Hall ...	...	...	£52 10		...	...	...	...	52 10	...	...	...	...	...	...
Fee for ditto, and Hospital Medical and Surgical Practice...	...	...	£94 10		...	...	... or in one sum...	...	89 5 84 5	105 0 95 15	...	...	£90 0		

TABULAR LIST OF THE CLASSES, LECTURERS, FEES, AND DAYS OF OPERATIONS AT THE LONDON HOSPITALS AND MEDICAL SCHOOLS, FOR THE SESSION 1875-76—(CONTINUED.)

LECTURES, ETC.	ST. THOMAS'S HOSPITAL AND SCHOOL.			UNIVERSITY COLLEGE AND HOSPITAL.				WESTMINSTER HOSPITAL.			
	Lecturers.	Days and Hours.	Fees. —	Lecturers.	Days and Hours.	Fees. One Course.	Fees. Perpetual.	Lecturers.	Days and Hours.	Fees. One Course.	Fees. Perpetual.
						£ s.	£ s.			£ s.	£ s.
WINTER SESSION.											
ANATOMY AND PHYSIOLOGY... ...	Dr. Ord Dr. J. Harley	M. W. F. 4	...	...	...	...	...	Dr. Maclure	M. W. F. 4	5 5	7 7
PRACTICAL PHYSIOLOGY AND HISTOLOGY	Dr. Ord Dr. J. Harley (in Summer)	M. Tu. W. Th. F. 1½ to 3	...	Dr. Sanderson	Daily, 9 (ex. S. 11)	7 7	9 9	Dr. Allchin	W. F. 11 to 1	4 4	...
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. F. Mason Mr. Wagstaffe	M. T. Th. F3, W12½	...	Mr. G. V. Ellis	Daily, 12	8 8	11 11	Mr. Davy	TuW.Th F. S. 9½	5 5	7 7
ANATOMICAL DEMONSTRATIONS...	Mr. Rainey Mr. R.W. Reid	Daily, 9 to 3	Fees for the entire of the Lectures and Hospital Practice in the first year, £40; second year, £40; £20 for the third; and every succeeding year, £10. Perpetual to the whole, £105. Special entries may be made to any Course of Lectures, or to Hospital Practice.	Mr. Thane Mr. Maclean Mr. Gould	...	...	...	Mr. M. Smith	Daily, 10 to 1	2 2	3 3
CHEMISTRY	Dr. A. J. Bernays	T. Th. F. 12		Dr Williamson	Daily, (ex. S.) 11	7 7	9 9	Dr. Dupré	W. Th. F. 3	5 5	7 7
MEDICINE	Drs. Peacock & Murchison	M. Th. or F. 2, W. 5		Dr. Reynolds	Daily, (ex. M.) 9	6 6	9 9	Dr. Fincham Dr. Sturges	M. Th. F. 3	5 5	7 7
SURGERY	Mr. S. Jones Mr. Mac Cormac	M. or Tu Th. F. 5		Mr. Marshall	Tu. W. F. 4	5 5	6 6	Mr. Cowell	Tu. Th. 3 F. 4	5 5	7 7
GENERAL PATHOLOGY	Dr. Bristowe	Th. 4		...	...	...	...	...	...	...	...
NATURAL PHILOSOPHY	Dr. Stone (*with Physics*)	S. 12		Mr. Foster	Daily, (ex. S.)	7 7	...	Mr. Brooke (in Summer)	Tu. 3	1 1	...
HOSPITAL PRACTICE:											
PHYSICIANS	Dr. Peacock Dr. Bristowe Dr Murchison Dr. Stone Dr. Gervis (*obst.*)	Daily, 8 to 9½		Sir W. Jenner Dr. Reynolds Dr. W. Fox Dr. S. Ringer Dr. Bastian Dr. G. Hewitt (*acc.*) Dr T. Fox, *skin*	Daily, 1 & 2 Each twice weekly Twice weekly	12 mths. 10 0	...	Dr. Basham Dr. Fincham Dr. Gibb Dr Potter, *obst.*	M.Th 1½ W. S. 1½ Tu. F. 1½ Tu. F. 3	12 mths 12 12	Per-pet. 21 0 31 0
ASSISTANT-PHYSICIANS	Drs. Ord, J. Harley, Payne, and Cory (*obst.*)	...		Dr. Roberts Dr. Gowers Dr. G. V. Poore Dr. Williams (*obst.*)	...	...	Per-pet. £27	Dr. Sturges Dr. Allchin Dr. Donkin Dr. Grigg	W. S. 1 M. Th. 1 Tu. F. 1 Tu. F. 1	...	
SURGEONS	Mr. Simon Mr. S. Jones Mr. Croft Mr. Mac Cormac Mr. Liebreich (*ophthal.*)	...		Mr. Erichsen Mr J. Marshall Sir Henry Thompson Mr. B. Hill Mr. C. Heath Mr T. W. Jones Mr Streatfeild (*ophth.*) Mr. Ibbetson (*dent.*)	Daily, 1 & 2 Twice a week, 1&2 Thrice weekly	...	...	Mr. Holthouse Mr. Cowell Mr. Davy Mr. Walker (*surg.-dent.*) [*Ophth. Prac.:* Mr. Cowell, M. Th. 3 *Skin dep.:* Mr. Bond]	Tu. F. 1½ M. Th. 1½ W. S. 1½ W. S. 9½	12 mths 12 12	Per-pet. 21 0
ASSISTANT-SURGEONS	Mr. F. Mason Mr. H. Arnott Mr. Wagstaffe	...		Mr. Marcus Beck Mr. Barker	...	...	...	Mr. Cooke Mr. Bond Mr. Keene	M. Th. 1 Tu. F. 1 W. S. 1	...	...
CLINICAL MEDICINE	By the Physicians.	After visits		*Sir W. Jenner Dr. Reynolds Dr. W. Fox Dr. Tilb. Fox (Skin Inf.)	Fortntly. Fortntly. Twice a week	...	...	Dr. Basham Dr. Fincham Dr. Radcliffe	Weekly	...	...
CLINICAL SURGERY	The Surgeons in rotation	After visits		*Mr. Heath Mr. Marshall Sir Henry Thompson	Once a week Fortntly.	...	...	Mr. Holthouse Mr Holt Mr. Cowell Mr. Davy		...	...
CLINICAL MIDWIFERY, &c.	Dr. Gervis	Tu. 4 P.-mort. ex. 2 Operations, W. S. 1½ S. 9½ *oph.* Th. 3		Dr. G. Hewitt	Fortntly. Operations, W. at 2	...	...	Dr. Potter [*Morb. Anat.:* The Registrars] [*Minor Surg. & Bandaging* Mr. Cheyne in Summer]	Altern. F. 3 P.-mort. exam. 2 Operations, Tu. at 2	...	...
SUMMER SESSION.											
MATERIA MEDICA, &c.	Dr. Payne	M. W. F. 8 A.M.		Dr. S. Ringer	Daily, (ex. M.) 10	4 4	6 6	Dr. Phillips	Tu. Th. S. 9	3 3	4 4
MIDWIFERY, &c.	Dr. Barnes	M. Tu. Th. F. 3		Dr. Hewitt	Daily, (ex. M. Th.) 9	4 4	6 6	Dr. Potter	Tu. W. F. 4	4 4	5 5
BOTANY	Mr. A. W. Bennett	Tu. Th. S. 8		Mr. Oliver	Daily, (ex. S.) 8	3 3	4 4	Mr. Holmes	M. W. F. 9	3 3	4 4
MEDICAL JURISPRUDENCE	Dr. Stone Dr. Gervis	M. 2 Tu. S. 12		Dr. Maudsley	Tu. W. Th. F. 10	3 3	4 4	Mr. Bond Dr. Dupré	M. W. F. 3	3 3	4 4
PRACTICAL CHEMISTRY	Dr. Bernays	Tu. Th. S. 11		Dr. Williamson	Daily, (ex. S.) 11	4 4	7 7	Dr. A. Dupré	M. W. F. 10	3 3	...
MENTAL DISEASES	Dr. Williams	F. 12		Dr. Sankey	M. T. W. 4	2 2	...	Dr. Sutherland	...	...	...
HYGIENE AND PUBLIC HEALTH...	(with Med. Jur.)	...		Dr. Corfield	Tu. F. 12	1 1	...	Mr. Bond	...	...	...
CLINICAL MEDICINE	By the Physicians.	After visits		As in Winter	...	...	...	As in Winter	...	...	...
COMPARATIVE ANATOMY...	Mr. C. Stewart (with Zoology)	M. W. 11½		Prof. Lankester	Daily, (ex. S.) 3	4 4 4 4	9 9	Mr. Carter Blake	W. S. 11	2 2	...
PATHOLOGY & MORBID ANATOMY	†Mr. H. Arnott †Dr. Greenfield	M. 3 to 5		Dr. Bastian	M. Th. F. 9 (ex. F. 4)	4 4	6 6	Dr. Allchin (in Summer)	M. W. Th. 4	3 3	4 4
OPHTHALMIC SURGERY	Mr. Liebreich	M. 4	...	Mr T. W. Jones	Tu. Th.	1 1	...	Mr. Cowell	M. 2¾	...	...
DENTAL SURGERY	Mr. Elliott	Tu. F. 11	...	† Mr. Ibbetson	M. Th. 4	2 2	...	Mr. Walker	W. 9½	2 2	...
PRACTICAL SURGERY...	Mr. W. G. Ranger Mr. Croft Mr. Mac Kellar (and in Wint.)	Tu. F. 4 M. or T. 5	...	† Mr. B. Hill † Mr. M. Beck † Mr. Barker	M. Th. 4	4 4	...	Mr. Cowell (in Winter)	M. W. 3 Tu. Th. 4	...	...
PRACTICAL PHARMACY	Mr. R. W. Jones	...	...	Mr. Gerrard	...	3 3	6 mo. 5 5	Mr. Beer	...	3 3	5 5
FEE for Lectures and Hospital Practice	[*Med. Sec.:* Mr. Whitfield]	...	£105	...	...	...	10 5	In 1 sum, £80. In 2 payments, £82. In 4 payments, £85 1s.			

* Throughout the year. † In Winter.

TABULAR LIST OF THE CLASSES, LECTURERS ETC., AND FEES, AT THE PROVINCIAL SCHOOLS OF MEDICINE, FOR THE SESSION 1875-76.

LECTURES, ETC.	BIRMINGHAM QUEEN'S COLLEGE.				BRISTOL MEDICAL SCHOOL.				CAMBRIDGE UNIVERSITY.			LEEDS SCHOOL OF MEDICINE.			
	LECTURERS.	Days and Hours.	FEES.		LECTURERS.	Days and Hours.	FEES.		LECTURERS.	Days and Hours.	FEES.	LECTURERS.	Days and Hours.	FEES.	
			One Course.	Per-petual.			One Course.	Per-petual.			Ses-sional Course.			First Course.	Second Course.
WINTER SESSION.			£ s.	£ s.			£ s.	£ s.			£ s.			£ s.	£ s.
ANATOMY AND PHYSIOLOGY	Dr. R. Norris Mr. T. H. Bartleet	M. Th. 4	5 5	8 8	Mr. Atchley Dr. Smith	M. W. F. 9½	5 5	8 8	Prof. Humphry	Tu. Th. S. 1		Messrs. Wright and Horsfall	M. Tu. 3 Th. 2	5 5	5 5
ANATOMY, DESCRIPTIVE & SURGICAL	Dr. E. Rickards Mr. Wm. Thomas Dr. R. Jolly	M. Tu. Th. F. 1	5 5	8 8	Mr. Board Mr. Dobson	M. W. F. S. 10½	5 5	8 8	Prof. Humphry Dr. Wilson	M. W. F. 9	5 5	Messrs. Land, Nunneley, and Robinson	Tu. Th. F. S. 10	6 6	5 5
ANATOMICAL DEMONSTRATIONS ...	Mr. Pope Mr. Bennett May	Daily	4 4	6 6	Drs. Lawrence, Elliott, Waldo, Messrs Newman and Stevens	...	...	...	Dr. Wilson	Daily		Mr. Robinson Mr. M'Gill			
PRACTICAL PHYSIOLOGY	...	...	...	...	...	...	...	...	Dr. M. Foster (and in Summer)	M. W. F. 12	2 2	Mr. Walker	...	...	...
CHEMISTRY	Dr. A. Hill	Tu. Th. F. 12	4 4	6 6	Mr. Coomber	M. W. F. 8½	5 5	7 7	Prof. Liveing (and *Prac. Chemis.*)	M. Tu. Th. F. 12	3 3	Prof. Thorpe	M. Tu. Th. F. 11	4 4	3 3
MEDICINE	Dr. B. W. Foster	Tu. W. F. 3	5 5	8 8	Dr. Martyn Dr. Spencer	M. W. F. 8½	5 5	8 8	Prof. Paget	M. W. F. 9	3 3	Dr. Heaton Dr. Allbutt	M. Tu. W. Th. 5	5 5	4 4
SURGERY	Mr. Pemberton Mr. F. Jordan	Tu. W. F. 4	5 5	8 8	Mr. Coe Mr. Tibbits	Tu. Th. S. 8½ A.M.	5 5	8 8	...	...	...	Messrs. Teale, Jessop, and Atkinson	M. W. S. 9	5 5	4 4
HOSPITAL PRACTICE	GENERAL HOSPITAL AND QUEEN'S HOSPITAL.	...	31 10	5 5	BRISTOL ROY. INFIRMARY, AND BRISTOL GENERAL HOSPITAL.	Daily, 11½ to 3			ADDENBROOKE'S HOSPITAL.			LEEDS GENERAL INFIRMARY.			
PHYSICIANS		...	31 10	...			...	...	Prof. Paget Prof. Latham Dr. Bradbury	Daily	6 mths. 8 8 12 mths. 10 10 perp. 15 15	Dr. Heaton Dr. Allbutt Dr. Eddison	...	...	...
SURGEONS	(*See Additional Information on Schools.*)	...	...	...	(*See Additional Information on Schools.*)	...	...	...	Mr. Lestourgeon Prof. Humphry Mr. Carver	Daily		Mr. Wheelhouse Mr. T. P. Teale Mr. Jessop Mr. Atkinson	...	...	...
SUMMER SESSION.															
MATERIA MEDICA, &c.	Dr. E. Mackey	M. W. F. 4	3 3	5 5	Dr. Burder	M. Tu. Th. F. 9 A.M.	4 4	6 6	Prof. Latham	M. Tu. Th. F. 10	2 2	Dr. Eddison	M. Th. Th. F. 11	4 4	...
MIDWIFERY, &c.	Mr. Clay and Mr. Bassett Mr. Berry and Dr. R. C. R. Jordan (*Dis. Wom. & Chil.*)	M. Tu. Th. F. 1	4 4	...	Dr. Swayne	Daily (ex. S.) 8 A.M.	4 4	6 6	...	...	2 2	Mr. W. N. Price Dr. J. Braithwaite	M. Tu. Th. F. 4	4 4	...
PRACTICAL ANATOMY	...	...	...	...	...	...	...	...	Prof. Humphry (and *Osteology*) Dr. Wilson	...	...	Mr. Robinson Mr. M'Gill	...	...	...
BOTANY	Dr. Hinds	M. W. F. 3	3 3	5 5	Mr. Leipner	Daily (ex. S.) 7 A.M.	3 3	5 5	Prof. Babington	M. W. F. 1	1 1	Mr. Atkinson	Tu. F. 12 Th. 10	4 4	...
MEDICAL JURISPRUDENCE	Mr. Wilders Dr. A. Hill	Tu. Th. F. 12	3 3	5 5	Mr. Keall	M. W. Th. 9 A.M.	3 3	5 5	...	...	...	Mr. Scattergood	M. Tu. W. Th. 5	4 4	...
MENTAL DISEASES	...	...	...	...	...	...	...	...	...	...	...	Dr. J. C. Browne	F. 3, S. 4	...	...
PRACTICAL CHEMISTRY	Mr. Anderson	Th. 2, F 12	3 3	5 5	Mr. Coomber	Daily, (ex. S.) 8 A.M.	3 3	5 5	Prof. Liveing Dr. Hicks	Daily	...	Prof. Thorpe	M. W. 9½	3 3	...
COMPARATIVE ANATOMY...	Dr. T. Savage	...	3 3	5 5	Mr. Atchley	M. W. Th. S. 10 A.M.	4 4	...	*Prof. Newton (in Winter)	M. Tu. F. 1	...	Dr. Allbutt Mr. Atkinson	M. W. 12	2 2	...
PATHOLOGY AND MORBID ANATOMY	Dr. J. Sawyer (in Winter)	M. 3	...	...	Dr. Martyn Dr. Spencer	M. W. F. 7 A.M.	3 3	4 4	Dr. Bradbury	M. Tu. Th. F. 9	...	Mr. Oglesby	...	...	...
PRACTICAL HISTOLOGY	The Professors of Physiology	...	...	...	...	...	...	...	Dr. Wilson	S. 12½	...	Mr. Walker	...	...	...
DENTAL PHYSIC AND SURGERY... ...	Mr. Howkins	...	3 3	5 5	...	...	...	...	...	...	...	...	...	...	...
CLINICAL MEDICINE	The Physicians of the two Hospitals.	...	...	...	...	Weekly	...	...	The Physicians	F. 11	...	Dr. Heaton Dr. Allbutt Dr. Eddison	F. 5 P.M.	...	...
	[*Ophthal. Surg.:* Mr. Solomon]	...	3 3	5 5											
CLINICAL SURGERY	The Surgeons of the two Hospitals. [*Medical Tutor:* Mr. H. C. Pope]	...	...	...	...	Ditto	...	...	The Surgeons [*Pract. Surgery:* The Surgeons]	Th. 11 Daily	...	Surgeons of the Infirmary [*Demons. Skin Dis.:* Dr. Eddison]	F. 9 A.M.	...	...
FEES for all the Lectures required by the College and Hall	...	...	£52 10	...	...	...	£57 15		...	...	...	...	...	£46 4	
Ditto, and for Hospital Medical and Surgical Practice	...	...	...	...	...	...	£97 15		...	...	...	...	...	£42 0	

* With Zoology.

TABULAR LIST OF THE CLASSES, LECTURERS, ETC., AND FEES, AT THE PROVINCIAL SCHOOLS OF MEDICINE FOR THE SESSION 1875–76.

LECTURES, ETC.	DURHAM UNIVERSITY COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.				LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.			MANCHESTER ROYAL SCHOOL OF MEDICINE.			SHEFFIELD SCHOOL OF MEDICINE.			
	LECTURERS.	Days and Hours.	FEES. One Course.	FEES. —	LECTURERS.	Days and Hours.	FEES.	LECTURERS.	Days and Hours.	FEES. One Course.	LECTURERS.	Days and Hours.	FEES. One Course.	FEES. —
WINTER SESSION.			£ s.				£ s.			£ s.			£ s.	
ANATOMY & PHYSIOLOGY	Professor of Physiology	Thrice weekly, 3	4 4	...	Dr. Caton (*Physiology only*)	Tu. Th. S. 9½	4 4	Mr. W. Smith	M. Tu. W. Th. 12	4 4	Mr. S. Morton Dr. O'Keefe	*Anat.* M. W. F. 6 Tu. Th. 5 *Phys.* M. W. 4	6 6	...
PRACTICAL PHYSIOLOGY	Prof. of Phys.	...	...	...	Mr. R. Parker	...	...	Dr. Arthur Gamgee	Tu. W. Th. F. 11½	4 4	Dr. W. R. Thomas	...	3 3	...
ANATOMY, DESCRIPTIVE & SURGICAL... ...	Dr. Nesham Dr. L. Armstrong	Four days weekly, 8¾ A.M.	4 4	...	Mr. Banks	Daily, 3	4 4	...		4 4	Mr. Skinner Mr. E. Skinner	...	...	...
ANATOMICAL DEMONSTRATIONS	Mr. J. Russell (Dissections)	Daily, from 10 to 4	...	...	Mr. Ashby	...	3 3	Prof. Watson Mr. Perrin	M. Tu. W. Th. 1	4 4	Dr. T. H. Morton Dr. E. Thomas Mr. O. Barber	Daily	2 2	...
CHEMISTRY	Prof. Marreco	M. Tu. W. Th. F. 11	4 4	...	Dr. Brown	M. Tu. Th. F. 10½	5 5	Dr. Roscoe Prof. Schorlemmer	M. Tu. W. Th. 9½	4 4	Mr. Allen	M. W. F. 11½	4 4	...
MEDICINE	Dr. Philipson	M. W. F. 5	4 4	...	Dr. Waters	M. W. F. 9½	4 4	Dr. Roberts Dr Morgan	M. Tu. W. Th. 1	4 4	Dr. Bartolomé Dr. Hall	Tu. W. F. 5	4 4	...
SURGERY	Dr. Heath	M. W. F. 6	4 4	...	Mr. Harrison	M. W. F. 4	4 4	Mr. G. Southam Mr. Lund	M. 11, Tu. Th. 3	4 4	Mr. W. F. Favell Mr. Parker Mr. A. Jackson	M. W. F. 8 A.M.	4 4	...
PRACTICAL SURGERY	Dr. Heath	...	...	...	...	...	...	The Surgeons of the Royal Infirmary	...	...	The House-Surg. at the Infirmary	...	...	...
PATHOLOGY	Dr. Gibb	...	...	...	Dr. Davidson	Th. 4	3 3	...	...	...	Mr. Laver	...	...	...
HOSPITAL PRACTICE:	NEWCASTLE INFIRMARY.				LIVERPOOL ROYAL INF.			MANCHESTER ROYAL INFIRMARY.	Daily, 10 to 12		SHEFFIELD GEN. INFIRMARY.			
PHYSICIANS	Dr. Embleton Dr. Philipson	Each twice weekly, 11	6 mnths 5 5	12 months, £7 7 Perpetual, £17 17	Dr. Turnbull Dr. Waters Dr. Glynn	12 to 2½	6 mon. 5 5 12 mon. 6 6	Drs. E. Wilkinson, Watts, Browne, Roberts, Simpson, and Morgan	...	Dresserships Full period £42	Dr. Bartolomé Dr. Law Dr. Frank-Smith	...	...	Perpet. £15 15; £21 12 mths' prac, £10 10 6 months, £6 6s.
SURGEONS	Dr. Heath Mr. Russell Dr. Arnison Dr. Armstrong	Daily, 9½			Mr. Bickersteth Mr. Hakes Mr. Harrison	12 to 2½	6 mon. 6 6 12 mon. 8 8	Messrs. Smith, Southam, F. Heath, E. Lund and G. Bowring	...		Mr. Barber Mr. Favell Mr. Parker	...	...	
SUMMER SESSION.														
MATERIA MEDICA	Dr. Arnison * Dr. Humble †	Daily, 4¼ Daily, 5¾	4 4	...	Dr. J. B. Nevins	Tu. Th. S. 8½ A.M.	4 4	Mr. A. Somers Mr. Leech	M. Tu. W. Th. 1	4 4	Dr. Young	M. W. F. 8 A.M.	3 3	...
MIDWIFERY, &c....	Dr. Gibson	Daily, 8½ A.M.	4 4	...	Dr. Steele Dr. Gee (*dis. of children*)	M. W. F. 9 W. F. 10	4 4	Dr. Thorburn	M. T. Th. F. 1	4 4	Dr. Hime	M. W. F. 8 P.M.	3 3	...
BOTANY	Mr. Armstrong	...	...	...	Dr. Carter	Tu. Th. S. 9½	3 3	Mr. Williamson	Daily (ex. S.) 2	3 3	Mr. Birks	Tu. Th. 8	3 3	...
MEDICAL JURISPRUDENCE...	Dr. B. Bramwell	M. Tu. Th. F. 11	4 4	...	Dr. E. Whittle Dr. Brown (*toxicology*)	M. W. F. 3	3 3	Mr. G. M. Harrison	M. 1, W. 1, F. 1½	4 4	Mr. Harrison Mr. Baker	Tu. Th. 5	3 3	...
PRACTICAL CHEMISTRY	Prof. Marreco	Daily, 10 to 5	4 4	...	Dr. Brown	M. T. F. 10½	3 3	Dr. Roscoe	Tu. Th. 11	4 4	Mr. Allen	...	3 3	...
COMPARATIVE ANATOMY	...	...	...	...	Dr. Dickinson	Twice wkly.	2 2	Mr. Williamson	...	3 3	Mr. W. Jackson	F. 5	...	...
PATHOLOGY & MORBID ANATOMY...	Dr. Gibb	W. 6	4 4	...	...	...	...	Dr. Simpson Dr. Dreschfeld	M. Th. 12 F. 12	4 4	Mr. Laver	...	3 3	...
OPHTHALMIC SURGERY...	[*Ment. Diseases*:	...	...	...	Mr. Walker‡	Th. 4	1 1	Mr. Windsor	M. W. 4	2 2	...	...	...	...
DENTAL SURGERY & MECHANICS	Mr. Wickham Tu. 3 P.M.]	...	...	...	Mr. Snape	...	...	...	...	...	Dr. Merryweather	...	...	...
OPERATIVE SURGERY	Dr. Heath	...	4 4	...	Mr. Stewart Mr. Harrison	...	3 3	...	...	...	Mr. Favell Mr. Parker	...	3 3	...
CLINICAL MEDICINE	Phys. and Surg. of Infirmary	...	...	...	Phys. and Surg. of Roy. Infir.	...	...	Physicians and Surgeons of the Royal Infirmary	W 11	...	Physicians and Surgeons of Gen. Infirmary	Tu. 8 P.M.	...	...
CLINICAL SURGERY		...	...	...		...	...		Tu. 11	...		Th. 8 P.M.	...	...
FEE for all the Lectures required by the College and Hall	...	...	...	£52 10	...	...	£47 5§	...	...	£42	...	...	...	£42 0
Ditto, and for Hospital Medical & Surgical Practice	...	...	...	70 7	...	...	£80 17	...	...	£42 ‖	...	...	...	...

* With Pharm. Chem. † With Therapeutics. ‡ In Winter. § Except Prac. Chem. ‖ Including Dressership.

TABULAR LIST OF THE CLASSES, LECTURERS ETC., AND FEES, AT THE MEDICAL SCHOOLS OF SCOTLAND, FOR THE SESSION 1875–76.

LECTURES, ETC.	ABERDEEN UNIVERSITY.			EDINBURGH UNIVERSITY.			SCHOOL OF MEDICINE, EDINBURGH.					GLASGOW UNIVERSITY.			GLASGOW, ANDERSON'S UNIV.		
	LECTURERS.	Hours	FEES. One Course.	LECTURERS.	Hours.	FEES —	LECTURERS.	Hours.	FEES. First Course.	Second Course.	Per-petual.	LECTURERS.	Hours	FEES. One Course.	LECTURERS.	Hours.	FEES. One Course.
WINTER SESSION.			£ s.			£ s.			£ s.	£ s.	£ s.			£ s.			£ s
ANATOMY, DEMONSTRATIONS, &c.	Dr. Struthers	11, 9	5 5	Mr. Turner	1, 4	8 8	Dr. Handyside	9 to 4	7 9	6 8	...	Dr. A. Thomson	11, 2, 4	6 6	Dr. A. M. Buchanan	5, 1	4 4
CHEMISTRY (PRACTICAL, &c.)	Mr. Brazier	3	3 3	Dr. Crum Brown	10	7 7‡	Dr. S. Macadam	10	3 5	2 4	5 5	Mr. J. Ferguson	10, 12,	3 3	...	10	2 2
				(Adv. Class in Sum.)			Mr. Falconer King	10	3 5	2 4	5 5						
PHYSIOLOGY (INST. OF MEDICINE) ...	Dr. Ogilvie	4	3 3	Dr. Rutherford	11	4 4	Dr. Bell Pettigrew§	11	3 5	2 4	5 5	Dr. Buchanan	3	3 3	Dr. E. Watson	12	2 2
							Dr. McKendrick	11	3 5	2 4	5 5				(In Infirmary)		
GENERAL PATHOLOGY, &c.	Dr. Rodger	...	2 2	Dr. Sanders	2	4 4	Dr. John Wyllie	2	3 5	2 4	5 5	...	2	3 3	...	...	...
MEDICINE	Dr. Smith-Shand	3	3 3	Dr. Laycock	3	4 4	Dr. Haldane	3	3 5	2 4	5 5	Dr. Gairdner	12	3 3	Dr. Wood Smith	12	2 2
							Dr. Claud Muirhead	3	3 5	2 4	5 5						
							Dr. Graing. Stewart	3	3 5	2 4	5 5						
SURGERY	Dr. Pirrie	10	3 3	Mr. Spence	10	4 4	Dr. P. H. Watson	10	3 5	2 4	5 5	Dr. Macleod	1	3 3	Dr. Dunlop	11	2 2
							Mr. J. Bell	10	3 5	2 4	5 5						
							Mr. Chiene	10	3 5	2 4	5 5						
							Dr. John Duncan	10	3 5	2 4	5 5						
MIDWIFERY, &c.	Dr. Stephenson	2	3 3	Dr. Simpson (Dis. Wom. & Chil.)	11	4 4	Dr. Matt. Duncan	11	3 5	1 3	...	Dr. Leishman	5	3 3	(In Summer)	...	...
MEDICAL JURISPRUDENCE, &c. ...	Dr. Ogston	9	3 3	...	...	...	Dr. Littlejohn	2	3 5	2 4	5 5	Dr. Simpson	4	3 3	(In Summer)	...	...
NATURAL HISTORY	Mr. Nicol	2	3 3	...	...	...	...		...	...	...	...	...	...	...	...	...
NATURAL PHILOSOPHY	Mr. Thomson	9	3 3	Mr. Tait	...	3 3	...	...	...	...	...	Sir W. Thomson	9, 11	4 4	Mr. Forbes	...	2 2
VACCINATION	...	...	...	...	...	...	Dr. Husband§	...	1 1	...	...	...	...	...	In Infirmary	...	...
STATE MEDICINE AND HYGIENE...	...	...	...	...	...	...	Dr. Smart§	4	2 2	...	...	GLASGOW ROY. INF. AND WESTERN INF.	...	...	...	...	
HOSPITAL PRACTICE:	ABERDEEN R. INF.			EDIN. ROYAL INF.	...	...	EDIN. ROYAL INF.								GLASGOW ROY. INF.		
PHYSICIANS	Drs. J. F. Smith-Shand, Beveridge, and A. Fraser	Daily, 12	One year, £3 10s. Perpetual, £6.	...	12	Perpetual ticket, £10	Dr. Haldane Dr. Balfour Dr. Stewart Dr. J. M. Duncan	12	1 year, £5 5s.	6 months, £3 3s.	Perpetual, £10 at one payment.	Drs Scott Orr, Perry, Maclaren, Wood-Smith, Charteris, Gairdner, McCall Anderson, and J. Finlayson.	9	1 year, £3 3s.; perpetual, £7 7s.	Drs. M'C. Anderson, Gairdner, Perry, Scott Orr, & M'Laren *Out-patients:* Drs. Charteris and Lindsay	Daily, 9	1st year, £3 3s.; 2nd, £3 3s.; 3rd and perp., £1 1s.; 6 mons., £2 2s.; 3 mons., £1 11s 6d.
SURGEONS	Drs. Pirrie, Kerr, Ogston, Mr. Williamson (*dental*)	Daily, 12		...	...		Dr. Watson Mr. Annandale	12				Drs Watson, Dewar, Dunlop, Cameron, Morton, Macleod, G. Buchanan, and A. Paterson.	9		Drs. G. Buchanan, Watson, Dewar, M'Leod, and Morton *Out-patients:* Drs. Dunlop and Patterson	9	
ASSISTANT-SURGEONS	Dr. Will	..	...	...	...	...	Mr. J. Bell	...	...	...	...		...				
CLINICAL MEDICINE	Drs. J. F. Smith-Shand, Beveridge, and A. Fraser	1	3 3	Drs. Laycock, Maclagan, and Sanders (and in Summer)	M. Tu. Th. F. 12 to 2	4 4 3 3	Drs. Haldane, Balfour, Stewart, and Duncan (and in Summer)	Tu., F., 12	3 5	2 4	5 5	The Physicians (Dr. McCall Anderson, Professor)	9	3 3	The Physicians	9	3 3 3 mos. 1 11 6
CLINICAL SURGERY	Drs. Pirrie, Kerr, and Ogston	1	3 3	Mr. J. Lister (and in Summer)	M., Th., 12	4 4 3 3	Dr. Watson Mr. Annandale (and in Summer)	M., Th., 12	3 5	2 4	5 5	The Surgeons (Dr. G. Buchanan, Professor)	9	3 3	The Surgeons	9	3 3 3 mos 1 11 6
SUMMER SESSION.																	
PRAC. ANAT. & DEMONSTRATIONS	Dr. Struthers	9 to 4	2 2	Mr. Turner	...	5 5	Dr. Handyside	9 to 4	2 2	...	...	Dr. Thomson and Demonstrator	...	...	Dr. Buchanan	12	2 2
BOTANY	Dr. Dickie	9	3 3	Dr. Balfour	8	4 4	...	...	...	...	...	Dr. Dickson	...	3 3	Mr. Hennedy	10	2 2
HISTOLOGY	Dr. Struthers	2	...	(with Prac. Physio.)	Tu., F., 3	3 3	...	...	...	...	...	...	...	...	...	...	...
MEDICAL JURISPRUDENCE	Dr. Ogston	9	3 3	Dr. D. Maclagan	11	4 4	Dr. Littlejohn	11	3 5	2 4	5 5	...	...	...	Dr. Alex. Lindsay	4	2 2
COMPARATIVE ANATOMY...	Mr. Nicol	2	3 3	...	...	...	...	...	...	...	...	...	...	...	(With Anatomy)	...	...
PRACTICAL CHEMISTRY	Mr. Brazier	10	3 3	Dr. Crum Brown	...	3 3	Dr. Falconer King	9 to 5	3 3	...	...	Mr. J. Ferguson	...	3 3	Dr. Thorpe	...	2 2
DISEASES OF THE EYE	Dr. A. D. Davidson	...	...	...	...	...	Dr. Robertson	1	2 2	...	...	Dr. T. Reid	...	1 1	Dr. Wolfe	...	...
DISEASES OF CHILDREN...	...	...	...	...	...	...	Dr. Stephenson	3	2 2	...	...	...	...	...	(With Midwifery)	...	...
NATURAL HISTORY	...	...	...	Dr. Wy. Thomson	1	4 4	...	...	...	...	...	Dr. Young	...	3 3	...	...	...
MEDICAL PSYCHOLOGY & INSANITY	...	...	...	Dr. Laycock*	M W. T. 3	2 2	Dr. J. Batty Tuke	3	2 2	...	...	...	...	...	(With Jurisprud.)	...	...
GYNÆCOLOGY	...	...	...	Dr. Simpson	Tu. F. 12	2 2	...	...	...	...	...	...	...	...	...	...	2 2
MIDWIFERY, &c.	...	...	...	[*Pract. Patho.:* Dr. Sanders.]	11	2 2	Drs. Keiller, Macdonald, & Underhill	10	3 5	1 3	...	...	...	...	Dr. J. G. Wilson	3	...
OPERATIVE SURGERY	...	...	...	Mr. Spence	...	2 2	...‖	...	...	...	...	Dr. Macleod	...	2 2	Dr. Dunlop	11	...
MATERIA MEDICA, &c.	Dr. Harvey	3 & 4	3 3	Sir R. Christison†	9	4 4	Dr. Craig & Moinet†	9	3 5	2 4	5 5	Dr. Cowan	...	2 2	Dr. Morton†	3	2 2

* With Practical Instruction at an Asylum (Saturday), £3 3s. † In Winter. ‡ Chemistry, £4 4s.; Practical Chemistry £3 3s. § And in Summer. ‖ Messrs. Joseph Bell and Chiene, and Dr. Duncan, 4 P.M., £2 2s. each.

TABULAR LIST OF THE CLASSES, LECTURERS ETC., AND FEES, AT THE MEDICAL SCHOOLS OF IRELAND, FOR THE SESSION 1875–76.

LECTURES, ETC.	DUBLIN UNIVERSITY. Lecturers.	DUBLIN UNIVERSITY. Fees.	DUBLIN R. C. OF SURGEONS. Lecturers. Days & Hours.	DUBLIN R. C. OF SURGEONS. Fees.	DR. STEEVENS' HOSP. AND MED. COLL., DUBLIN. Lecturers and Hours.	DR. STEEVENS'. Fees. First Course. £ s.	DUBLIN, CARMICHAEL SCHOOL. Lecturers. Days and Hours.	DUBLIN, CARMICHAEL SCHOOL. Fees.	DUBLIN, CATHOLIC UNIVERSITY. Lecturers.	DUBLIN, CATHOLIC UNIVERSITY. Days & Hours.	DUBLIN, CATHOLIC UNIVERSITY. Fees.
ANATOMY AND PHYSIOLOGY	Dr. M'Dowel (*anat.*)	Course, £3 3s., in all Classes, ex. Botany, Nat. Phil., Comp. Anat., Pract. Pharm., & Logic. Pract. Anat., £8 8s.	Dr. Mapother daily (ex. S.), 2	Course, £3 3s., in all the Classes, except Comparative Anatomy and Hygiene, which are free.	Mr Hamilton 10	3 3	Dr. R. J. Harvey M. W. F. 1	For each Course, £3 3s.; except Dissections, £5 5s.	Dr. Hayden Dr. R. Cryan	Daily (ex. S.) 12	£3 3s. each Course.
ANATOMY, DESCRIPTIVE & SURGICAL	Dr. M'Dowel		Dr. Bevan Mr. Morgan Daily, 12		Mr. Swan, 1	3 3	Mr. G. M. Foy Tu. Th. S. 1		Dr. R. Cryan Dr. Hayden	Daily (ex. S.) 1	
PRACTICAL ANATOMY AND DISSECTIONS	Dr. Little (*prac. anat.*)		Drs. Croly, Stoney, Stoker, Ormsby, and Kilgarriff		Mr. Bookey Mr. Swan Mr. Warnock Mr. O'Grady Mr. Reede	5 5	Drs. Harvey, Foy, Blakely, Auchinleck, Cochrane, & Weddick		Dr. P. Hayes Dr. Nixon Dr Coppinger Mr Kilgarriff Dr. Gunn Mr. Dillon	7 to 7 daily	
CHEMISTRY	Dr. Reynolds		Dr. Barker M. W. F. 1		Dr. Bell 12	3 3	Dr. Tichborne Tu. Th. S. 2		Mr Campbell	M. W. F. 2	
PRACTICAL CHEMISTRY ...	Dr. Reynolds		Dr. Barker		Dr. Bell	3 3	Dr. Tichborne (*in Summer*)		*Mr. Campbell	M. T. W. F. 2	
MATERIA MEDICA AND PHARMACY	Dr. Aquilla Smith		Mr. Macnamara		Dr Grimshaw (*in Summer*)	3 3	Mr. Auchinleck (*in Summer*)		*Dr. Quinlan	M. Tu. W. Th. 1	
BOTANY AND ZOOLOGY ...	Prof. Wright (*bot.*), Prof. Macalister (*zoology*)		Dr. Minchin		Dr. Warren (*in Summer*)	3 3	Mr. Blakely (*in Summer*)		*Dr. Sigerson	Th. 2 F. S. 1	
INSTITUTES OF MEDICINE AND PATHOLOGY	Dr. Purser		Dr. Little		...	...	Dr. Harvey (*in Summer*)		Dr. R. D. Lyons	Tu. Th. S. 3	
NATURAL PHILOSOPHY ...	Prof. Leslie		...		Dr. Bell (*in Summer*)	...	...		*Rev. G. Molloy	Tu. Th. 1 S. 2	
HOSPITAL PRACTICE	SIR P. DUN'S OR OTHER DUBLIN HOSPITAL.		CITY OF DUBLIN HOSPITAL. (Daily, 9)		DR. STEEVENS HOSPITAL. (Daily, 8½)	...	RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.		...	...	
CLINICAL LECTURES	...		Three times weekly		Dr. Freke Dr Grimshaw Mrs. Colles, Hamilton, & M'Donnell	...	...		...	...	
SURGERY	Dr. E. H. Bennett		Dr. Hughes Dr. Stokes Tu. Th. S. 3		Mr. Colles 11	3 3	Mr. A. H. Corley M. W. F. 12		Mr. Tyrrell	M. W. F. 3	
MIDWIFERY, &c.	Dr. Sinclair		Dr. Sawyer M. W. F. 11		Dr. Isdell (thrice wkly.)	3 3	Dr. Jennings M. W. F. 2		Dr. Byrne	Tu. Th. S. 2	
MEDICINE	Dr. Moore		Dr. Benson M. W. F. 11		Dr. Freke 11	3 3	Dr. Gordon Tu. Th. S. 12		Dr. R. D. Lyons	Tu. Th. S. 3	
MEDICAL JURISPRUDENCE	Dr. Travers		Dr. Davy		Dr. Tweedy (*in Summer*)	...	Dr. Woodhouse (*in Summer*)		*Dr. Macswiney	M. T. W. Th. 12	
COMPARATIVE ANATOMY...	Prof. Alex. Macalister		Dr. Mapother		Mr Hamilton	...	...		...	...	
PRACTICAL PHARMACY ...	...		[*Hygiene:* Dr. Cameron]		Mr. Nichols	...	...		...	...	
LOGIC	The College Tutors		[*Ophth. and Aural Surg.:* Dr. Wilson]		...	...	...		*Dr. D. B. Dunne	...	

* In Summer.

LECTURES, ETC.	CORK, QUEEN'S COLLEGE. Lecturers.	CORK. Days & Hours.	CORK. Fees. First Course. £ s.	CORK. Fees. Second Course. £ s.	BELFAST, QUEEN'S COLLEGE. Lecturers.	BELFAST. Days & Hours.	BELFAST. Fees. First Course. £ s.	BELFAST. Fees. Second Course. £ s.	GALWAY, QUEEN'S COLLEGE. Lecturers.	GALWAY. Fees. First Course. £ s.	GALWAY. Fees. Second Course. £ s.
ANATOMY AND PHYSIOLOGY	Vacant	Daily (ex. S.) 1	3 0	2 0	Dr. P. Redfern	Daily (ex. S.) 2	3 0	2 0	Dr. J. Cleland daily (ex. S.) 2	3 0	2 0
ANATOMY, DESCRIPTIVE & SURGICAL	Vacant	Daily (ex. S.) 12	...	...	Dr. P. Redfern	...	...	...	...	...	...
PRACTICAL ANATOMY AND DISSECTIONS	Vacant	Daily, 12	3 0	...	Dr. Charles	Daily (ex. S.) 12	3 0	3 0	Dr. Cleland (*and Demonstrator*) Daily, 1	3 0	3 0
CHEMISTRY	Dr. Maxwell Simpson	M. W. F.	2 0	1 0	Dr. Andrews	Daily (ex. S.) 3	2 0	1 0	Dr. Rowney M. W. F. 12	2 0	...
PRACTICAL CHEMISTRY ...	Dr. Maxwell Simpson	M. Tu. W. Th.	3 0	...	Dr. Andrews (*in Summer*)	Daily (ex. S.) 12	3 0	3 0	Dr. Rowney Tu. Th. S. 2	3 0	...
MATERIA MEDICA AND PHARMACY	Dr. Purcell O'Leary	Tu. Th. S. 2	2 0	1 0	Dr. J. S. Reid	M. Tu. W. Th. 4	2 0	1 0	Dr. J. P. Pye M. W. F. 4	2 0	1 0
BOTANY AND ZOOLOGY ...	Dr. J. R. Green	M. W. F. 3	2 0	1 0	Dr. R. O. Cunningham (*in Summer*)	M. Tu. W. Th. F. 1 (*Bot.* 11)	2 0	1 0	Dr. A. G. Melville Tu. Th. S. 11	2 0	...
INSTITUTES OF MEDICINE AND PATHOLOGY	...	...	...	...	...	...	...	...	...	...	...
NATURAL PHILOSOPHY ...	Mr. J. England	Tu. Th. S. 11	2 0	1 0	Dr. J. Everett (*Winter and Summer*)	M. W. F. 11 & 1	2 0	...	*Exp. Physics:* Dr. A. H. Curtis Tu. Th. 12	2 0	...
HOSPITAL PRACTICE	NORTH AND SOUTH INFIRMARIES.	...	...	...	BELFAST GENERAL HOSPITAL.	...	...	...	GALWAY INFIRMARY & TOWN HOSP. Daily	Sess 4 0	4 0
CLINICAL LECTURES	...	...	...	...	...	...	...	...	Drs. Colahan, Browne, Cleland, and Pye M. F. 10	...	...
SURGERY	Dr. W. Tanner	Tu. Th. S. 4	2 0	1 0	Dr. A. Gordon	M. Tu. W. Th. 1	2 0	1 0	Dr. J. V. Browne M. W. F. 11	2 0	1 0
MIDWIFERY, &c.	Dr. J. R. Harvey	M. W. F. 4	2 0	1 0	Dr. Dill (*in Summer*)	M. Tu. W. Th. 3	2 0	1 0	Dr. R. Doherty M. W. F. 2	2 0	1 0
MEDICINE	Dr. D. C. O'Connor	M. W. F. 3	2 0	1 0	Dr. Cuming	M. Tu. W. Th. 4	2 0	1 0	Dr. Colahan Tu. Th. S. 2	2 0	1 0
MEDICAL JURISPRUDENCE	Professors O'Leary and O'Shaughnessy	...	...	...	Dr. Hodges (*in Summer*)	M. Tu. W. Th. 2	2 0	1 0	Dr. J. P. Pye Tu. Th. S. 4	2 0	2 0
COMPARATIVE ANATOMY...		...	2 0	...	...	...	...	...	...	...	...
PRACTICAL PHARMACY ...	...	...	...	...	...	...	...	...	...	...	...
LOGIC	Mr. G. S. Read	...	1 0	...	...	...	...	...	Dr. T. W. Moffett M. W. F. 1	...	...

METROPOLITAN HOSPITALS AND MEDICAL SCHOOLS.

St. Bartholomew's Hospital and College. — The clinical practice of the hospital comprises a service of 710 beds, of which 676 are in the hospital at Smithfield, and 34 are for convalescent patients at Lauderdale House, Highgate.

Pupils' Appointments.—Four house-physicians and four house-surgeons are appointed annually, each of them holding office for one year, and provided with rooms by the hospital authorities. The fee payable for the house-physicianships and house-surgeoncies is only nominal. The midwifery assistant is appointed for a year, and is provided with rooms by the hospital authorities. The ophthalmic house-surgeon is appointed for six months, and is eligible for re-election for a second term of six months. The assistant chloroformist is appointed annually, and receives rooms and a salary of £25. No fee is paid for any of these appointments.

The clinical clerks, the obstetric clerks, the clerks to the medical out-patients, the dressers to the surgical out-patients, and the dressers in the special departments are chosen from the diligent students. No fee is required for any of these appointments. Sixteen ward dresserships are given annually to the students (of the second year) who pass the best examination in the subjects of study of the first and second year, or who may be otherwise especially recommended for such appointments. Other ward-dresserships may be obtained by payment of the usual fees.

A College is attached to the hospital, in which students can reside, subject to the College regulations. By applying to the warden, students will obtain information respecting rooms in College, or will be advised respecting residence out of the hospital.

Foundation and other Prizes.—Open Scholarship in Science (founded 1873). This Scholarship, of the value of £100, tenable for one year, will be competed for September 25th. Candidates must not be more than twenty-five years of age, and must not have entered to the medical or surgical practice of any metropolitan medical school. The subjects of examination are Physics, Chemistry, Botany, and Zoology.—Preliminary Scientific Exhibition (founded 1873). The subjects of examination are identical with those of the Open Scholarship in Science. This Exhibition, of the value of £50, is tenable for one year. The examination is confined to students of the hospital of less than six months' standing, and will be held October 27th.—The Jeaffreson Exhibition, of the value of £20 yearly, and tenable for two years, is awarded, in October, to the student who passes the best examination in the subjects of General Education.—A Senior Scholarship, £50, in Anatomy, Physiology, and Chemistry.—Lawrence Scholarship, and Gold Medal, of the value of forty-five guineas (founded in 1873 by the family of the late Sir Wm. Lawrence).—Two Brackenbury Scholarships in Medicine and Surgery.—Junior Scholarships in the subjects of study of the first year: 1. £50; 2. £30; 3. £20.—The Wix Prize is awarded for the best essay on a given subject.—The Bentley Prize for the best report on Surgical cases occurring in the wards of the hospital during the previous year. The Kirkes Gold Medal for Clinical Medicine.—The Hichens Prize for the best examination in "Butler's Analogy."—Foster Prize for the best examination in Practical Anatomy (senior).—The Treasurer's Prize for the best examination in Practical Anatomy (junior).

Students preparing for their examinations are arranged in classes, and examined by the lecturers, demonstrators, and medical tutor.

An examination of all students of the first year is held at the close of the first winter and first summer sessions.

A class in the subjects required for Matriculation at the University of London is held from October to January, and from March to June. A class for the Preliminary Scientific Examination is held from January to July. Classes are also held for the first and second M.B. Examinations and in Logic for the M.D. Examination.

Courses of Practical Surgery and of Practical Physiology have been instituted in accordance with recent regulations of the Royal College of Surgeons.

The Anatomical Museum and the Museums of Materia Medica and of Botany are open daily from 10 till 4 o'clock.

Charing-cross Hospital and College.—The fee for matriculation is £2 2s., to be paid on entering. Matriculated students pay proportionately lower fees, and are admitted without additional fee to the special courses in Practical Surgery, the lectures on Psychological Medicine by Dr. Hunt, to the Physiological Laboratory for practical instruction in Histology, and to the practice of the Royal Westminster Ophthalmic Hospital. They alone are entitled to compete for the scholarships, medals, and prizes.

Two Entrance Scholarships, of the value of £30 and £20 respectively, tenable for one year, will be awarded annually in October, after a competitive examination in the following subjects:—*Compulsory,* English, Latin, French, *or* German, Mathematics; *Optional* (only one of which may be selected), Chemistry, Mechanics, German *or* French.

Two scholarships are open for competition among the matriculated students: the Llewellyn Scholarship of £25, for students who have just completed their second year; and the Golding Scholarship of £15, for students who have just completed their first year. The following medals are awarded annually: the Governors' Clinical gold medal; and silver and bronze medals in all classes.

St. George's Hospital.—Perpetual pupils, by payment of £105, are entitled to admission to the medical and surgical practice; to compete for prizes and exhibitions; to hold the appointments of house-physician and house-surgeon, assistant house-physician, assistant house-surgeon, ophthalmic assistant, and to become clinical clerks for two periods of three months each, and dressers for similar periods. The house-physician and house-surgeon now receive their board and lodging free, and *no payment* is made for the appointment. Clinical clerks and dressers are also appointed without payment. Gentlemen are admitted to the hospital practice and lectures required by the Colleges of Physicians and Surgeons and the Society of Apothecaries on payment of forty guineas at the commencement of the first winter session, forty guineas at the commencement of the second year of study, and ten guineas for each succeeding year, which entitles the pupil to hold the offices of clinical clerk and dresser for three months each, and to become a candidate for the offices of medical and surgical registrar and demonstrator of anatomy and curator of the museum. These are all salaried offices. The obstetric assistant is resident, with a salary of £100. He must be a legally qualified practitioner.

Pupils may enter to the hospital practice and lectures separately. The appointments of house-physician and house-surgeon are made every six months, are four in number, and are tenable for one year. These appointments are awarded after examination, and are given without fee or payment, each officer being lodged and boarded at the expense of the governors of the hospital. The whole of the patients are under the charge of these officers in the absence of the physicians and surgeons.

Prizes.—The William Brown Exhibition of £100 per annum, tenable for two years; open to any pupil of St. George's who is under twenty-five years of age, and who shall have obtained a diploma or licence entitling him to be registered as a practitioner of medicine or surgery in England, within two years previous to the period fixed for the examination (July). The examination is to test the proficiency of the candidate in Medicine, Midwifery, and Surgery, including Ophthalmic Surgery. The William Brown Exhibition of £40 per annum, tenable for three years, for general fitness for the exercise of the medical profession, and for moral conduct. Sir Charles Clarke's Prize (interest of £200 Consols) for good conduct. The Thompson Medal and the Treasurer's Clinical Prize for proficiency in the clinical examination of medical and surgical cases in the wards of the hospital, with observations on pathology and treatment. Sir Benjamin Brodie's Clinical Prize in Surgery, for the best report of Surgical cases which have occurred in the hospital during the preceding twelve months, with notes illustrative of their pathology, diagnosis, and treatment. The Acland Clinical Prize in Medicine for the best report of Medical cases which have occurred in the hospital during the preceding twelve months, accompanied by drawings, diagrams, and observations. The Henry Charles Johnson Memorial Prize, awarded at the end of the winter session to the pupil most distinguished in Practical Anatomy. The

Brackenbury Prize in Medicine, value nearly £40; the Brackenbury Prize in Surgery, value nearly £40; open to all pupils of the hospital who on April 30th have not completed the fourth year of study, although they may at the next ensuing examination (in May) possess a diploma entitling them to practise medicine or surgery.

At the close of the summer session an examination of all the pupils is held, and certificates of proficiency given to every one who passes to the satisfaction of the examiners. Three prizes of ten guineas each are awarded to the most distinguished student in the first, second, and third years of study respectively. All students who have passed the examinations in Anatomy and Physiology will be formed into classes under the personal supervision of the physicians and surgeons in the hospital, for instruction in diagnosis and the practice of medicine and surgery. In the selection of the house-physicians and house-surgeons, regard will be had to their work in the wards of the hospital, and to the examinations for the Clinical and General Proficiency Prizes.

GUY'S HOSPITAL.—House-physicians and house-surgeons, obstetric residents, dressers, clinical and other clerks, are selected from the students according to merit, and without payment. The house-physicians hold office for a period of six months each — three months as junior, and three as senior. The main duty of the junior house-physician is to attend the medical out-patients three times a week, in a room adjoining that occupied by the assistant-physician for the day, and to prescribe for those patients who are not seen by him. The senior house-physician is chiefly occupied in the wards, which he visits twice a day. He assists the permanent medical officer in attending to all the emergencies that may arise in the absence of the physician. The evening clinical observations of temperature, &c., are chiefly made by him. He has separate rooms in the clinical building, and is boarded at the charge of the hospital. The house-surgeons hold office for a period of four months, acting as junior for the first two months, and as senior for the last two months. The junior house-surgeon is provided with commons. He has the general superintendence of the surgical casualty department, and assists his senior when required. The senior house-surgeon resides in the hospital, and is boarded free of expense. In the absence of the surgeons and assistant-surgeons he has the general superintendence of the surgical wards. The dressers are selected from those gentlemen who have completed their third winter session, and who have been surgical ward clerks. They hold office for six months each. Three are attached to each surgeon. During their week of special duty they reside in the hospital, and board with the house-surgeons free of expense. The obstetric residents, two in number, reside and are boarded in the hospital. Each holds office for two months—one month as junior, and one month as senior. Their duties are to accompany the pupils to their first cases of labour, to assist them in difficult cases, and to superintend generally the working of the lying-in charity. They are not allowed to use instruments without the sanction of one of the obstetric physicians.

Prizes, &c.—Voluntary competitive examinations are held at four periods of the student's course. 1. The Entrance Examination (commencing this year on October 7th) comprises Classics and Mathematics, Modern Languages, Botany, Physics, and Chemistry. The candidate who distinguishes himself the most receives £60; the second candidate £30. 2. At the end of the first sessional year, in Anatomy, Physiology, Materia Medica, Chemistry, Botany, and Comparative Anatomy: first prize, £50; second, £25; third, £10 10*s.* (presented by one of the Governors). 3. At the end of the second sessional year, in Anatomy, Physiology, and Practical Physiology: first prize, £25; second, £10; 4. At the end of the third sessional year, in Medicine, Surgery, Midwifery, and Medical Jurisprudence: first prize, £35; second prize, £20. Honorary certificates are given to those candidates who pass creditable examinations. Two Gold Medals are given annually by the Treasurer to the students who, having completed their third and not exceeded their fourth year, most distinguish themselves at special examinations in Clinical Medicine and Clinical Surgery. One medal is awarded in each subject. The Physical Society awards the following prizes:—One of £5 to the member who sends in the best essay and report of cases; prizes of £10 and £5 for the best papers read before the Society; and one of £5 to the member who has most distinguished himself in the debates of the session.

The Library is supplied with weekly, monthly, and quarterly journals of medicine, natural history, and philosophy; it is open to the students daily from 10 A.M. to 4 P.M.

KING'S COLLEGE.—The physicians' assistants, the physician-accoucheur's assistant, the clinical clerks, and the house-surgeon and dressers, are selected by examination from among those matriculated students of the College who are pupils of the hospital. The College and Hospital fees, in the case of matriculated students, for the three years' course of study required by the regulations of the College of Physicians, the College of Surgeons, and the Society of Apothecaries, amount to £105. Payments for this course may be made by one sum of £100 on entrance, or by the following instalments: £52 10*s.* on entrance, £42 at the beginning of the second winter session, and £10 10*s.* at the beginning of the third winter session. If the course be extended over a longer period than three years, a further sum of £10 10*s.* will be required at the beginning of each subsequent winter session. Students are recommended to add to the above the fee for attendance on the Medical Tutor's class for one year—namely, £3 3*s.* for the first-year subjects, or in the case of those preparing for the Preliminary Scientific Examination of the University of London, £5 5*s.* All resident students are required to attend the tutor during their first year. Rooms are provided within the walls of the College for the residence of a limited number of matriculated students. Registration fee at hospital, 10*s.* 6*d.*

Scholarships.—Warneford Scholarships: Two of £25 per annum, for three years. Science: One of £30, for two years. College Scholarships: One of £40 per annum, for two years; one of £30, for one year; three of £20, for one year. The Daniell Scholarship, of the annual value of £20. Sambrooke Registrarships, of the annual value of £50 each, and tenable for two years, are open to all matriculated students who have filled any one of the higher appointments at the hospital, or who have become Associates. The Leathes Prizes, value £7, and the Warneford Prizes, value £40, are given annually amongst the matriculated medical students. Class prizes are awarded annually for proficiency in the several subjects of Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, Obstetric Medicine, Botany, Forensic Medicine, Comparative Anatomy, Pathological Anatomy, Practical Physiology, and Practical Chemistry. These consist of books of the value of £3 in each subject of examination. Certificates of honour are also given. Two Medical Clinical Prizes, one of £3 for the winter session, and one of £2 for the summer session; and two Surgical Clinical Prizes, of the same value, are given. The Todd Medical Clinical Prize consists of a bronze medal and books to the value of £4 4*s.* The Tanner Prize for Obstetric Medicine, value £10, is given annually in July. All students, occasional as well as matriculated, are admitted to contend for the class prizes.

LONDON HOSPITAL.—At the Medical College lectures will be given on all the subjects required by the examining boards. For instruction in Mental Diseases, students can attend, without further fee, the practice of Dr. John Millar, medical superintendent of Bethnal House Asylum, a few minutes' walk from the hospital. Clinical lectures, both medical and surgical, will be given every week, and practical instruction imparted in all the departments.

Prizes.—Seven Scholarships to be offered for competition in the winter and summer sessions:—Two Entrance Science Scholarships awarded at the end of September of the value of £60 and £40 respectively. Two Scholarships of £30 and £20, to the students who pass in October the best and second-best examinations in the subjects required at the Preliminary Examinations. A Scholarship, value £20, in Human Anatomy, for first-year students, to be awarded in April, 1876. A Scholarship, value £25, in Anatomy, Physiology, and Chemistry, for first-year students, to be awarded at the end of the session. Three Hospital Scholarships, value £20 each, for Clinical Medicine and Clinical Surgery (to be awarded in April), and Clinical Obstetrics (to be awarded in June); in connexion with the latter a prize of £5 will be awarded to the student who has attended most Midwifery cases for the hospital during the preceding twelve months.

The Duckworth Nelson prize, value £10, for Practical Medicine and Surgery (biennial). Money prizes to the value of £60 given annually by the House Committee for zeal in dressing out-patients and knowledge of Minor Surgery.

Appointments.—Four house-surgeoncies, tenable for three or six months, and dresserships to in-patients, open to all. Dresserships to out-patients, with the privilege of competing for the prizes above mentioned. Resident medical officer, tenable for two years, with a salary of £75 the first year and £100 the second year. Two junior resident medical officers, tenable for six months. Eight medical assistantships, held for three or six months, with residence and board in the hospital for three or six weeks. Resident accoucheur, tenable for six months. (N.B. The holders of all the resident offices are provided with rooms and board free of expense.) Four clinical assistants in the medical and surgical outpatient departments, each at a salary of £40. Medical registrar, salary £100. Surgical registrar, salary £100. Two prosectors of anatomy, ward clerks, and post-mortem clerks, according to merit.

General fee to lectures and hospital practice, 90 guineas, payable in two instalments of 45 guineas each. Library fee, £1 1*s*. Special entries can be made to lectures or practice.

St. Mary's Hospital.—There are four resident medical officers, three of whom are appointed for twelve months, and one, the obstetric officer, for six months, who board free of expense in the hospital. These appointments are awarded after competition, without additional fee. A resident registrar is also appointed from amongst the students, with a salary of £100 a year and dispensary fees, who resides free of expense in the hospital. In addition to the above, a demonstrator of anatomy is appointed annually with a salary of £100 a year; and the medical tutor in like manner, with a salary of £100 a year. Both these officers are eligible for re-election.

All general students are required to perform the duties of clinical clerks and dressers during the last two years of their curriculum. Students of the third year are also appointed to assist the physicians and surgeons in charge of the out-patients.

The Library is partly maintained by an annual grant from the school, and each student on entering is required to pay a fee of one guinea. There is a Hospital Medical Society, which meets regularly during the winter session.

A Maternity Department is attached to the hospital. There are special departments for Diseases of the Eye, the Ear, the Skin, and the Throat, in which clinical demonstrations are constantly given by the physicians and surgeons in charge of them.

Scholarships, Prizes, &c.—Three Scholarships in Natural Science, each tenable for three years, and of the value of £60 the first year, £40 the second, and £20 the third year, and an Exhibition in Natural Science of the value of £20, tenable for one year. One of the scholarships and the exhibition are awarded immediately before the commencement of each winter session, by open competitive examination. Two Extra Scholarships will also be awarded in October, 1875: one in Natural Science, tenable for three years, of the value of £60 the first year, £25 the second, and £15 the third, is restricted to students educated at Epsom College; the other is an Open Scholarship in Classics and Mathematics, tenable for one year, and of the value of £35. A Scholarship in Anatomy of the annual value of £20, for students who have completed their second winter session; and a Scholarship in Pathology of £20, for students who have completed their third winter session. Examinations will be held and prizes awarded in the various classes of each year at the termination of both the summer and winter sessions. Two prosectors are annually appointed, who each receive £5 and a certificate for their services.

Students can receive instruction in Vaccination.

Fee to the hospital practice and lectures, £89 5*s*. in instalments, or £84 in one sum; perpetual, £105 in instalments, or £99 15*s*. in one sum. Fee to the hospital practice and lectures required for the examination in Dental Surgery by the College of Surgeons, £52 10*s*. Special entries can be made to courses of lectures or periods of hospital practice. There is no fee for registration.

Middlesex Hospital.—There is a special Cancer Department, affording accommodation for 33 in-patients, whose period of residence in the hospital is unlimited. Special attention is bestowed on the clinical instruction of the students both in the wards and out-patient rooms. Classes, open to all the students, are held for practical instruction in the microscopic examination of healthy and diseased tissues, and also in the application of bandages and other surgical apparatus. Students are allowed to take out to read at their own homes the books from the large and carefully selected medical library of the school. Two Entrance Scholarships, of the annual value of £25 and £20, and tenable for two years, are offered for competition at the commencement of the winter session. Two Broderip Scholarships, of the annual value of £30 and £20, tenable for two years, and two clinical prizes (value six and four guineas respectively) are annually awarded to those students who pass the best examination at the bedside and the postmortem room. The Murray medal and Scholarship, in memory of the late Dr. John Murray, have been founded in connexion with the University of Aberdeen, and will be awarded every third year to a student of this hospital. The Governors' Prize of twenty guineas is also awarded annually to the student who shall most distinguish himself during his three years' curriculum. Valable class prizes are also given, and six resident clinical appointments are annually awarded, after competitive examination, to students who have completed their education, and complied with the regulations of the school. The officers thus appointed reside and board in the hospital free of expense. The College tutors assist all general students, especially those who are preparing for examination, free of charge; and their instruction is arranged with a view to avoid the necessity of students obtaining any private tuition, apart from that of the Medical School. The fee for attendance on the hospital practice and lectures required by the Colleges of Physicians and Surgeons and by the Society of Apothecaries is £90, which may be paid by instalments.

The clinical clerk and dresser of the physician and surgeon of the week dine at the board-room table, free of charge, with the view of their being constantly in the hospital to assist the resident-physician's assistant and house-surgeon in case of need, and to have the opportunity of seeing the fresh cases. A limited number of general students are also allowed to dine at the board-room table. The paid offices of medical registrar, surgical registrar, resident medical officer, and demonstrator of anatomy are open to qualified men as they become vacant. All clinical clerkships and dresserships are awarded without fee.

St. Thomas's Hospital.—*Prizes and Appointments for the year* 1875-6.—For First-year's Students: Two Scholarships, of the value of £60 and £40, will be awarded during the first week in October, after an examination in Physics, Chemistry, Botany, and Zoology; the William Tite Scholarship, founded by Sir William Tite, F.R.S., the proceeds of £1000 Consols, tenable for three years; also prizes of £20 and £10; summer, £15, £10, and £5. For Second-year's Students: The Musgrove Scholarship, founded by Sir John Musgrove, Bart., the President of the Hospital, and endowed with £1400 Consols, producing 40 guineas per annum, is awarded biennially to the student who shall take the highest place in the first class list in the examinations at the end of the second winter session; it is tenable for two years, provided the holder obtains a place in the first class in the subsequent examinations; making the winter prizes £42, £20, and £10; summer, £15, £10, and £5; with the dresserships and the clinical clerkships. For Third-year's Students: Prizes of £20, £15, and £10, and the Prosector's Prize of £5. Clinical clerks and dressers are selected according to merit. The Grainger Testimonial Prize of £20, awarded biennially to third or fourth year's students, for the best Physiological Essay, to be illustrated by preparations and dissections. The Cheselden Medal, for Surgery and Surgical Anatomy. The Mead Medal, founded by Mr. and Mrs. Newman Smith, is awarded annually to a third-year's student, in respect of a special Practical Examination in Medicine. The Solly Medal, with a prize of at least 10 guineas, will be awarded at the end of the session, to a student of the third, fourth, fifth, or sixth year, for the best Report of Surgical Cases. The Treasurer's Gold Medal, for general proficiency and good conduct. The house-physicians, house-surgeons, and resident accoucheur are chosen, from gentlemen who have obtained their professional diplomas, according to merit, and, with the dressers, are provided with rooms and commons. Two hospital registrars, at £40 per annum each, will be selected from gentlemen distinguished for merit.

Fee to hospital practice and lectures for the first and second year, each £40; £20 for the third; and £10 for each succeeding year; or £105 perpetual. The fee for attendance on the general subjects required of students in Dental Surgery is, for the two years, £45; or, by instalments, £40 for the first year, and £10 for the second.

University College, London.—The fees for lectures and hospital practice required by the Colleges of Physicians and Surgeons and the Society of Apothecaries during the student's entire course amount to £105 15*s.*, which may be paid as follows:—First winter, £36 5*s.*; first summer, £11 11*s.* Second winter, £32 1*s.*; second summer, £7 7*s.* Third winter, £7; third summer, £7 7*s.* Fourth winter, £4 4*s.*

Entrance Exhibitions.—Three Entrance Exhibitions, of the respective values of £30, £20, and £10 per annum, tenable for two years, are annually awarded, upon examination by printed papers, to gentlemen who are about to commence their first winter's attendance in a medical school. The subjects of the examinations are — Classics, Elementary Mathematics, Natural Philosophy, and either French or German at the option of the candidate. The next examination will take place at the College on September 28th and 29th. Notice of intention to compete, with a statement of the modern language in which the candidate wishes to be examined, must be left addressed to the Secretary, not later than 2 p.m. on September 18th, at the office of the College, where the regulations and copies of previous examination papers may be obtained.

Scholarships and Exhibitions.—The Atkinson Morley Surgical Scholarship, of £45, tenable for three years, is annually awarded to the student who, upon examination, is found to possess the greatest proficiency in the theory and practice of Surgery. The Sharpey Physiological Scholarship, of about £70 per annum, tenable for three years, for proficiency in Biological Science. Filliter Exhibition: a prize of £30 is awarded annually, in July, to the most proficient student in the class of Pathological Anatomy.

Medals and Prizes.—Dr. Fellowes' Clinical Medals, one gold and one silver, awarded at the end of each winter and summer session to pupils who have most distinguished themselves by reports and observations on the medical cases in the hospital. The Liston Gold Medal is awarded at the end of the summer session to the pupil who has most distinguished himself by reports and observations on the surgical cases in the hospital. The Alexander Bruce Gold Medal will be awarded for proficiency in Pathology and Surgery. The Cluff Memorial Prize is awarded every other year for proficiency in Anatomy, Physiology, and Chemistry.

Class Medals and Prizes.—Besides the above, gold and silver medals or other prizes are awarded in each class.

The appointment of assistant-curator to the Museum of Anatomy and Pathology, of demonstrators of anatomy, of resident medical officer to the hospital, and of surgical registrar—all of which have emoluments attached to them —are almost invariably conferred upon students of the College.

Offices in the Hospital tenable by Students. — Physicians' assistants, house-surgeons, midwifery assistants, physicians' clerks, surgeons' dressers, ward clerks, and ophthalmic surgeons' assistants are selected from the pupils, without additional fees.

Westminster Hospital.—The entry fee to lectures and hospital practice required by the Colleges of Physicians and Surgeons and the Society of Apothecaries may be paid in one sum of £80, or in two instalments—£42 and £40 at the commencement of the first two winter sessions, or in four instalments of £29 8*s.*, £14 14*s.*, £26 5*s.* and £13 13*s.*, at the commencement of the first four sessions.

In addition to the practice of the hospital, which contains 191 beds, the pupils of this school are admitted to the practice of the Westminster Ophthalmic Hospital, and to that of the National Hospital for Epilepsy and Paralysis.

A house-physician, house-surgeon, and resident obstetric assistant are appointed annually, by examination, from amongst the senior students, without the payment of any fee, and these officers are provided with board and lodging free of expense. The medical and surgical registrars receive each a salary of £40. The appointments of assistant house-surgeon, physician's assistant, surgeon's assistant, ophthalmic assistant, in-patients' clerks, in-patients' dressers, and out-patients' dressers, are open to students of the hospital.

Besides the prize appointments just enumerated there is a Scholarship in Anatomy and Physiology of twenty guineas, for second-year's men; an Exhibition in Anatomy and Elementary Physiology, of ten guineas, for first-year's men. There are also the Chadwick Prize for general proficiency, of the value of twenty guineas, and two Clinical Prizes of £5 each for Medicine and Surgery and practical work in the wards. Certificates of honour may be obtained in any of the classes. There are also two Entrance Scholarships of £20 and £10 each, tenable for two years. Examination in Latin, Mathematics, and French, German, or Greek, on October 2nd and 3rd.

Royal Free Hospital, Gray's-inn-road.—102 beds. Physicians: Dr. O'Connor, Dr. Cockle, Dr. Rickards. Surgeons: Mr. Victor de Méric, Mr. Fred. J. Gant, Mr. William Rose. This Hospital affords large opportunities for obtaining a bedside knowledge of medicine and surgery, also for the study of morbid anatomy. Students can prepare for examinations by attending a course of three or six months' clinical instruction. Vacancies for clinical clerks and dressers. For particulars apply to any member of the medical staff at the Hospital daily at 2 p.m.

Great Northern Hospital, Caledonian-road. — Consulting Surgeon: Frederick Le Gros Clark, Esq., F.R.S. Physicians: Dr. Leared, Dr. Hardinge, Dr. Cholmeley, Dr. Crucknell, Dr. Cook. Obstetric Physician: Dr. Gustavus C. P. Murray. Ophthalmic Surgeon: Mr. Bowater John Vernon. Surgeons: Mr. Gay, Mr. W. Adams, Mr. T. Carr Jackson, Mr. W. Spencer Watson, M. T. B. Lowne. Aural Surgeon: Mr. Harvey. Dental Surgeon: Mr. Charles James Fox. Chloroformist: Mr. George Eastes. House-Surgeon: Mr. P. N. Hart (Acting) M.B., M.R.C.S., C.M. Medical practitioners and students admitted to the practice of the hospital.

West London Hospital, Hammersmith-road, W.—68 beds. 407 in-patients. Consulting Physician: Dr. Henry Maudsley. Consulting Physician-Accoucheur: Dr. W. O. Priestley. Consulting Surgeons: Mr. Samuel Armstrong Lane and Mr. William Bird. Physicians: Dr. Goddard Rogers and Dr. Thorowgood. Physician for Diseases of Women: Dr. Wiltshire. Surgeons: Mr. William F. Teevan and Mr. Alfred Cooper. Surgeon for Diseases of the Eye: Mr. B. J. Vernon. Junior Physicians: Dr. Fish and Dr. Milner Fothergill. Junior Surgeons: Mr. J. A. Bloxam and Mr. H. T. Butlin. Surgeon-Dentist: Mr. H. E. Sewill. Analytical Chemist: Mr. William Crookes. Resident Medical Officers: Two House-Surgeons and an Apothecary. The practice of this hospital is open to all students and members of the medical profession. Gentlemen desirous of acting as clinical clerks or dressers can obtain all information on application to the secretary at the hospital.

Hospital for Consumption and Diseases of the Chest, Brompton.—Consulting Physicians: Dr. C. J. B. Williams, F.R.S., Dr. W. H. Walshe, Dr. R. P. Cotton, Dr. R. Quain, F.R.S. Consulting Surgeon: Sir William Fergusson, Bart. Physicians: Dr. J. E. Pollock, Dr. E. S. Thompson, Dr. C. T. Williams, Dr. R. D. Powell, Dr. J. Tatham. Assistant-Physicians: Dr. R. Thompson, Dr. B. Yeo, Dr. F. Roberts, Dr. T. H. Green, Dr. J. M. Bruce. Dental Surgeon: Mr. W. P. Bartlett. Resident Medical Officer: Mr. R. Rendle, F.R.C.S. Secretary: Mr. H. Dobbin. Three clinical assistants reside in the hospital for a period of six months. Pupils are admitted to the practice of the hospital: terms. £3 3*s.* for three months; perpetual, £5 5*s.* The medical practice of the hospital is recognised by the University of London, the Apothecaries' Company, and the Army and Navy and India Medical Boards. The hospital contains 257 beds, and there is an extensive out-patient department.

City of London Hospital for Diseases of the Chest, Victoria-park. Office: 24, Finsbury-circus, E.C.—Consulting Physicians: Drs. Peacock, J. Risdon Bennett, and Birkett. Physicians: Drs. Ward, Andrew, Thorowgood, and Sutton. Consulting Surgeon: Mr. J. Hilton. Assistant-Physicians: Drs. Shepherd, Smith, Corfield, and Berkart. Resident Medical Officer: Mr. Ernest O'Bark. Information respecting medical instruction at the hospital may be obtained on application to the physicians.

Royal Hospital for Diseases of the Chest, City-road, E.C.—Established 1814. 12 beds. Consulting Physicians: Drs. Herbert Davies and Horace Dobell. Physicians: Drs. H. H. Crucknell, G. Goddard Rogers, P. J. Hensley, Gilbert Smith, and W. S. Greenfield. Consulting Surgeon: Mr. J. Adams. Surgeon: Mr. Alfred Cooper. House Physician: (vacant). In-patients, 168; out-patients, 5199. It is proposed shortly to enlarge this hospital by addition of new buildings capable of holding 50 additional beds. The office of House-Physician, which is tenable for one year, and for which a sum of £100 is voted in lieu of board and residence, is filled up annually in October.

National Hospital for the Paralysed and Epileptic, 23, 24, and 25, Queen-square, Bloomsbury.—The physicians attend every Monday, Tuesday, Wednesday, and Friday, at half-past two o'clock. In and out-patients' practice and electrical-room treatment at that hour. Physicians: Drs. Ramskill, Radcliffe, Hughlings Jackson, and Buzzard. Assistant-Physicians: Dr. H. Charlton Bastian, Dr. Elam, Dr. Maclure, and Dr. Gowers. Surgeon: W. Adams, F.R.C.S. Medical Superintendent: Dr. Herbert Tibbitts. Medical Registrar: Dr. Sturge. Medical practitioners and students will be admitted on showing their cards.

Royal Orthopædic Hospital, 315, Oxford-street.—Surgeon: Mr. B. E. Brodhurst.—House-Surgeon: Mr. W. E. Balkwill. Secretary: Mr. Maskell. Operations on Mondays at 2 p.m. The hospital is open to all legally qualified practitioners. Pupils are admitted to witness the practice of the hospital on the following terms: Six months, £3 3s.; twelve months, £5 5s.; perpetual, £10 10s. The annual course of lectures will be duly announced.

Royal Westminster Ophthalmic Hospital, King William-street, Charing-cross.—The hospital contains 36 beds; and the patients, who number 10,000 annually, are seen, and operations performed, daily at 1 o'clock. The following are the days of attendance of the surgeons: Monday and Friday, Mr. Power and Mr. Rouse; Tuesday, Thursday, and Saturday, Mr. Hogg; Wednesday and Saturday, Mr. Cowell. The practice of the hospital is open to students. Fees for six months, £3 3s.; perpetual, £5 5s. Students of the hospital are eligible for the post of house-surgeon. Special Demonstrations and Lectures will be given during the summer session. Secretary, Mr. Farrant.

London School of Dental Surgery, Leicester-square.—Lectures are delivered in winter on Mechanical Dentistry, by Mr. James S. Turner, M.R.C.S., L.D.S., on Wednesdays, at 7 p.m.; on Metallurgy in its application to Dental Purposes, by Mr. G. H. Makins, M.R.C.S., F.C.S., on Tuesdays and Fridays, at 6.30 p.m. In summer, Mr. S. H. Cartwright, M.R.C.S., L.D.S., lectures on Dental Surgery and Pathology; and Mr. C. S. Tomes, M.R.C.S., L.D.S., on Dental Anatomy and Physiology (Human and Comparative). General fee for special lectures required for the curriculum, £15 15s.—Dental Hospital of London (in connexion with the above). Surgeons: Messrs. Fox, Underwood, Gregson, Coleman, Harding, and Hill. Assistant-Surgeons: Messrs. Moon, Medwin, Lane, Bartlett, S. H. Cartwright, and David Hepburn. Dental House-Surgeon: Mr. James Merson. Fee for two years' hospital practice required by the curriculum, £15 15s.

Seamen's Hospital (late *Dreadnought*), Greenwich, S.E.—This institution is established for the relief of seamen of all nations. Casualties are received at all hours. Apartments are provided in the hospital for students and others who may be desirous of studying diseases incidental to tropical climates before entering the services or going abroad. Unusually good opportunities also exist for the practice of operative surgery. Honorary Physician: Dr. George Budd. Visiting Physicians: Dr. Stephen H. Ward and Dr. Charles Henry Ralfe. Honorary Surgeon: Mr. Busk. Visiting Surgeon: Mr. Davies-Colley. Surgeon: Mr. W. Johnson Smith. House-Physician: Dr. J. T. Law. House-Surgeon: Vacant. Secretary: Henry C. Burdett.

The Hospital for Sick Children, Great Ormond-street, Queen-square, W.C., and Cromwell House, Highgate.—Physicians: Drs. Dickinson and Gee. Assistant-Physicians: Drs. W. B. Cheadle, O. Sturges, A. L. Galabin, R. J. Lee, and Thos. Barlow. Surgeons: Mr. T. Smith, Mr. F. Howard Marsh, and Mr. J. W. Haward. Surgeon-Dentist: Mr. T. Edgelow. Fee for three months' attendance, £3 3s.; perpetual, £5 5s. Secretary: S. Whitford. There are now 65 beds in the hospital, Great Ormond-street, and 52 beds at the country branch; total, 117. In-patients last year, 531; out-patients, 13,250. The practice at the hospital has recently been thrown open gratuitously to the pupils of the different hospitals and medical schools of London, on conditions which may be ascertained of the Secretary. The new hospital about to be opened will contain 110 beds.

Victoria Hospital for Children, Gough House, Queen's-road, Chelsea.—The hospital contains 54 beds, and has a large out-patient department; over 400 weekly. Physicians: Dr. Evans and Dr. Cavafy. Assistant-Physicians: Dr. Jones, Dr. Grigg, Dr. Laking, Dr. Pearson Irvine, and Dr. Allchin. Surgeon: Mr. Cowell. Assistant-Surgeons: Mr. Churchill and Mr. Fisher. Dental Surgeon: Mr. Risdon. House-Surgeon and Registrar, vacant. Secretary: Captain W. C. Blunt, R.N. Out-patients are seen daily as under:—Medical cases: Daily, except Saturday and Sunday, at 9 a.m.; and Mondays and Thursdays at noon. Surgical cases: Daily, except Saturday and Monday, at 10 a.m. Dental cases: Saturdays at 9.30 a.m.

Royal Infirmary for Children and Women, Waterloo-bridge-road.—Instituted 1816. Consulting Physicians: Dr. Wilks, Dr. John Williams. Consulting Surgeon: Mr. J. Cooper Forster. Physicians: Drs. G. V. Poore, W. Park, G. Roper, and E. J. Sparks. Surgeon: Mr. Edwin Canton. Surgeon-Dentist: Mr. Thomas Roberts. Resident Medical Officer: Mr. E. Overman Day. Secretary: Mr. W. Champion. Advanced students in medicine, and such practitioners as may desire it, are permitted to attend the practice of this hospital gratis. If a certificate signifying such attendance be required, the sum of five guineas must be paid to the physicians and surgeons in ordinary conjointly.

British Lying-in Hospital, Endell-street, St. Giles's, W.C.—Consulting Physician: Dr. Priestley. Consulting Surgeon: Sir William Fergusson, Bart. Physicians: Dr. Heywood Smith, Dr. Arthur Edis, and Dr. Wiltshire. Matron: Miss Freeman. Secretary: Mr. Vincent Yardley. This institution receives women only, as midwifery pupils. The pupils reside in the hospital, and attend the patients in-doors and within half a mile radius, under the direction of the matron and physicians. A course of lectures is also given by the physicians. The fee for the course of three months is ten guineas. Pupils that prove themselves competent receive a certificate signed by the physicians, enabling them to practise midwifery.

Belgrave Hospital for Children, 1, Cumberland-street, S.W.—Established 1866. 20 beds. Consulting Physician: Sir Wm. Gull. Consulting Surgeon: Mr. John Wood. Physicians: Dr. Farquharson and Dr. Fenwick. Surgeons: Mr. Brodhurst and Mr. Pick. Surgeon-Dentist: Mr. T. C. White. House-Surgeon: Mr. M. McHardy. In-patients, 97; out-patients, 900. Pupils are admitted to the practice of the hospital upon producing a certificate of being duly registered as medical students.

Evelina Hospital for Sick Children, Southwark-bridge-road, S.E.—Consulting Physician: Dr. Arthur Farre. Consulting Surgeon: Mr. Prescott Hewett. Physicians: Drs. C. Hilton Fagge, E. Buchanan Baxter, F. Taylor, and T. Crawford Hayes. Surgeons: Messrs. W. Morrant Baker, H. Howse, and R. Clement Lucas.

Pharmaceutical Society of Great Britain, Bloomsbury-square, W.C.—School of Pharmacy. The session will commence on October 1st, and extend to the end of July. Lectures on Chemistry and Pharmacy will be delivered by Professor Redwood on Monday, Tuesday, and Wednesday, at 9 a.m. Also lectures on Botany and Materia Medica, by Professor Bentley, on Thursday, Friday, and Saturday, at 9 a.m. A course of Systematic Botany will be delivered at the Royal Botanic Gardens, Regent's-park, during the summer months. The Laboratory, under the direction of Professor Attfield, is open from 10 a.m. to 5 p.m. daily, except Saturdays, when it is open from 10 a.m. to 2 p.m. Students may enter at any period during the session.

ENGLISH PROVINCIAL HOSPITALS AND MEDICAL SCHOOLS.

Queen's College, Birmingham.—The Sands Cox Prize, value £20, is annually awarded after examination in Medicine, Surgery, and Midwifery. The examination in 1876 will be held in the third week in March. The Warden's Prize, value £3 3*s.*, is awarded annually to the most proficient student of the first year. The Percy Prize, value £5 5*s.*, is awarded to the student who may pass the best examination in German. Class Prizes: Medals and certificates of honour are awarded annually in each class after examination. Hospital practice may be attended at either the General Hospital or the Queen's Hospital for a common fee. Composition fee, £50.

The General and Queen's Hospitals, Birmingham.—*The General Hospital*:—Consulting Surgeon: D. W. Crompton, F.R.C.S. Physicians: Dr. Fletcher, Dr. Russell, Dr. Wade, Dr. Foster, Dr. Rickards. Surgeons: Mr. Baker, Mr. Pemberton, Mr. Bartleet, Mr. Goodall, Mr. Jolly. *The Queen's Hospital*:—Consulting Surgeon: William Sands Cox, F.R.S. Consulting Surgeon-Accoucheur: Samuel Berry, F.R.C.S. Physicians: Dr. Heslop, Dr. Johnston, Dr. Sawyer, Dr. Mackey. Surgeons: Mr. West, Mr. Gamgee, Mr. Furneaux Jordan, Mr. Wilders. Obstetric Surgeon: Mr. John Clay. Acting Ophthalmic Surgeon: Mr. Priestly Smith. Pathologist: Mr. Thomas. Dental Surgeon: Mr. Charles Sims.

The practices of these hospitals are amalgamated for the purpose of clinical instruction under the direction of the Birmingham Clinical Board, by whose order all schedules will be signed and all examinations conducted. The hospitals have a total of upwards of 400 beds. 4500 in-patients, and 45,000 out-patients, are treated annually. Special instruction is given at the hospitals in the use of the microscope, laryngoscope, ophthalmoscope, in case-taking, and the art of prescribing. Practical Pharmacy is taught in the dispensaries of the hospitals.

Appointments.—At the General Hospital: A resident medical assistant, a resident surgical assistant, and two resident dressers; tenable for six months. At the Queen's Hospital: a resident obstetric assistant, tenable for six months. Resident surgical assistant; tenable for three months. Clinical prizes, of the value of £30, will be given annually.

Fees for attendance for four years (the period required by the University of London, and the Colleges of Physicians and Surgeons, &c.) on the Medical and Surgical Practice, and on the Clinical Lectures at both hospitals, £31 10*s.* This payment may be made in two equal sums, the first on entrance, and the second at the commencement of the second year.

All students will be required to attend six months alternately at each hospital, as they may be directed by the Clinical Board, excepting students who enter for six months only, who will be allowed to choose the hospital they wish to attend.

Any further information may be obtained from Robert Jolly, M.D., or William Thomas, M.B., Hon. Sec. of the Birmingham Clinical Board.

Bristol Royal Infirmary.—242 beds. Physicians: Drs. Fairbrother, E. L. Fox, Spencer, and Shingleton Smith. Surgeons: Messrs. Leonard, Tibbits, Steele, Board, and Dowson. Physician for the Out-patients: Dr. Waldo. Surgeon for the Out-patients: Mr. Bernard. House-Surgeon, H. M. Chute. Secretary: W. Trenerry. In-patients last year, 2678; out-patients last year, 23,923.

Fees.—Surgeon's pupil: First year, £12 12*s.*; two years, £21; three years, £26 5*s.* Dresser (extra fee): one year, £12 12*s.*; two years, £21; three years, £26 5*s.* Physician's pupil: six months, £8; one year, £15; eighteen months, £20; perpetual, £25. Each physician appoints a clinical clerk without extra fee. Each pupil is required to pay an entrance fee to the infirmary of £5 5*s.*, and a subscription of £1 1*s.* per annum to the library, which numbers about 2700 volumes, and contains most of the standard works on medicine and surgery, and also the medical periodicals.

Prizes.—Suple Prize: A gold medal, value £5 5*s.*, with £7 7*s.* in money, is given annually to each of the two successful candidates in the medical and surgical examinations. Clark's Prize: The interest of about £500 is given annually to the prizeman of the third year's examination at the Bristol Medical School, if educated at the Bristol Royal Infirmary.

Bristol General Hospital.—140 beds. Medical or Surgical Practice: Six months, £6; one year, £10; perpetual, £20. Library fee, £1 1*s.* per annum. Dressership or clinical clerkship, £5 5*s.* for six months. Two Scholarships of £15 each are awarded annually, and a Scholarship value £22 10*s.*, founded by the late John Naish Sanders, Esq., for the encouragement of the study of medicine and surgery by pupils in the hospital. Dressers reside in the hospital in weekly rotation free of expense. There is a large ward used solely as a children's ward.

Physicians: Drs. Martyn, G. F. Burder, and J. G. Swayne (*acc.*) Surgeons: Messrs. Coe, F. P. Lansdown, G. F. Atchley, and N. C. Dobson.

Bristol Medical School.—Prizes and certificates of honour are given after competitive examination amongst students of the first, second, and third years respectively. The interest of £500 will be given to the prizeman of the third year, who shall have been educated at the infirmary, and can produce certificates of good conduct and moral character.

Addenbrooke's Hospital, Cambridge.—Clinical Lectures in Medicine and Surgery in connexion with the Cambridge Medical School are delivered at this hospital twice a week during the academical year; and practical instruction in Medicine and Surgery, in the wards, is given by the physicians and surgeons daily, during the vacations as well as term time.

Leeds School of Medicine.—Attendance at the lectures of this school will confer the same qualifications for examination as are obtained in the medical schools of London. The Lectures on Chemistry, by Professor Thorpe, are delivered at the Yorkshire College of Science. The Hardwick Clinical Prize, value £10, is conferred annually upon the most deserving student who exhibits a satisfactory proficiency in Clinical Medicine. The Surgeons' Clinical Prize, value £10, given by the surgeons of the hospital, is conferred annually on the most deserving student who exhibits proficiency in Clinical Surgery. In addition to the Silver Medal awarded in Medical Jurisprudence, there is a prize of £10, for which a special examination is annually held. Practical Surgery and Practical Physiology are taught in accordance with the regulations of the Royal College of Surgeons. In the Infirmary there are six clinical clerkships and eight dresserships. Four resident assistants are chosen from the senior students; board and residence free. Besides the Infirmary there is a large Dispensary and a Fever Hospital; both are in the town, and open to students attending the School.

Liverpool Royal Infirmary School of Medicine.—Three house-surgeons and two house-physicians are elected every six months from pupils of the School who have obtained a qualification. Six dressers and six clinical clerks are elected quarterly. Pupils of the Infirmary are admitted to learn Pharmacy in the dispensing department for six months.

The Roger Lyon Jones Scholarship (£90) will probably be awarded during the next year.

The hospital contains 300 beds, including wards, with 40 beds, for the treatment of diseases of women. The Lock Hospital adjoining contains 60 beds.

Fees.—For six months' medical practice, five guineas; twelve months, six guineas; surgical, six guineas for six months, eight guineas for twelve months (this includes admission to the practice of the Lock Hospital adjoining the infirmary); perpetual medical and surgical practice, thirty-two guineas.

Liverpool Northern Hospital.—144 beds. A special ward for the diseases and accidents of children. Clinical lectures are regularly delivered by the physicians and surgeons during the winter and summer sessions. Instruction in Morbid Anatomy is given by the medical staff. Clinical clerkships and dresserships are open to all the students, without additional fee.

Fees for Hospital Practice and Clinical Lectures.—Perpetual twenty-five guineas; one year, ten guineas; six months, seven guineas; three months, four guineas.

One resident pupil received; fee, sixty guineas per annum. Attendance on the practice of this hospital qualifies for all the examining boards.

Liverpool Royal Southern Hospital.—Physicians: Dr. Cameron and Dr. Carter. Surgeons: Dr. Nottingham, Mr. Hamilton, and Dr. Wollaston. House-Surgeons: Mr. Henry Caddy and Mr. O. Gwatkin. 200 beds. Clinical Lectures given by the physicians and surgeons during the winter and summer sessions. Clinical Clerkships and Dresserships open to all students. A special ward for diseases and accidents of children. Rooms for a limited number of resident pupils.

Fees for Hospital Practice and Clinical Lectures.—Perpetual, twenty-five guineas; one year, ten guineas; six months, seven guineas; three months, four guineas.

The practice of the hospital is recognised by all the examining bodies.

Owens College (Manchester Royal) School of Medicine.—This medical school is located in a large, new building, which forms a part of Owens College. It is provided with a very large dissecting room, physiological laboratory, private laboratories, and work rooms, besides lecture rooms, a museum, and a library. The departments of Anatomy, Physiology, and Chemistry are taught by professors who devote the whole of their time to the duties of their respective chairs. The more strictly practical departments of medical study are taught partly in the Medical School and partly in the Royal Infirmary, to which are attached a fever hospital, a lunatic asylum, and a convalescent home. Medical and surgical clinical classes are conducted in the infirmary by the professors of medicine and surgery, and separate instruction is afforded in the elements of medical and surgical physical diagnosis, in obstetric medicine, ophthalmic surgery, and pathological anatomy by the different members of the staff of the Medical School and Infirmary. The following scholarships and prizes are open to students of the Medical School:—1. A Scholarship and Prizes are awarded at the end of each academic year to students of the first, second, and third year. 2. A Platt Physiological Scholarship of £50 a year for two years is offered annually to the student who, having studied for one entire session in the physiological laboratory of Owens College, has prosecuted the best original investigation in Physiology and has passed a satisfactory examination in Physiology. 3. A Dumville Surgical Prize of £20 is offered annually for proficiency in Clinical Surgery. 4. Medical and Surgical Clinical Prizes, each of the value of six guineas, are open to competition each year for the best reports (with comments) of cases which have occurred in the wards of the infirmary.

University of Durham.—College of Medicine, Newcastle-upon-Tyne.—*Winter Session* (commencing Oct. 1st, 1875).—Physiology: The Professor of Physiology and Biology about to be appointed by the Colleges of Medicine and Physical Science. Anatomy: Dr. Nesham, Dr. Armstrong, and Mr. Russell. Medicine: Dr. Philipson. Surgery: Dr. Heath. Chemistry: Mr. Marreco, M.A.—*Summer Session.*—Midwifery: Dr. Gibson. Botany: Mr. H. E. Armstrong. Medical Jurisprudence: Dr. Bramwell. Therapeutics: Dr. Humble. Materia Medica: Dr. Arnison. Practical Chemistry: Mr. Marreco, M.A. Operative Surgery: Dr. Heath. Pathological Anatomy: Dr. Gibb. Pharmacy: Mr. Proctor. Practical Physiology: the Professor of Physiology. Medical Tutor and Demonstrator: Dr. Reoch, M.A., M.B., M.C.

Fees for Lectures.—Composition fee for all the Lectures, qualifying for the Licence in Medicine and the Mastership in Surgery of the University of Durham, the Licence and Membership of the Royal College of Physicians, the Membership of the College of Surgeons, and the Licence of the Apothecaries' Society, and payable on entering to the first winter session, £52 10*s.* Perpetual ticket for Pharmacy curriculum, £12 12*s.* Separate courses of lectures, each £4 4*s.* Single course of Chemistry, £5 5*s.* The composition fee entitles the holder to attend the lectures on Botany, Chemistry, Materia Medica, and Pharmacy, and to use the Museum of Materia Medica in the Library of the College.

Hospital Practice.—This can be attended at the Newcastle Infirmary, which contains 230 beds. Midwifery, Diseases of the Eye, and Insanity can be specially studied. The Laboratories, Libraries, and Museums are open daily.

Fees for Hospital Practice.—Twelve months, £7 7*s.*; six months, £5 5*s.*; three months, £4 4*s.*; perpetual fee, £17 17*s.*; or, if paid by instalments, first year £7 7*s.*; second year £6 6*s.*; third year, £5 5*s.* These fees are payable in advance.

Medical Scholarships in the University of Durham.—Four Scholarships of £25 a year each, tenable each for four years, and four resident Dresserships, are conferred for merit. The resident dressers, who also act as clinical clerks, pay £10 10*s.* for six months' board in the hospital. Dickinson Memorial Scholarship, £15, tenable for one year, for general proficiency.

Newcastle-upon-Tyne Infirmary.—230 beds. Medical and Surgical clinical lectures are delivered, and clinical instruction is given in the wards. There are special wards for the treatment of children, ophthalmic and syphilitic diseases. Physicians: Dr. Embleton, Dr. Philipson, and Dr. B. Bramwell. Surgeons: Dr. Heath, Mr. Russell, Dr. Arnison, and Dr. L. Armstrong. Assistant-Surgeons: Mr. A. Bell, Dr. Hume, and Mr. J. Hawthorn.

Fees for Hospital Practice and Clinical Lectures.—Twelve months, seven guineas; six months, five guineas; three months, four guineas. Perpetual fee, seventeen guineas; or, if paid by instalments, first year, seven guineas; second year, six guineas; third year, five guineas. These fees are to be paid on entering at the hospital.

Four resident clinical assistants are nominated by the Medical Board half-yearly; and, if approved, are appointed by the House Committee. The clinical clerks and resident dressers are provided with apartments, and pay a fee of £10 to the hospital for their board. These appointments are made without any extra fee.

Eye Infirmary, Newcastle-on-Tyne.—The Eye Infirmary last year was completely renovated, and is furnished with all the latest instruments for diagnosis and treatment of eye disease. 300 operations in Ophthalmic Surgery are performed annually.

Norfolk and Norwich Hospital.—120 beds. One year's attendance recognised by examining boards. Fees: For the physicians' practice, ten guineas, perpetual. For the surgeons' practice, including dressership, £20 for one year; £30 for two years; and £40 perpetual. Pupils resident and non-resident. Physicians: Dr. Copeman, Dr. Eade, and Dr. Bateman. Hon. Consulting Surgeon: Mr. Nichols. Surgeons: Mr. Firth, Mr. Cadge, and Mr. Crosse. Assistant-Surgeons: Mr. Williams and Dr. Beverley.

Sheffield School of Medicine.—The Infirmary contains 200 beds; a Museum of Pathology, Library, and Post-mortem Theatre, with microscopes, and all the appliances for clinical research. Perpetual fee for attendance on all the lectures required by the Royal College of Surgeons and the Apothecaries' Hall, £42. Prospectuses and all further information may be obtained upon application to the Hon. Secretary, Mr. A. Jackson.

Sheffield Public Hospital and Dispensary.—Physicians: Dr. J. C. Hill, Dr. Law, and Dr. H. J. Branch. Surgeons: Mr. Jackson, Dr. Keeling, and Mr. Thorpe.

Sheffield Hospital for Women, Figtree-lane.—Medical officers: Dr. Jackson, Dr. Keeling, Dr. Hime, and Mr. F. Woolhouse. The hospital is devoted more especially to cases requiring obstetric operations and difficult midwifery. Out-patients are attended daily at the hospital. Midwifery cases are attended at their homes by the hospital midwives. Students can attend the practice of the hospital, and be supplied with cases of midwifery, on payment of a fee of one guinea.

North Staffordshire Infirmary, Hartshill, Stoke-upon-Trent.—The New North Staffordshire Infirmary was opened in 1869, and is built on the pavilion plan. It has accommodation for nearly 200 patients. In-patients last year, 1199; out-patients, 5416. The hospital is duly recognised by the Court of Examiners of the Royal College of Surgeons of England, and students have great facilities for acquiring a practical knowledge of their profession.

Wolverhampton and Staffordshire General Hospital.—210 beds. Attendance recognised by examining boards. Pupils resident and non-resident. The hospital contains large male and female accident wards, general medical and surgical wards, a children's ward, a ward for diseases of women, and a fever wing. The out-patient department, commodious and convenient, is semi-detached from the main building.

Fees for Hospital Practice.—One year, ten guineas; perpetual, twenty guineas. The fees must be paid to James Hay, Esq., secretary to the hospital. Physicians: Dr. Millington and Dr. Totherick. Surgeons: Mr. Vincent Jackson, Mr. J. O'Brien Kough, and Mr. C. A Newnham. House-Surgeon: Mr. C. L. Taylor. House-Physician: Charles A. Nankivell, M.B. Lond. Operations are performed in the theatre every Thursday morning at 11 o'clock.

York County Hospital.—Established 1740; rebuilt 1851. 100 beds. In-patients, 748; out-patients, 3229. Physicians: Drs. G. Shann and W. Matterson. Surgeons: Messrs. W. D. Husband, G. Hornby, and R. Hewitson. House-Surgeon: Mr. Samuel Wreford. Secretary: Mr. R. Holtby.

SCOTTISH HOSPITALS AND MEDICAL SCHOOLS.

Royal Infirmary, Edinburgh.—Beds are set apart for clinical instruction by the professors of the University of Edinburgh. Courses of Clinical Medicine and Surgery are also given by the ordinary physicians and surgeons. Special instruction is given in the medical department on Diseases of Women, Physical Diagnosis, &c., and in the surgical department on Diseases of the Eye. Separate wards are devoted to fever, venereal diseases, diseases of women, diseases of the eye, also to cases of incidental delirium or insanity. Post-mortem examinations are conducted in the Anatomical Theatre by the Pathologist, who also gives practical instruction in Pathological Anatomy and Histology. Hospital tickets: Perpetual in one payment, £10; annual, £5 5*s.*; half-yearly, £3 3*s.*; quarterly, £1 11*s* 6*d.* Separate payments for two years entitle the students to a perpetual ticket. No fees are payable for any medical or surgical appointment. The subordinate appointments are open to all students and junior practitioners holding the hospital ticket during the period over which the appointment extends. These appointments are as follows:—1. Resident physicians and surgeons are appointed, and live in the house free of charge. Candidates must be registered as legally qualified practitioners. The appointment is for six months, but may be renewed at the end of that period by special recommendation. 2. Non-resident clinical clerks are appointed by the physicians and surgeons for such periods and under such conditions as they deem expedient. 3. Dresserships: Each surgeon appoints from four to nine dressers, the appointment being for six months. 4. Assistants in the Pathological department are appointed by the pathologist.

School of Medicine, Edinburgh.—The lectures qualify for the University of Edinburgh and the other universities; the Royal Colleges of Physicians and Surgeons of Edinburgh, London, and Dublin, and the other medical and surgical boards.

In accordance with the statutes of the University of Edinburgh, any four of the medical classes required for graduation, or two complete *anni medici*, may be attended in this school, each of which *anni medici* may be constituted by attendance on two of the six months' courses, or on one of these and two three months' courses. The regulations require that the fee for any class taken for graduation in Edinburgh shall be the same as that for the corresponding class in the University.

The whole of the education required for graduation at the University of London may be taken in this school.

The minimum cost of the education in this School of Medicine for the double qualification of physician and surgeon from the Royal Colleges of Physicians and Surgeons, including the fees for the joint examination, is £90 4*s.*, which is payable by yearly instalments during the period of study; whilst the minimum cost for the single qualification of either physician or surgeon, including fees for examination, is £80.

Edinburgh Eye Infirmary, 6, Cambridge-street, Lothian-road.—Number of beds, 6. Surgeons: Mr. B. Bell and Dr. Joseph Bell. Assistant-Surgeon: Dr. Kirk Duncanson. Three months' attendance fee, £1 1*s.* Instruction in the use of the Ophthalmoscope is given. Hour of visit, 1 to 2 daily. Average number of out-patients, 900 to 1000.

Royal Hospital for Sick Children, Meadowside House, Edinburgh.—Consulting Physicians: Professor Sir Robert Christison, Bart., Drs. Charles Wilson, Graham Weir, and Matthews Duncan. Consulting Surgeon: Professor Spence. Pathologist: Professor Sanders. Ordinary Physicians: Drs. Ritchie, Linton, and James Dunsmure, jun. Extra Physicians: Drs. James Andrew and James Cumming. Assistant Extra Physician: Dr. Ballingall. Surgeon-Dentist: Dr. Smith. Ophthalmic Surgeon: Dr. Argyll Robertson. Resident Physician: Dr. James Crabb. Honorary Secretary: Mr. John Henry, 20, St. Andrew-square.

Fees.—To hospital, three months, £1 1*s.*; to dispensary department, three months, £1 1*s.*

Anderson's University, Glasgow.—The winter session will be opened on Tuesday, October 27th; the summer session on the first Tuesday of May. Anatomy, Professor A. M. Buchanan, M.D.; Chemistry, Professor ———; Institutes of Medicine (Physiology), Professor E. Watson, M.D.; Surgery, Professor Dunlop, M.D.; Materia Medica, Professor Morton, M.D.; Practice of Medicine, Professor Wood Smith, M.D.; Midwifery (in summer), Professor J. G. Wilson, M.D.; Medical Jurisprudence (in summer), Professor Alexander Lindsay, M.D.; Botany (in summer), Mr. Hennedy; Ophthalmic Medicine and Surgery, Dr. Wolfe.

Class Fees.—For each of the above courses of lectures, first session, £2 2*s.*, second session, £1 1*s.*; afterwards free. Anatomy Class Fees: For both courses (lectures and demonstrations on Practical Anatomy), first session, £4 4*s.*; second session, £4 4*s.* The dissecting-room is free for two sessions to those who attend both courses of Anatomy. After the second year the fee for admission to the dissecting-room is £1 1*s.* per session.

The fee for all the lectures in the Medical School required of candidates for the diplomas of physician and surgeon amount to £30.

Diploma in Medicine and Surgery.—Gentlemen who have studied in this School are eligible for examination before any of the Royal Colleges, and in Glasgow they may obtain the diplomas of physician and surgeon or general practitioner, which entitles to registration under the Medical Act, with the right to practise Medicine and Surgery in any part of the kingdom.

Glasgow Royal Infirmary.—583 beds. Physicians: Drs. Scott Orr, Perry, M'Laren, J. Wood Smith, and M. Charteris. Surgeons: Drs. Morton, E. Watson, Dewar, J. Dunlop, and H. C. Cameron. Besides the clinical instruction given at the bedside, lectures on the cases are given four times weekly, at 9 a.m., during the winter and summer sessions. The Pathological Museum is open to students. There are five physicians' and five surgeons' assistants, who perform all the duties of house-physicians and house-surgeons. They are lodged and boarded in the hospital for £25 per annum. There is also a Fever assistant, who receives a salary of £25, and is boarded free. Dressers to the surgical wards and clerks to the dispensary are appointed without fee.

Aberdeen Royal Infirmary.—Contains about 300 beds. Consulting Physician: Dr. A. Harvey. Physicians: J. W. F. Smith-Shand, R. Beveridge, Angus Fraser. Consulting Surgeon: Mr. D. Fiddes. Surgeons: Messrs. W. Pirrie, D. Kerr, A. Ogston, and J. O. Will. Ophthalmic Surgeon: Dr. Alex. D. Davidson. Pathologist: Dr. James Rodger. Dental Surgeon: Mr. Williamson. Resident Superintendent and Apothecary: Dr. R. Rattray. Resident Assistant-Physician: Mr. James Smith, A.M. Resident Assistant-Surgeon: Mr. James Simpson. Pathologist and Curator of Museum: Dr. J. Rodger. Treasurer and Secretary: Mr. W. Carnie.

The Aberdeen Royal Lunatic Asylum.—Contains about 475 beds. Resident Physician and Clinical Teacher: Dr. Robert Jamieson. Consulting Physician: Dr. John Macrobin.

IRISH HOSPITALS AND MEDICAL SCHOOLS.

Queen's College, Belfast.—*Fees:* Anatomy and Physiology, first course, £3; each subsequent course, £2. Anatomic Demonstrations and Practical Anatomy, each course, £3. Practical Chemistry, £3. Other Medical lectures: first course, £2; each subsequent course, £1.

Belfast Royal Hospital.—Physicians: Drs. Purdon, Smith, Ross, and Professor Cuming. Surgeons: Drs. Browne, Murney, James Moore, and John Moore. There is an extern department for the treatment of diseases and injuries not admitted into the hospital. Four pupils are permitted to enjoy the advantages to be derived from residence in hospital; £30 per annum is charged for board, &c. *Fees* —For Clinical Instruction, including hospital fees and 10*s.* 6*d.* registration fee at the beginning of each session: First winter session, five guineas; second, five guineas; third, five guineas; fourth and afterwards, one guinea. First, second, and third summer sessions, £2 12*s.* 6*d.*; fourth session and afterwards, £2 12*s.* 6*d.* Perpetual fee, £10 10*s.*, payable in two instalments.

The Malcolm Exhibition is competed for annually in May by the students attending this hospital.

Sir Patrick Dun's Hospital, Dublin.—Consulting Physician: Dr. W. Stokes. Consulting Surgeon: Dr. Wm. Collis. Physicians: Dr. J. M. Purser, Dr. W. Moore, Dr. Aquilla Smith, Dr. E. B. Sinclair. Surgeons: Dr. Thos. Evelyn Little, Dr. Ed. H. Bennett, Dr. R. G. Butcher, Dr. Ben. McDowel. Hospital fee for twelve months, including nine months' Clinical Lectures, £9 9*s.*

Richmond (Surgical), Whitworth (Medical), and Hardwicke (Fever) Hospitals, North Brunswick-street, Dublin.—These hospitals contain 312 beds, and have attached to them the Carmichael School of Medicine, a new building, with large dissecting-rooms, museums, and where lectures are given on all the different branches of Medicine and Surgery. Two clinical lectures are delivered in each week, in addition to the usual bedside instruction, which is given daily by the physicians and surgeons. A large Dispensary is attached to both the Medical and Surgical Hospitals, where patients are seen daily. Average daily attendance last year, 150. Practical Pharmacy is taught under the superintendence of the apothecary of the hospitals. A house-surgeon is appointed every second year; he holds the appointment for two years, and receives a salary. Eight resident clinical clerks are appointed each half-year, and provided with furnished apartments, fuel, &c. The Richmond Institution for the Insane, containing 1000 patients, adjoins these hospitals, affording every facility for the study of mental diseases.

Carmichael School of Anatomy, Medicine, and Surgery, North Brunswick-street, Dublin (in immediate proximity to the largest hospital in Ireland). Open for dissections 1st October. Lectures begin 1st November. Premiums to the value of £60 are awarded at the end of the session; and the Mayne Scholarship, value £15, will be given for proficiency in purely Practical Medicine, Surgery, and Anatomy, as tested by clinical examinations in the hospitals and by operations and dissections on the subject. Registrar: Dr. Harvey, 7, Upper Merrion-street, Dublin.

Dr. Steevens's Hospital and Medical College.—Operations on Saturday at ten. Six months' attendance, seven guineas; nine months', nine guineas. Lectures and Hospital Practice, College and Hall, seventy-eight guineas, in two instalments. The hospital contains 250 beds.

Ledwich School of Surgery, Peter-street, Dublin.—All the several courses of lectures required by the various licensing bodies to entitle the student to present himself for examination are delivered in the theatre of the institution, and are fully recognised. The school is in a central situation and in the immediate vicinity of four great medical and surgical hospitals, thus affording to the student the most ample opportunity of acquiring a thorough knowledge of the symptoms and treatment of disease. Demonstrators will be present in the dissecting-room at all hours. At the termination of the sessions, prizes will be awarded to the best answers in each department. Applications to be made to Edwd. Ledwich, Sec., 7, Harcourt-street, Dublin, from whom all particulars in connexion with the institution may be obtained.

EDUCATIONAL VACCINATING STATIONS.

In order to provide for the granting of those special certificates of proficiency in vaccination which are required to be part of the medical qualification for entering into contracts for the performance of public vaccination, or for acting as deputy to a contractor, vaccinating stations in London and the large towns are open, under certain specified conditions, for the purposes of teaching and examination. The public vaccinators officiating at these stations are authorised to give the required certificates of proficiency in vaccination to persons whom they have sufficiently instructed therein.

MEDICAL TEACHERS.

The Drs. Power continue daily their Classes for the various Competitive and Pass Examinations. Dr. Power receives two Resident Pupils. Dr. W. H. Power prepares Senior Practitioners by correspondence for the M.D. St. And. and the Colleges of Physicians Lond. and Edin. — Lecture-rooms, 8, Red Lion-square, Holborn, W.C.

Mr. Thomas Cooke, F.R.C.S., Senior Assistant-Surgeon to the Westminster Hospital, continues his Lectures and Demonstrations of Anatomy and Physiology at his Private Licensed Dissecting-room, 102, Stamford-street, Waterloo-bridge.—16, Woburn-place, Russell-square.

Dr. W. Handsel Griffiths, Lecturer on Chemistry, Ledwich School of Medicine, Dublin, and Librarian, Royal College of Surgeons in Ireland, has Classes on Materia Medica, Chemistry, Botany, and Medical Jurisprudence, preparatory for the Universities, Royal Colleges of Physicians and Surgeons, Apothecaries' Hall, and Public Services.—Laboratory, Ledwich School of Medicine, Peter-street, Dublin.

Mr. Thomas Lyle, F.R. Hist. S. (of the University of London), prepares gentlemen for the Preliminary Arts Examination of the Apothecaries' Hall and the Royal College of Surgeons, and for the Matriculation at the London University. Resident Pupils received. During the year 1874 thirty students were successful, many of whom obtained honours.—Fern House, 48, Navarino-road, Dalston, N.E.

Mr. Murray, B.A., Arkteon House, Wray-crescent, Tollington-park, Holloway, N., prepares for the Preliminary Examination at the Royal College of Surgeons and Apothecaries' Hall, and the Matriculation at the University of London.

Dr. Coales, LL.D., M.A., prepares candidates in Class or by Private Lessons for the following examinations: London University, Preliminary Scientific and Matriculation: College of Surgeons, Preliminary Membership and Fellowship; Apothecaries' Hall, Preliminary Membership. Resident Pupils received.—119, Gower-street, W.C.

Mr. F. A. Hanbury, M.A., Wrangler and late Senior Scholar of his College, prepares Pupils for the Matriculation Examination of the London University, for the Preliminary Examination of the Royal College of Surgeons, &c.—24, Old-square, Lincoln's-inn, W.C.

Mr. Henry Sergeant, B.A., 8, High-street, Camden-town, N.W., prepares gentlemen for the London University Matriculation; also for Royal College of Surgeons, Apothecaries' Hall, British Pharmaceutical Society, &c.

Mr. Wm. Youldon, C.M., prepares candidates for the College of Surgeons, the Apothecaries' Hall, and likewise for the Entrance Scholarships for the London, Charing-cross, and other Metropolitan Hospitals, privately, in class, or by letter.—64, Grafton-street, Mile-end, E.

Mr. S. Elliott, B.A., Rochester-row, S.W., prepares candidates for Matriculation, Preliminaries of the College of Surgeons, Apothecaries Hall, &c., either privately, in class, or by letter.—Terms on application.

Mr. G. Hind will continue his Demonstrations, commencing on the 15th inst., at 11 A.M., at 29, Newman-street, Oxford-street.

Mr. F. A. White, B.A. (Classical and Mathematical Honours, Cambridge), prepares pupils for the Matriculation at the London University, and for the Examinations at the Royal College of Surgeons and Apothecaries' Hall.—178, Alexandra-road, St. John's-wood, N.W.

A TABULAR VIEW OF THE DAYS AND HOURS OF THE INTRODUCTORY LECTURES

To be delivered at the different Medical Schools.

	Lecturers.	Days and Hours.
St. Bartholomew's Hospital		Oct. 1st
Charing-cross Hospital	Mr. W. Fairlie Clarke	„ 1st, 4
St. George's Hospital	Dr. Barnes	„ 1st, 4
Guy's Hospital	Dr. Thos. Stevenson	„ 1st, 2
King's College	Dr. Curnow	„ 1st, 4
London Hospital	Dr. W. B. Woodman	„ 1st, 3
St. Mary's Hospital	Dr. Randall	„ 1st, 8
Middlesex Hospital	Mr. B. Thompson Lowne	„ 1st, 4
St. Thomas's Hospital	Dr. Payne	„ 1st, 3
University College	Professor Corfield	„ 1st, 3
Westminster Hospital	Mr. R. Davy	„ 4th, 3
Glasgow University	Prof. G. Buchanan	„ 26th, 12
Durham University	Dr. G. Y. Heath	„ 1st, 2
Queen's College, Birmingham	Rev. W. H. Poulton	„ 1st, 3
Leeds School of Medicine	Mr. T. R. Jessop	„ 1st, 4
Liverpool Royal Inf. and Sch. of Med.	Dr. Dickinson	„ 2nd, 3
School of Medicine, Bristol		„ 1st
Sheffield School of Medicine	Dr. J. Young	„ 1st, 4
Edinburgh University	Sir Alex. Grant	Nov. 1st, 2
Liverpool Southern Hospital		Oct. 1st
Owens College, Manchester		„ 1st
Aberdeen University		Oct. 18th
Anderson's University, Glasgow		„ 26th

TO CORRESPONDENTS.

Our thanks are due to those gentlemen who have kindly supplied us with the requisite information relative to the various medical examining bodies, hospitals, and medical schools given in this Students' Number of The Lancet.

In consequence of the present number being exclusively devoted to information especially interesting to students, reference to other subjects is necessarily postponed until next week.

Clinical Lecture

ON

SOFT CHANCRES IN THEIR RELATION TO SYPHILIS.

By JONATHAN HUTCHINSON, F.R.C.S.,
SENIOR SURGEON TO THE LONDON HOSPITAL,
SURGEON TO MOORFIELDS OPHTHALMIC HOSPITAL AND TO THE HOSPITAL FOR SKIN DISEASES.

GENTLEMEN,—I wish to state to you, as explicitly as I can, my creed as to the relationship between the soft and the hard chancre. It is simply this: that the one is produced by pus-contagion, and the other by a specific virus. Let me ask you for the time to try to conceive of the latter as of the sporules of yeast, or as of some infinitely minute molecular bodies possessing independent vitality, and capable of growth and of enormously prolific multiplication when once implanted in a suitable soil. Although the cryptogamic or microphytic character of the syphilitic virus has never been yet demonstrated, yet it is so highly probable that we conveniently assume it proven. At any rate it is essential that you should think of its germs as of specific and definite bodies—as definite, for instance, as the seeds of clover or mustard, and as capable of being mixed up with other materials whilst yet preserving intact their own individuality. Now, let us ask what is our knowledge as to the results of implantation of these germs in the human body. We know this, that usually for a day some trivial irritation marks the spot where the inoculation has taken place, that this irritation soon passes off, and that all appears quite well for about a month or five weeks, when the spot begins to itch, to become red, and subsequently to indurate. A little later we find a peculiar hardness at the base of the inflamed spot; and to this hardness, attended as it usually is by but little ulceration or discharge, we give the name of the Hunterian chancre. We know, further, that at about the time when the sore takes on characteristic induration the patient usually becomes a little feverish, his tonsils ulcerate, and his skin shows numerous spots or blotches, symmetrically placed. Such is the usual, or perhaps we might say the typical, course of primary and secondary syphilis; but we know also that departures often occur from this type. The qualities in the specific virus which cause induration in the chancre may also cause inflammation of a more destructive kind, and then the sore, instead of remaining almost free from ulceration and suppuration, becomes deeply eroded by molecular gangrene, and may discharge purulent secretion in some abundance. This liability to ulcerate occurs not alone in the primary sore or chancre, but in the papules or tubercles which constitute the secondary rash. These are often quite free from secretion, their epidermis never breaking; but in many cases they ulcerate, and become covered by a pus-crust.

You must now allow me to reiterate a very important assertion as to fact which I have often before made, and it is this—that *all living pus is contagious*. I mean that all living pus-cells possess the power of setting up when transferred to another home, if that home be a suitable one, a kind of inflammatory action similar to that from which they themselves had originated. Gonorrhœa-pus will produce gonorrhœal inflammation; but note, it must gain a favourable tissue home. It will succeed if put on the mucous membrane of the urethra, or on the conjunctiva, or into the nostril, or into the rectum, but in each of these parts it flourishes with differing degrees of vigour, whilst on the skin, and possibly in the mouth, it will not live at all. The doctrine of the contagiousness of freshly-produced (i. e., living) pus explains much that we observe as to the spread of many forms of skin disease in which the secretion infects other parts of the patient's skin or the skin of other persons. We have long been in the habit of applying the old term porrigo to all forms of eruption believed to be due to the transference of purulent secretion from part to part. Foot-rot in sheep is another excellent example of the contagiousness of pus, this disease being simply a kind of suppurating whitlow of the hoof, which spreads through a flock by contagion from one to another. There are several secondary laws which we must keep in mind in reference to the contagiousness of pus. First, I have already said that the pus, if it is to grow on the new soil, must be living when you put it there. This is obvious. You must not expect the pus of an abscess, for instance, which is usually dead and in an advanced state of fatty degeneration, to manifest any vital properties. It may possibly irritate, but it can do nothing worse. Secondly, the precise character and stage of the inflammatory process which has produced the pus will be represented in the recipient. If you inoculate the conjunctiva with the pus from gonorrhœa in an early and acute stage, an acute purulent ophthalmia will result quite different from that which would follow inoculation with pus from a chronic gleet. Thirdly, it seems very probable that the pus produced by any special tissue is contagious, or, in other words, capable of further vital action, by preference on some tissue of similar kind to that in which it originated. I have already mentioned gonorrhœa-pus as an instance, and alluded to its different degrees of virulence on the different mucous surfaces. We may remember, in passing, that gonorrhœa of the male urethra rarely causes similar inflammation on the mucous lining of the prepuce, whilst in the female gonorrhœal suppuration of the vagina almost always infects the urethra. We may venture, I think, to believe, without much fear of being wrong, that pus-cells, as a rule, prefer that their new habitat should resemble their birthplace. The negro does not thrive in Newfoundland, nor the Esquimaux on the Gold Coast, although each might bear without detriment transference to almost any distance from home if to a home-like country. It is so with pus-cells: those originating in the skin are contagious to skin, those in the glans to the mucous membrane of the glans, those from the urethra to the urethra, and so on.

The bearing of these facts upon the theory of venereal sores is obvious. We have seen that the true virus of syphilis may cause inflammation, and thus result in ulceration and the formation of pus. Let me ask you to believe that the pus so produced is in itself contagious, and you have my theory of all soft or non-infective chancres. This pus, although produced by an inflammation caused by the specific germs of syphilis, does not necessarily contain those germs. It may contain them, or it may not, just as the clover you sow in your field may or may not contain, as an accidental admixture, the seeds of poppy as well. If the poppy-seeds be there they will probably grow; and just so if with the pus-cells there be also the germs of the syphilitic virus, they too may grow, and you may have a mixed crop. Mixed chancres are indeed very common. I hope I shall mislead no one by using the illustration of the clover and poppy-seed, which is, after all, only superficially applicable. The difference between the contagion of pus—a purely local affair—and that of syphilitic virus, a zymotic, self-multiplying, specific poison, capable of passing into the blood, and destined to go through long stages of development and change, is far greater than any that can be imagined between two species of vegetable seeds. Nor have we, in mentioning these points of great difference, specified the chief, which is that the relationship between the syphilitic virus and the pus-cells is that of producer and product—one which no two vegetable seeds ever maintain to each other. If they were like each other in any degree comparable to the likeness between two seeds, even of the most widely different plants, there would be some show of reason for the terms employed by dualists. On the contrary, I hold that the dualists have not, and never had, the slightest basis for their creed. Chancres differ, it is true; but we have, and let us be thankful that it is so, no duality of syphilis. The soft sore is not syphilis at all, and cannot produce syphilis; nor is it the offspring of a sister virus. If the term dualism means anything it must, I suppose, mean this—that there are extant two kinds of specific poison, each producing its specific results, and incapable of transmutation or alliance. If the hypothesis which I have suggested be the true one the soft sore is not the offspring of a specific virus, but comes as a sort of side result from the inflammation caused by it. Thus, if you could to-day exterminate soft sores, and destroy all the secretions capable of producing them by contagion, you must expect in a few weeks again to find them reproduced.

If, on the other hand, you could destroy all hard chancres, and all the specific germs of syphilis, there would be no reproduction of the disease. The soft sore cannot develop the specific germs of syphilis; but the germs of syphilis can cause the inflammatory action which produces the pus that is the *materies morbi* of the soft sore. I repeat, there is no dualism here, for the soft sore is nothing but a poor degraded, bastard, and unprolific* child of the one true syphilis.

Perhaps some may be saying that I am asking them to believe a great deal on very little evidence. Candidly, I do not think so; for although I admit I offer nothing that can be called proof, yet the probability seems very strong. At any rate, the theory advanced does appear to offer some explanation of what was before not explained, and it relieves us from the necessity of trying to believe the very unlikely suggestion that two separate specific poisons, each liable to be conveyed chiefly in the venereal act, have existed side by side for many centuries without becoming intermixed.

Let us next try how this theory will fit with what we observe in practice.

We have first the fact, which is universally acknowledged, that the soft sore has no period of incubation. This is precisely what we should expect on the theory of pus-contagion, and precisely what we should not expect if there were any specific virus in the case. It is parallel with what happens in gonorrhœa, in purulent ophthalmia, in porrigo of the skin, and, as I believe, in erysipelas. Next we have the frequent multiplicity of soft sores, which is to be explained by the fact that the purulent secretion from the first is contagious. It may happen that several parts have been inoculated simultaneously from the first contagion, but it is probable that in most cases the first sore stands in the position of parent to the others. You may sometimes see a dozen soft sores on the same penis, and not unfrequently some spots covered with pus-scabs (porrigo) are seen on the patient's thighs and abdomen. The ease with which you can inoculate the soft sore on any part of its possessor's skin, and for any number of times, is simply another illustration of the same fact. The pus which easily effects accidental contagion is of course easily inoculable; and, inasmuch as there is no specificity in the matter, nothing but a purely local process, the constitution never becomes protected, however many times it is repeated. I must claim also the circumstance that soft chancres may differ one from another within very wide limits of variability as another argument in support of my view. I believe it is generally acknowledged that when a soft chancre is transmitted by inoculation the second sore very closely resembles its parent; and I am far from wishing to assert that in the matter of contagion all pus is exactly alike. Indeed I have already said that it is modified by the special kind of tissue from which it is produced, also by the stage of the inflammatory process, and, allow me now to add, by the special type of the inflammation. By the term "type" I mean the whole of the clinical peculiarities which the inflammatory process in question shows: thus we may have a phagedænic type, a suppurative type, an erysipelatous type, a diphtheritic type, and many others. The word "variety" would perhaps be equally applicable; but, whichever word we use, I wish clearly to say that in speaking of a type of inflammation it is intended to imply only clinical peculiarities, and not specificity. Just in the same way we speak of a greyhound, a pointer, or a spaniel, meaning in each case to denote a well-recognised type of dog, but by no means to imply specific distinctness. All dogs will of course breed together, and their mongrel progeny may exhibit all varieties of mixed qualities. It is practicable of course, with care, to secure what are called "pure breeds"; and my suggestion is that a precisely analogous law obtains in reference to pus-contagion—the progeny will resemble its parent. Thus, I think, I am quite entitled to recognise the peculiarities which soft chancres present, their similarity one to another, and the considerable degrees of dissimilarity from sores which result from other causes, without for a moment acknowledging that these facts imply true specificity in origin. It is simply a matter of degree; and it is highly probable that you may breed up, so to speak, a certain quality of pus until, so long as due precautions are taken, it will manifest almost invariably peculiarities in its products which are deceptively like those of a species.

You will all be aware that it is extremely rare for any surgeon, however well skilled he may suppose himself in the diagnosis of the results of venereal disease, to recognise a soft chancre on any other part than the genitals. It is for the most part on these surfaces only that soft sores will assume peculiarities which are easy of recognition. If a chancre is diagnosed on any other part, that chancre is always an indurated, or at any rate an infecting one. Yet there can be little doubt that persons do, not unfrequently, get contaminated with the pus-secretion from non-specific venereal sores on other parts than the genitals. The product, however, has not enough of peculiarity to lead to its recognition. The precautions necessary for breeding "true" have not been observed. The conditions indicative of peculiarity of type fade away, and we recognise only an irritable pus-secreting sore, to which we may give, according to our habits and nomenclature, the name of impetigo, porrigo, or ecthyma.

(*To be concluded.*)

NOTE OF A NEW FORM OF PSEUDO-PARAPLEGIA.

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T. S——, aged thirty-five, a labourer, married, a native of and resident in Fife, was admitted to the Royal Infirmary, under my care, on July 23rd, 1875, complaining of want of power in both legs and the right arm, from which he has suffered more or less for three years. He states that he has always been healthy, and never met with any accident. At the age of twenty-two he went to New Zealand, and remained there for ten years. From the age of twenty-five to twenty-seven he was occasionally guilty of masturbation. He enjoyed perfect health till he was on his homeward voyage, when he felt a pain as of something tied tightly round his waist. This pain prevented him from standing upright, and he sometimes felt that he dragged his right foot slightly. On reaching home he suffered from a stiffness in his legs, and dizziness, with occasionally a peculiar sensation which he describes as an uneasiness passing up the left leg, then down the right, becoming in the latter part of its course as if boiling water were scalding the limb. He consulted various practitioners, one of whom applied the cautery over the spine with decided benefit. In January, 1873, he married. He did not indulge excessively in sexual intercourse, but he observed that the completion of the act appeared to be delayed. He worked as a labourer and was frequently employed in carrying bags, and was able to continue at his occupation until nine months ago, when the stiffness of his limbs had so increased that he had to give up the attempt. His habits as to food and drink have been favourable; his home has always been comfortable; his work pretty hard, but not excessive. He knows of no nervous disease in his family.

On admission he was sound in all respects except the nervous and muscular systems. He had no abnormal sensation except slight numbness in the fingers of the right hand, especially the thumb and forefinger; sensibility to all kinds of impressions natural everywhere, except in the right hand, where it seems slightly diminished. His sight has failed a little of late, especially in the right eye. His pupils are sluggish, of medium size and equal. In the right eye the disc is greyish, its outline ill defined, and the vessels are diminished in calibre. The left eye is similarly but less affected. Hearing, taste, and smell are natural. The muscular sense, as tested by weights, and by standing and walking with the eyes closed, is natural. The natural reflex actions are normally performed, except that micturition is often slow and the bowels are singularly constipated. On tickling the soles the legs do not jerk, but become rigid from general spasm of the muscles. Voluntary motion is normal in the head, thorax, abdomen, and left arm. The muscles of the right shoulder and upper arm are normal, and he can grasp firmly with the hand, but he says he feels it somewhat weak, and incapable of finer movements, such as buttoning. When he attempts prolonged finer movements, as in writing, his efforts are from the first slow and unsatisfactory, and soon fail altogether, not from any jerking, but from failure of the action of his fingers. The movements of his legs are singularly impaired. He can flex the thigh quite well, but he cannot, when lying in bed either on his face or his back, bend the knees nor the ankles nor the toes. As soon as he attempts to do so the flexor muscles come into play, but at the same moment the antagonistic muscles contract correspondingly, and the limb becomes rigid. He has learned, by moving his pelvis and hip-joints, to obtain some mechanical advantage, and get his flexors to prevail, so that in a roundabout way he obtains flexion; but this is both slow and unsatisfactory. As soon as he ceases to aim at flexion all the muscles relax. When he stands he plants his feet somewhat apart, but is quite steady; and closing his eyes makes no difference. His legs are quite rigid, all the muscles being contracted, and the right foot slightly inverted. When he tries to walk, the legs continue rigid; there is no jerking; throwing himself over on the supporting leg, he brings the foot round with a swing, scarcely clearing the ground, and he moves it slowly; the moving leg looks as if it were powerful, but held down and back by a heavy weight. His legs are easily fatigued, and he likes to help himself forward by grasping objects with his hands. He has, owing to the rigidity of his limbs when he attempts to move, the greatest difficulty in going up or down stairs. He manages to sit down by making use of the weight of his body, throwing the centre of gravity behind the line of his legs, and he is able to rise without much difficulty. Getting into bed is a difficult process on account of the rigidity of the limbs. He throws himself diagonally into the bed, his pelvis resting on the edge, and then he swings his legs round into the bed. The vaso-motor and nutritive functions are normal, as are also the cerebral and mental. The cranium and spine are well formed. Percussion over the lumbar region elicits complaint of some degree of tenderness. The hot sponge brings out nothing peculiar. The bones and joints are normal. The muscles are in all parts well nourished. In both legs, also apparently in the right hand, voluntary effort at movement or peripheral irritation induces spasmodic contraction of all the muscles, so that the limb becomes rigid, as above described. There is no tendency to cramp. After prolonged exertion jerking of the muscles is noticed, but it soon passes off. There are no fibrillary twitchings. Electro-sensibility and electro-contractility are normal.

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* "Unprolific" in the sense of not being able to produce a blood disease; prolific enough as to its capability of causing local contagion.

The peculiar features of this case are, the almost perfect soundness of the sensory functions, and the undue excitability of the motor structures, whereby voluntary movement is prevented by corresponding and equivalent contraction of the antagonistic muscles, general contraction being also induced by peripheral irritation.

These features do not correspond to anything which is described in the works on diseases of the nervous system to which I have access. It is sufficiently clear that, although the patient is practically paraplegic, he is not really so, seeing that the power of muscular contraction is impaired in no part of the lower limbs. It is therefore among the pseudo-paraplegias that we must look for analogous cases. In M. Jaccoud's classical work, "Les Paraplegies et l'Ataxie du Mouvement," there are described five forms of pseudo-paraplegia, viz.:—

1. A result of general asthenia, which is essentially characterised by the debility being as marked in the arms as in the legs, and by all normal movements being performed, although feebly.

2. A result of partial paralysis—that is, of paralysis of individual muscles or groups of muscles.

3. A result of exaggerated spinal excitability. In this form walking is embarrassed or rendered impossible, because contact of the sole of the foot with the ground induces more or less violent reflex movements; it may be either in the extensors or the flexors. This, of course, induces singular jerkings, which interfere with progression. When fully developed it cannot be confounded with paraplegia, because the limb is agitated by movements, sometimes painful, each time that the foot touches the ground; but when it is present in a less degree error is possible, walking being simply rendered difficult or irregular by the sudden contraction of a group of muscles, which interferes with the series of movements necessary for normal progression. If one watches closely, however, the nature and cause of the interference with walking are evident. If the mode of walking does not clear up the case, directing the patient to move in bed infallibly does so; for the movements of the leg are perfectly normal so long as the foot is not touching the ground. This was described by M. Goupil as a form of hysterical paraplegia. The embarrassment of movement is solely connected with reflex irritation; voluntary motion is perfectly intact. And the embarrassment is not merely due to plantar hyperæsthesia. That hyperæsthesia exists in some cases, but not in all; and it is generally quite evident that it is the excitability of the cord which is at fault; the excito-motor elements have become excessively sensitive.

4. A result of plantar anæsthesia. The gait is hesitating and unsteady.

5. A result of locomotor ataxia, due to sclerosis of the posterior columns of the cord.

It is obvious that our case cannot be referred to any of the first four categories, and a little consideration should satisfy anyone that it is not referable to the fifth. The three great essential features of locomotor ataxia are wanting. The patient can stand and walk almost as well with his eyes shut as open; his walk is slow and stiff, not jerking, and is unaccompanied by the characteristic stroke of the heel on the ground; he is as helpless in bed as out of it; and the sensory functions are unimpaired.

What, then, is the nature of the affection? It certainly is not merely hysterical, or of the functional character which in women we are accustomed to designate by that title, for it is not attended by any of the ordinary symptoms of that malady, and the early history of the case, supported by the organic changes in the eye, afford conclusive proof that organic disease of the cord exists.

What columns are affected? Certainly not the posterior; for the sensory functions are normal. Certainly not the grey matter to any grave extent; for reflex action, electro-contractility, and the nutrition of the muscles are unimpaired. With equal certainty we may say that the antero-lateral columns are affected, as is proved by the abnormal motor excitability. That the peculiar action is of spinal, not of cerebral, origin is proved by its occurrence in answer to irritation of the soles as well as on voluntary effort.

What is the nature of the lesion? The origin and progress of the case, taken with the affection of the optic nerve, forbid the idea of its being merely functional; and yet it may be hoped that the organic lesion does not extend deeply into the substance of the cord. The commencement during a long voyage, the feeling as of a tight cord round the waist, the giddiness, and the uneasy sensation in the limbs, render it highly probable that a degree of myelitis then existed. The gradual progress towards rigidity on exertion renders it likely that a degree of sclerosis exists. Still, as it is three years since the illness commenced, and as there is even now no true paralysis, or almost none, in the legs, there seems to be reason to hope that the symptoms may be in great measure due to increased excitability of a functional nature.

The condition which appears to me to be most closely allied to what occurs in the case is that which is known as associated movements (Mitbewegungen). Referring to this, Leyden* says that its essential characteristic is that when it is intended to bring a voluntary muscle into play, simultaneous contractions occur in other groups. It is seen in the healthy condition when violent effort is made. Nothnagel regards it as a result of an irradiation of the voluntary impulse. He remarks that the more intense that impulse is, the more widely is its irradiation diffused. Sometimes, in morbid conditions, the intended movement is weakly performed, the other strongly, so that a result the opposite of what was intended is obtained. In cases of paralysis of the extensors of the forearm, for example, the patient may produce flexion when he purposes to extend the fingers. In pareses of the legs it is observed that the associated movements become stronger at every step as the voluntary effort to walk increases. Careful observation of the case under consideration shows that it does not exactly correspond to this in respect that there is, so far as I can make out, no paralysis, only the abnormal irradiation of the voluntary impulse.

A question of great importance is, whether the irradiation in our case is due to irritation originating in sclerosis of the cord. It is quite possible that it may be; and if so, we may expect to find a further gradual extension of the disease, with increase and alteration of the symptoms, true paralysis becoming ultimately developed.

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* Klinik der Rückenmarks Krankheiten, vol. i., p. 133.

Meanwhile it is clear that the object to be kept in view in treatment is the diminution of the excitability of the spinal cord. The application of icebags along the spine appears to be invariably followed by temporary improvement. When they have been applied for some time, the patient bends his legs quite readily; but when he attempts to walk, little difference is noticed. Ergot of rye has failed to do good; conium has also failed; chloral hydrate appeared to prove in some degree beneficial, but latterly has been found to be of little use. Other remedies must be tried, in the hope that the irritability may be overcome.

Charlotte-square, Edinburgh.

REPORT OF

A CASE OF FEMORAL ANEURISM.

BY FLEET-SURGEON JOHN ELLIOTT, R.N.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

S. T——, gunner, Royal Marine Artillery, aged thirty-seven, single, of spare habit, thin, sallow features, and prematurely-aged appearance, was admitted into the Naval Sick Quarters at Halifax on the 6th of June, 1874. During eighteen years' service he has been in the hospital with intermittent fever, pneumonia, syphilis (not constitutional), and bubo. Otherwise he has enjoyed good health, occasionally, however, complaining for days at a time of a stitch beneath the left nipple. He is of temperate habits, and does not smoke. For the last two years and a half he has been employed as coachman to an officer on this station. The patient stated that on Saturday, the 30th of May, he had a number of heavy packages to lift and place in position, and among them a barrel of vegetables weighing 3 cwt. The following day, though not complaining, he did not go out, and on the Monday "felt curious," finding a great stiffness from the knee to the hip when he got up. These symptoms increased during the day, and prevented his sleeping at night. He felt "as if he had been beaten about the thigh with a stick." On Tuesday morning, when getting out of bed, he noticed a lump, the size of a "hen's egg," in his left groin, beating forcibly. He went about his customary duties, however—washing a carriage, cleaning harness, &c. Towards the evening the limb felt numb, and he applied a turpentine stupe. The following day the numbness had disappeared, though the tumour had increased in size, and the pulsation was stronger. Went about his duties as usual—driving, &c.; and at 11.30 P.M., on his way home, he felt the cold very much. On Thursday there was a continuance of the same signs. On Friday he took to bed; and on Saturday morning, the 6th of June, at 9 A.M., he applied for relief at the Naval Sick Quarters, and was at once admitted.

Present condition.—Upon examination a large tumour, measuring 5 in. (transversely) by 4 in. (vertically), somewhat globular in shape, but compressed on its surface, and pulsating visibly with great force, was found at the upper and anterior part of left thigh, occupying the greater part of Scarpa's space and whole of inguinal region, pushing up Poupart's ligament, and obscuring situation of anterior superior iliac spine externally. Upon palpation it was found distinctly circumscribed, hard, and tense, with greatly thickened coats, and distensile pulsation. Its surface was marked by a cicatrix two inches in length, where a bubo had been opened some time before. A soft bruit was heard all over the tumour, and with greatest distinctness internally over the artery. The heart sounds were found normal, though somewhat deficient in strength, and the general health was good.

General record.—Patient was at once placed in bed, and ordered a mixture containing two scruples of tincture of digitalis and one grain of tartar emetic, one-eighth part three times daily; low diet with milk. Digital compression was applied for two hours over external iliac artery, in close vicinity of tumour, and had the effect of almost stopping the pulsation, the bruit disappearing; but the size of the tumour was not lessened, nor could it by pressure be emptied of its contents. Patient complained greatly of numbness of thigh below seat of aneurism during and after its application, and the temperature of the leg and thigh of the affected side was found lower than that of the other. The artery was again compressed for an hour at 2.30 P.M., but had to be stopped on account of the pain to which it gave rise. It was again attempted at 4 P.M., but could not be borne. The pulsation in tumour is stronger—85. Ice was applied at 6 P.M., and at 8 P.M. it had lessened somewhat.

June 7th.—Digital compression was tried, but could not be borne. Slept three hours last night. Complains of numbness of left leg, and hot-water tins were placed around it. Measurement round left thigh over tumour, 22 inches. At 8 P.M. complained of numbness of limb. Stop ice. Temperature in flexure of left knee, 97·4° F.; right ditto, 96°. Ordered one ounce of castor oil, as bowels were confined.

8th.—Tumour measures 6 in. (transversely) by 4 in. (vertically); left thigh around tumour, 23⅛ in.; measurement round upper right thigh, 20 in. There has been an increase of one inch in a transverse direction. No numbness in thigh; slept well; bowels have acted freely. Temperature in left flexure of knee, 95 2°; right ditto, 95·4°. Ordered the following mixture:—Tannic acid, two drachms; tincture of digitalis, half a drachm; to eight ounces of water; one ounce every hour. Pulsation in tumour, strong distensile, 89. The thigh was flexed on the abdomen, and bandaged in that position for about four hours, when the limb was straightened, patient complaining of the constrained position. At 4.5 limb again flexed on abdomen, till 8.30, when numbness and pain shooting down inside of thigh, with heat of parts coming on, it was stopped. Temperature of right flexure of knee, 97·2°; left ditto, 98·1°. Bowels moved twice to-day.

9th.—Slept well; pulse 80; tumour measures 3¼ in. vertically, 6 in. transversely; temperature of right flexure of knee, 96 3°, left ditto, 97·3°; pulsation quieter; complains of numbness down the centre of the thigh; temperature near tumour, 98°. By means of a tourniquet kept in position by relays of nurses, pressure was kept up for three hours and a half, the circulation through tumour being lessened considerably. It was again applied from 9 till 10 P.M.

10th.—Slept from 9 till 2 A.M. Temperature of right leg 98·1°; of left, 96·4°. Tumour measures 6⅛ in. transversely, 4¼ in. vertically. Measurement around thigh 26 in. Pulsation in tumour 90. Pulsation can be felt in both tibials to-day for the first time; there is a slight difference in the pulsations. Surface of skin over tumour slightly discoloured and finely rugated. Bruit heard over whole surface. Tumour more compressible than it was. At intervals pressure was kept up, as during yesterday. At 4.15 Carte's tourniquet was placed in position and the pad screwed down till pulsation or bruit could not be detected in the tumour. It had to be removed on account of faintness and palpitation of heart, which attacked the patient shortly after its application. Great distress continued for the rest of the day. A morphia draught was given at night.

11th.—Has passed a good night. The tumour has increased in size, measuring 6½ in. transversely and 4½ in. vertically. The skin covering it is livid and discoloured, and corrugated. To the touch it is softer at its most prominent part. The pulsation has increased in strength. Temperature of right flexure of knee, 96·4°; of left ditto, 98·1°. Pulsation apparent in posterior tibial artery of right side. Bruit loud all over the tumour; most distinct internally. At 9 A.M. patient was given a dose of castor oil. At 10 o'clock, as the bowels had not acted, a simple enema was administered, a small quantity of fæces coming away.

A consultation was held with the medical officers of the ship, Dr. Jennings of the Halifax Civil Hospital, and Dr. Douglas, Army Medical Staff; and it was decided to tie the external iliac, or, if impracticable, the common iliac artery.

Operation.—Chloroform was administered, and at 12.15, patient being well under its influence, I made an incision five inches in length, extending from a little inside and two fingers' breadth above Poupart's ligament, at its centre, upwards and outwards, to within three fingers' breadth of the crest of the ilium; and the skin, superficial fascia, external oblique, internal oblique, and transversalis muscles having been divided, the transversalis fascia was exposed, and carefully divided on a director to the full extent of the external wound; the peritoneum was then loosened from the surrounding cellular tissue and drawn up towards the mesial line of the abdomen, and the sheath of the vessels exposed. This having been worked through gently, the ligature (a twisted hempen one) was passed from within outwards, and tied, pulsation at once ceasing in the sac and in the vessel beneath it. Four small vessels required ligature during the operation. The parts through which the incisions were made were found greatly congested from pressure, but the artery appeared to be healthy. The wound was sponged with carbolic-acid lotion, and its edges brought together by seven points of interrupted suture (silver wire); carbolic dressing was then applied with a slight compress and bandage. The whole of the left limb was then enveloped in cotton wool with a flannel bandage and surrounded by warm-water tins. Pulse 92. No change in tumour. At 1.30 one drachm of solution of morphia was given, and again at 3. At 4 o'clock he complained of numbness of the left leg. Pulse 94. Slept for two hours towards evening. He was ordered one grain of opium pill every fourth hour. Pulse 100. At 10 P.M. comfortable; no pain; leg warm; pulse 100; passed urine. At 11 P.M. was sleeping.

June 12th.—9.30 A.M.: Passed a good night; pulse 95; temperature in axilla 101·4°; thirsty; restless. Abdomen distended and tympanitic. Slight oozing from wound, staining bandages. Complains of numbness of left foot; and on examination this is found to be very cold. Tins of hot water renewed. To continue the opium pill. Has taken nothing but a little milk-and-water since the operation.—12 A.M.: Sleeping.—1 P.M.: Has passed water; no pain; pulse full, 102.—5 P.M.: Pulse 124; temperature 101·4°; respiration 24. Temperature of left leg (hot-water bottles in vicinity) 96·4°.—6 P.M.: Pulse 130, small, soft, and compressible; temperature 102·4°; restless; tongue white, parched; great thirst; eyes bright, suffused; skin dry and rough. When seen at night he was perspiring a little. Had passed urine involuntarily at times in bed during the day; but before visit had passed a vesselful without difficulty. Complains greatly of flatulence.

13th.—Did not sleep last night. Pulse 124, soft, small, compressible; tongue white and parched; restless, throwing off clothes. Suffers greatly from tympanites. Temperature in axilla 99·2°; in vicinity of tumour 100·1°. Tumour measures 5·2 in. transversely, 3·4 in. vertically, and feels harder. No evidence of returning pulsation. Temperature of left leg 95·3°; of right do. 94·3°. Was ordered ice to relieve thirst, and beef-tea during the day. Abdomen distended, tympanitic, and painful on pressure. Not much discharge from wound. Tumour hard and tense. Left leg and foot warm. Has been taking opium pills during the day, but has only slept two hours since 11 o'clock last night. Ordered one drachm of solution of muriate of morphia; to be repeated if he does not sleep.

14th.—7 A.M.: Slept for two hours last night, the rest of the time dozing. Pulse 135; skin warm; left leg and toes warm. Upon removing the dressings, which were slightly stained with discharges, the wound was found looking healthy, and united for part of its extent. At its lower angle, where the ligature came through, there was a slight sanious discharge. The wound was redressed, and soiled linen removed. The abdomen continues distended and tympanitic. Got nourishment in small quantities at repeated intervals during the day, and continued taking the opium pills. Ice was also given at intervals. The bowels have not acted since the operation. The wound discharged more freely after redressing. At 9 P.M. the patient was found very restless; the pulse 142; tongue thickly furred; vomited a little during the afternoon; is slightly delirious. 11 P.M.: Sleeping.

15th.—Awoke at 8 A.M. covered with a cold clammy sweat; extremities cold; pulse 72, irregular; countenance anxious; passed urine in bed; conscious. Stimulants were at once administered, and hot-water tins renewed around extremities.—10 A.M.: Had rallied a little. Was given brandy, egg-mixture, and beef-tea at short intervals. A large piece of spongio-piline, wrung out of hot water, was kept constantly applied to the abdomen. Passed about a pint of dark-coloured turbid urine. At 12 A.M. his pulse was 150, small, soft, and compressible. Pain on pressure over the abdomen. Wandering slightly; perspiring. At 1.30 there was nausea and slight vomiting. Brandy was administered, and a draught containing half a grain of muriate of morphia.—4 P.M.: Slept a little since last visit. Gradually sinking. A marked change for the worse since last visit. Pulse rapid, fluttering; cannot be counted; talking incoherently; floccitatio.—5 P.M.: Pulse 199, fluttering; cold clammy sweat over the body. Floccitatio continues. Sighing respiration.—7.15: Sinking rapidly; rapid fluttering pulse. Stimulants continued at short intervals. Unconscious.—8.45: Expired.

Autopsy (performed twenty-four hours after death).—Rigor mortis absent; body emaciated; abdomen distended and tympanitic; scrotum dark and congested. A tumour, soft on palpation, 5·2 in. transversely, 3½ in. vertically, is situated in left groin and Scarpa's space. About 2 in. above it is a wound 5½ in. in length, extending outwards from the centre of Poupart's ligament, and almost united in the intervals between seven points of silver suture. Lungs healthy; old adhesions connecting lungs and pleura on both sides. About two ounces of clear yellow serum in cavity of pericardium. Heart small; flaccid; more than the normal deposit of fat in interventricular furrows; slight warty vegetations on anterior segment of mitral valve; slight roughening on anterior surface of ascending aorta; decolorised coagulum in right auricle; dark clot in pulmonary artery. The intestines were found distended with gas; a portion of the left lower edge of the omentum, four inches in extent, was congested, adherent to intestine beneath; lymph was effused on its surface. Liver, spleen, and kidneys healthy. A piece of the lower part of the ileum, six inches long, was intensely congested; the cæcum below it contained an accumulation of hardened fæces; about four inches of the colon at the sigmoid flexure was also found congested, the rectum below containing some hardened fæces. Gall bladder distended with bile, dark externally. The intestines were removed; the surgical wound in abdominal walls was found united superficially almost throughout the whole extent. More deeply, however, such was not the case, the muscles, &c., in the line of incision being congested and disorganised. Pus, green in colour, extended upwards for some distance on abdominal walls, between planes of muscles. Upon raising the peritoneal sac from the iliac fossa, diffuse cellular inflammation was found extending upwards as far as left kidney. The pus in the iliac fossa was of a pink tinge. The surgical wound was two inches above and parallel to Poupart's ligament. Upon removing the integument and superficial fascia from the front of the left thigh, the aneurismal tumour, tightly bound down by the sartorius muscle and the fascia lata, was discovered. Upon cutting across the former the tumour assumed a more conical shape. Its most prominent part was found greatly thinned, the same condition existing externally. It was with difficulty dissected out of its bed in the psoas, iliacus, and pectineus muscles, a considerable portion of these, together with a part of the capsular ligament of the hip-joint, having to be removed on account of their connexion with the tumour. Some doubt existed as to whether a depression observed on the head of the femur, below the acetabulum, was not due to pressure of the tumour, but on account of the history of the short duration of the disease, it was decided not. A few nerves were found stretched across its surface. The aneurism was formed on the external side of the femoral artery, from which it extended outwards, probably due to rupture of its internal and middle coats—its external coat, together with the sheath of the vessels, which was found greatly thickened, forming the coverings. The measurements were 3½ in. vertically and horizontally, 9 in. round greatest circumference. Its contents were fluid, a considerable portion of them (dark blood) having escaped by accidental rupture. The ligature was found firmly applied on the external iliac artery, two inches above the tumour, and two inches below the origin of the internal iliac artery. The femoral artery was involved for an inch and a half in the formation of the tumour; it appeared healthy. The femoral vein was found adherent, especially at the centre; above this its coats were thinned and dilated; below, greatly thickened (six lines). A quarter of an inch below the emergence of the femoral artery from the tumour two arteries were given off—the profunda femoris, hard and nodulated to the touch, and the external circumflex ilii.

The walls of the tumour were excessively thinned throughout, more particularly above and externally. The muscles in immediate contact were softened and disorganised.

Remarks.—The cause of the fatal termination in this case was diffuse cellular inflammation. Owing to the large size of the tumour, the parts around were subjected to considerable pressure, causing congestion &c., and were unable to regain their vitality after the operation.

NOTE ON

THE TREATMENT OF SCARLET FEVER BY THE EXTERNAL APPLICATION OF COLD WATER.

WITH TWO CASES.

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(*The Cases reported by* Dr. Steell, *Resident Medical Officer at the Fever Hospital.*)

(*Concluded from page* 341.)

Case 1.—S. F——, aged eight, was admitted into the Leeds Fever Hospital on the morning of the 13th of May, 1875, being the third day of illness. On admission, the following notes were made:—"Face congested and of a dusky hue. A nearly uniform blush of redness is observable over the upper part of the chest anteriorly, and upon the hands there is a faint but characteristic scarlatinal rash; elsewhere there is no rash. Temperature in the axilla 104·2° F. The skin is dry, and feels extremely hot; tongue thickly furred, red at the tip and margin; fauces and tonsils much congested and swollen; diffuse, partly œdematous, swelling at the angles of the jaw, accompanied by pain and tenderness. Over the lungs, posteriorly and inferiorly, a few coarse bronchitic rhonchi; elsewhere a vesicular murmur. Respiration 24 per minute; action of heart excited; pulse 144; heart-sounds clear. Patient is very drowsy, and her breathing heavy. Urine contains no albumen; sp. gr. 1020." She was ordered a tepid pack, two sheets, each applied for ten minutes. When taken out the temperature had fallen to 101·8°. This was at noon. At 1 P.M. it had again risen, and reached 105·3°. Another pack was immediately ordered, cold instead of tepid water being used. After thirty minutes, three sheets having been applied one after another, her temperature had again fallen, this time to 100°. A fourth and fifth sheet were applied however, but, on her being placed in the latter, slight shivering with chattering of the teeth supervened; when taken out and dried the temperature was found to have risen to 102°. The patient was now slightly delirious, and still very drowsy. At 5 P.M. the temperature was 105°; pulse 144, and weak. Powerful grinding movements of the lower jaw have supervened. She was now placed in a tepid bath, the water of which was gradually cooled down. During the bath she appeared more sensible, but the grinding movements of the jaw continued. Temperature, when taken out, 99°. She was kept in thirty minutes. The pulse was scarcely perceptible; but this seemed due chiefly to a local contraction of the arterial coats, as the action of the heart was ascertained by palpation and auscultation to be still vigorous. At 7 P.M. the temperature was 101·6°; at 7.30, 103°; at 8, 103·2°. A patch of deep-coloured rash was now observable on and above the elbows. At 10 P.M. the rash was well out on the arms and forearms. It was of a deep colour, and coarsely mottled in aspect. The patient was very drowsy, and slept with the eyelids open. Pupils normal; temperature 105°. At 11 P.M. she was again placed in a tepid bath, which was cooled down as before. During this bath the rash upon the arms became intense. The patient talked rationally while immersed, but occasionally rambled. Grinding movements of the jaw reappeared. She was kept immersed for forty-five minutes, and when taken out was much less drowsy, while her temperature had fallen to 95·6°. Half an hour after the bath it had risen one degree. The treatment adopted, besides bathing, consisted in the application of cold compresses to the throat, 3 oz. of wine in the twenty-four hours, and nourishment in the form of strong beef-tea and milk. The throat was also sponged with Condy's fluid.

May 14th (fourth day of disease).—Temperature during the night: 1 A.M., 101°; 2, 103·2°; 3, 104·2°; 4, 104·2°; 5, 104·6°; 6, 103·4°; 7, 104·2°; 8, 103·8°; 9, 103·6°; 10, 104·6°. Pulse 148. After last night's bath she slept quietly for three hours, and then woke up asking for a drink. This morning she continues very drowsy, her breathing heavy and snoring. Rash well out on the arms, but not so brilliant as during the bath. Taking nourishment well. Tongue red and characteristic of the disease. Passing urine in bed. Bowels open.—2.30 P.M.: Rash brilliant on arms; well out on legs and thighs. Temperature has stood persistently at a few points above 104°.—4.30 P.M.: Temperature 104·4°. Placed in the bath again. The temperature in ten minutes had fallen to 101°, in twenty minutes to 99·6°, and in thirty-five minutes to 95·5°, when she was taken out.—At 5.30 P.M. the temperature was 96°, and at 6.30, 101·6°.—7 P.M.: Pulse 136; sleeping quietly. During the last bath she was quite conscious and talked a good deal.—10.30 P.M.: Rash intense on arms; over the trunk a distinct mottling. Temperature 104·4°. Placed in bath; kept in fifty minutes. Temperature when taken out 96·2°.

15th (fifth day of disease).—Temperature during the night: at 12.45 A.M., 101·4°; 1.30, 102·2°; 2.30, 104°. At 2.30 she was placed in a wet pack, and the temperature at 3 A.M. had fallen to 101°.* At 4 A.M. it had risen to 103·4°. At 6 she was again placed in a pack, the temperature at 6.30 having again fallen to 101°. Pack continued, sheets changed every ten minutes, and cold water used. At 7 the temperature was 102·2°; and at 8 it was 102·8°, in spite of pack. She was then taken out. Temperature at 9 A.M., 103·2°; at 10, 103·8°. Rash universal; intense on extremities, resembling erysipelas. Tongue red, and as yesterday. Bowels open twice. Pulse 144. Patient is more intelligent and much less drowsy. At 11 A.M. the temperature was 104°, and at 12 noon 105°. The patient was again ordered a cold wet pack, which proved unsuccessful at first; but by placing her, wrapped in a sheet, in an empty bath, and sponging her with cold water, the temperature was at last reduced to 98·4° (at 2 P.M.) At 3 P.M. the temperature was 98·4° and the pulse 128, the heart-sounds being clear and its action less tumultuous. At 3.30 the temperature was 99°, at 4.30 it was 102·4°, and at 5.45 P.M. 103·4°. In ten minutes after being placed in a bath the temperature fell to 98°; she was kept in, however, for five-and-twenty minutes. At 7.30 the temperature had risen to 100·4°, and at 10.30 to 103·6°. At 10.45 the patient was delirious, talking of school, &c. Temperature 104°. Drowsy again. Pulse 144. Breathing heavy; respiration 26 per minute. The patient was placed in a bath, with the water at 90° cooled down to 68°. She was kept in forty-three minutes. During the bath the pulse was 128 and the respiration 26. Mind quite clear after the bath. The thermometer could not be got to register higher than 95° in the axilla.

16th.—Temperature at 1 A.M. 99·8°; at 4, 103·2°. On being placed in a bath, the temperature was reduced in fifteen minutes to 101·4°, in thirty minutes to 96·4°, and in forty-five minutes to 96·2°, when she was taken out. At 6 A.M. the temperature was 98°; at 10, 102·6°. Was sick in the last bath. Patient usually drinks freely of milk or beef-tea before entering and during the bath. Respiration 28 per minute; pulse 144; tongue dry and glazed; bowels not moved; passes urine in bed; takes food pretty well; breath fetid. At 12.30 P.M. the temperature was 103·4°. In ten minutes after being placed in the bath the temperature had fallen to 99·8°, and in thirty minutes to 95·2°, when she was taken out. At 5.20 P.M. the temperature was 103°. She was placed in the bath at 6 P.M., and in ten minutes the temperature had fallen to 98·4°, and in thirty minutes to 95·2°, when she was taken out. At 7 P.M. the pulse was 96 (taken with the stethoscope also). The temperature at 10.15 was 101·8°.

17th (seventh day of disease).—Temperature at midnight, 102°; 1 A.M., 102·6°; 2, 102·2°; 3, ditto; 4, 102°; 5, 102·2°; 6, ditto; 7, 101·8°; 8, 102°; 9, 101·4°; 10, 101°. Tongue moist, but clammy; bowels moved thrice; breath very fetid; fauces still congested; tonsils enlarged, white pultaceous matter on left one; glands at the angles of the jaw swollen, but not painful; pulse 128. Throat sponged with Condy's fluid. Temperature at 11 A.M., 102°; 12, 101·8°; 1 P.M., 102°; 2, 102·2°; 3, 102°; 4, 102·6°; 5, 103·3°; 6, 103·6°. Placed in bath at 6.30. In ten minutes the temperature was 98·4°; in twenty-five minutes 95°. Taken out. At 8 P.M., temperature 99°; rash less brilliant.

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* Duration of pack not noted.

18th.—Temperature at 1 A.M., 102·2°; 2, 103°. At 2.20 placed in bath; temperature reduced in ten minutes to 101°; kept in thirty minutes; when taken out the temperature was 96°; at 3.30 A.M., 98°; 4, 99°; 5, 100·6°; 7, 102°; 10, 102·2°. Pulse 136; tongue dry and glazed; bowels moved twice; desquamation beginning on face. At 12 noon, temperature 102·4°; 2 P.M., 102·8; at 3.55, put in bath, water at 70° F. In ten minutes, temperature 98·4°; in twenty minutes, 98°. At 5 P.M., temperature 98°; pulse 130; respiration 22. The duration of this bath unfortunately was not noted, but it probably was only twenty minutes. Tongue quite moist afterwards. At 6 P.M., temperature 100°; 7 A.M., 101°; 8, 102·6°; pulse 140; heart's impulse feebler.

19th.—12 midnight: temperature 103°; pulse 144. At 12.15 A.M., placed in bath; at 1 A.M., temperature 96° (duration of bath again omitted). When taken out, pulse 94; respiration 32; tongue, which had become dry, again moist. Temperature at 2 A.M., 97·2°; 3, 101°; 4, 101°; 5, 102°; 6, 101·2°; 7, 101°; 8, 101°; 9, 102°; 10, 102·4°. Pulse 124; tongue still dry and glazed.—3.15 P.M.: Temperature 103°; pulse 132.—4.35 P.M.: Placed in bath. In fifteen minutes temperature reduced to 98·4°. Taken out at 5.30 P.M. Pulse 104.—At 7.50 P.M., temperature 101·6°; 8.40, pulse 132; 10, temperature 102°; 11, 102·4° 12, 101° (?).

20th.—Temperature at 1 A.M., 102°; 2 and 3, ditto; 4, 101·4°; 5, 102·2°; 6, 102°; 7, 101°; 8, 101·2°; 9, 101·4°; 10, ditto. Pulse 124; tongue not quite so dry; bowels acted twice; desquamation progressing.—At 2 P.M., temperature 102·2°; 3 P.M., 102·4°. Pulse 132. At 5 P.M., temperature 102·6°. Bath at 5.30 P.M. In ten minutes temperature down to 100°; in twenty minutes, 98·4°. Kept in twenty-five minutes. At 7 P.M., temperature 100·2°; 9, 101·6°. A clear, healthy, vesicular murmur over the lungs; heart sounds normal. At 11.30 P.M. the temperature had again risen, reaching 103°. Placed in bath for thirty-five minutes. Temperature reduced to 95°. Drank brandy-and-milk after coming out. Pulse 88, shows a tendency to intermission; tongue moist.

21st.—Temperature at 2 A.M., 99°; 3, 99·6°; 4, 100·2°; 5, 102°; 6, 100·4° (?); 7, 101·8°; 8, 102°; 10, 102·6°. Pulse 120; tongue moist; says she feels better; bowels acted twice.—Temperature at 1 P.M., 101·8°; 2.30, 101·6°; at 3, pulse 120; 8.30 P.M., pulse 124; temperature 101·4°; 11 P.M., sleeping quietly; pulse 112; respiration 28; temperature 101·4°; 12, ditto.

22nd (twelfth day of disease).—Temperature at 1 A.M., 101·2°; 2, 101·4°; 3, ditto; 5 and 6, ditto; 7, 101·2°; 8, ditto; 9, 101·4°. Pulse 120, better in strength. Tongue moist; copious desquamation. Temperature at 12 noon, 101·6°; 1.30, 101·2°; 3, ditto; 4, 101°; 5 and 6, 101·6°; 7, 101·8°; 8, 102°. Pulse 120. At midnight sleeping quietly; pulse 108.

23rd.—Temperature during the night: 1 A.M., 100·6°; 2, ditto; 4, 100·2°; 7.30, 100°. At 10 A.M., 100°; pulse 112; tongue clean. Temperature at 8.30 P.M., 102·6°; pulse 120; temperature at 11.45, 102°.

24th.—Temperature at 1 A.M., 101·2°; 2, ditto; 3, 101°; 4, 100·2°; 5, 100·1°; 6, 99°; 7, 99·4°; 8.30, 99·8°. Pulse 108; tongue clean; bowels acted once; no albumen in urine. Temperature at 3 P.M., 100°; 5, 101·6°; 8.30, 102°; pulse 116. At 10.20 P.M. was put in tepid bath; kept in forty minutes; in the first ten minutes the temperature fell to 99·8°, in the second to 99°, and in the third to 98·2°. Temperature at 12 midnight, 99°; pulse 98; sleeping quietly.

25th.—Temperature during the night: 1 A.M., 100°; 2, 100·2°; 3, ditto; 4, 100·4°; 5 and 6, ditto; 7, 100°; 8, 99·6°; 10 A.M., 100°. Pulse 112; bowels moved once; urine contains no albumen. Temperature at 1 P.M., 101·4°; 2, 100·6°; 3, 100°; 4, ditto; 5, 101°; 6, 101°. Temperature at 10.25, 100·4°; pulse 108.

26th.—Temperature at 1 A.M., 100°; 2, ditto; 3, 99°; 4, ditto; 5, 99·4°; 6, 99·2°; 7, 99°; 8, 99·8°; ditto till 10 A.M. Pulse 100. Temperature at 11 and 12, 99·8°; 1, 99·9°; 2, 100·2°; 5, ditto; 6 and 7, ditto; 8, 100·4°; 10.30, 100·2°; 11.30, 101°.

27th (seventeenth day of disease).—Temperature during the night: 1.30 A.M., 100·4°; 2.30, 100·2°; 4, 99·2°; 5, do.; 6, 99·4°; 7, 98·4°; 8, do.; 9, 98·6°; tongue clean; much better in every way. At noon, temperature 99·2°; 2 P.M., 99·4°; 3, 99·6°; 4, 100°; 5, 100·1°; 6, 100·4°; 7, do.; 8, 100·5°; 11.20, 100°.

28th.—Temperature at 2 A.M., 99·8°; 5, 99·2°; 8, 98·6°; 10, 98°; 12 noon, 98·6°; 2 P.M., 99°; 4, 99·4°; 6, 99·6°; 8, 99·2°; 12 midnight, 99·2°.

29th.—Temperature at 4 A.M., 99·2°; 6, do.; 9, 98·4°; 10, do.; 12, 98·6°; 3 P.M., 99°; 6, 99·2°; 10, 99·4°.

30th.—Temperature at 3.30 A.M., 98°; 5, 98·6°; 10.30, 97·8°; 3.30 P.M., 98°; 6, 98·4°; 8, do.

31st.—Temperature at 5 A.M., 98°; 5, 98·2°; 3 P.M., 98°; 8, 99·2°.

June 1st.—Temperature keeps normal; pulse 96.

4th.—Urine normal; no pyrexia.

8th.—Trifling pyrexia has existed for last few nights; 99·8° highest temperature. Slight painful enlargement of the lymphatics at the angles of the jaw is the probable cause.

10th.—Enlarged glands diminishing and have ceased to be painful. Temperature normal; pulse 88 to 96.

14th.—Patient up and well.

17th.—To have fish to dinner; hitherto during convalescence she has had exclusively milk diet. Alcohol was withdrawn as soon as the symptoms of prostration during the worst of the disease had abated. Throughout her illness the ward was kept freely ventilated and the windows frequently open. The urine has been repeatedly examined for albumen, but always with a negative result.

28th.—Dismissed well.

CASE 2.—M. A. F——, aged four, sister to the foregoing patient, was admitted to the Leeds Fever Hospital on the 16th of May, 1875, on the third day of illness. The following notes were made on admission:—"An intense scarlatinal rash covers the whole body. It is of good colour, and in all respects a typical rash. Tongue clean, red, moist, and roughened from enlargement of the papillæ. The fauces and tonsils are considerably congested, but not much swollen. There is some swelling of the lymphatics at the left angle of the jaw. The heart-sounds loud and clear, its action excited; pulse 144; breath-sounds harsh, approaching to the production of rhonchus. Temperature 101·2°; skin feels comparatively cool." The temperature was taken shortly after a warm bath which the patient had on admission, and this no doubt was the cause of the lowered temperature. We have repeatedly had opportunity of making this observation in various febrile diseases, and no temperature taken shortly after a bath is to be considered reliable for diagnostic purposes. No danger of hyperpyrexia seemed threatening, and the temperature was not taken again till the evening, when it was found to have reached 105·3°, while the pulse was 152, so quick as scarcely to be counted. A bath was immediately ordered, the water at first tepid, and to be cooled down subsequently. Placed in bath at 8.30 P.M. In twenty minutes 104°; after thirty minutes' immersion, 101°; in fifty minutes, 98·4°; in sixty minutes, 95·6°. After bath: Pulse 120, intermits occasionally, alters in rate, counted again at 108. Rash livid; some bronchitic sounds over chest. Heart-sounds loud and clear. At 10.45 P.M. the temperature was 98·2°; respiration 24; pulse 136. At 12 midnight the temperature was 100°. Diet to consist of milk only; no medicine or wine; bowels moved twice.

May 17th (fourth day of disease).—Temperature during the night: 1 A.M., 100·6°; 2, 101·2°; 3, 102·4°; 4, 103·2°; 5, 104·2°; 6, 103·2°; 7, 102·4°; 8, 101·8°; 9, 102·5°; 10, 102·4°; 11, 102·8°; 12 noon, 102·6°; 1 P.M., 102·8°. Tongue as yesterday. Bronchitic sounds have entirely disappeared. Pulse 136. At 2.20 P.M. the temperature reached 103·2°. Placed in a bath again, temperature above 70°. In ten minutes it had fallen to 100°; in twenty minutes to 98·4°. When taken out, after forty minutes' immersion, the temperature was 95°. Temperature at 4 P.M., 100°; 5, 100·4°; 6, 100·4°; 7, 100·8°; 12 midnight, 101·5°. Pulse 136. No albumen in urine. Bowels moved once.

18th.—Temperature during the night: 1 A.M., 101·4°; 2, 101·4°; 3, 102°; 4, 101°; 5, 101°; 6, 100·6°; 7, 100·4°; 8, 99°; 9, 99·8°; 10, 100·4°. Pulse 132. Tongue clean and moist. Temperature 12 noon, 100·4°; 7.30 P.M., 102°. Pulse 124.

19th.—Temperature at 2 A.M., 100°; 3, 98°. Evening, 99·2°; pulse 104.

20th.—Sitting up in bed; desquamation on face; rash fading rapidly. Morning temperature, 98·2°; evening, 98·2°. Pulse 108–104. Bowels freely moved.

21st.—Temperature quite normal. Pulse 96.

23rd.—Pulse 84 to 76, somewhat irregular. Temperature quite normal since last report. Cuticle separating in large flakes from hands, &c.

25th.—Playing with toys, and apparently quite well.

27th.—Doubtful trace of albumen in urine.

28th.—No albumen in urine.

31st.—No albumen in urine.

June 3rd.—No albumen in urine.

4th.—Up and well. Milk diet has been continued throughout.

28th.—Dismissed well. Up to to-day the urine has been repeatedly examined for albumen with a negative result.

Leeds.

NOTES OF AN
EXAMINATION OF CAPTAIN WEBB.

By HENRY SMITH, F.R.C.S.,
SURGEON TO KING'S COLLEGE HOSPITAL.

Having had the opportunity of seeing Captain Webb, in the absence of Sir William Fergusson from London, I have made a few notes and observations, the result of the examination of a man who has rendered himself an object of interest to the whole world in general, but in an especial manner to the members of our profession, who are in a better position than any other class of the community to appreciate the wonderful powers of endurance which Captain Webb evinced in the performance of his late most marvellous and unheard-of exploit. I am sorry I had not time to make a more minute examination, and institute some inquiries on other points of interest; but I thought perhaps these few details and observations, imperfect as they are, may be of some interest to the readers of The Lancet.

As Captain Webb, who is 5 ft. 8 in. in height, and weighs 14 stone and a half, stood before me stripped to the waist, I could not fail being struck with the splendid form and symmetry of his chest, neck, and arms, and I was somewhat astonished to find him with such good flesh and so little angularity, as it were, about him. I expected, after such hard training and such severe exertion, that the muscles would stand out in relief and be well marked, as one has seen in prize-fighters and other athletes; but, on the contrary, there was a considerable development of other tissue besides that of muscle. On putting him into various attitudes, however, and making him exert particular muscles, their fine development and power were at once noticeable. The triceps especially, as one would expect, is extraordinarily developed. The scapular muscles and those of the neck are also especially remarkable. I measured his chest, whilst he was standing with his arms held above his head, at two points: first on a level with his nipples, and found that he measured in that situation forty-one inches and a half; around the waist, three inches above the umbilicus, the circumference was thirty-five inches and a half. The arm in circumference, three inches above the elbow, was thirteen inches and a half. The forearm two inches below the elbow measured eleven inches and a quarter. The circumference of the neck on a level with the thyroid cartilage was over fifteen inches.

On examination with the stethoscope I was astonished at the extraordinary volume of air entering the lungs at each inspiration. The sounds of the heart were remarkably clear and healthy.

On questioning him minutely about some points connected with his remarkable feat, Captain Webb gave me some interesting answers. In the first place he very modestly informed me, on my putting to him the question as to whether he could have held together for another mile, that he certainly could not have done so in the state the sea was in at the time. To my question as to whether he felt cold at any time whilst he was in the water, he answered decidedly, No. This, I think, is a point of special interest, for with ordinary persons who have remained in the water for a long time swimming we know that the sensation of cold comes on before that of weariness and exhaustion, and warns the swimmer to get on to his native element. A striking illustration of this fact occurred to my observation only last week in a young gentleman who, wishing to emulate Captain Webb's feat in a small degree, swam an immense distance in the sea by the side of a boat. He informed me that he was prompted to give up because he felt chilly, not because he was tired.

To my question about the porpoise grease with which his body was anointed, Captain Webb informed me that he did not know that it helped him at all—in fact, that he rather thought he did not derive any benefit from its use. However, of course this point could only be settled by the direct experience of a swimmer performing a feat under exactly similar conditions both with and without the oil.

On putting the question as to whether he suffered from any difficulty in breathing during his passage, he said, "Not at all, with the exception of that produced now and then by the mechanical force of the waves dashing against my mouth and nose"; to avoid this he had to keep his head well back, and hence the two transverse semicurved lines of abrasion, about four inches long and two inches apart, which were plainly noticeable on my examination.

Wimpole-street.

AN INFECTIOUS FORM OF PNEUMONIA.

By A. WYNTER BLYTH, M.R.C.S., F.C.S.,
FELL. ROY. HIST. SOC., ANALYST TO COUNTY OF DEVON, MEDICAL OFFICER OF HEALTH TO THE NORTH DEVON COMBINED DISTRICT, ETC.

In medical literature there are a few scattered facts and hesitating assertions with regard to an infectious form of pneumonia, or, at all events, one that assumes an epidemic aspect. Thus Dr. Parkes says:—"Considering that the pleuro-pneumonia of cattle is propagated through the pus- and epithelium-cells of the sputa passing into the air-cells of the cattle, that even in man there *is evidence of a pneumonia or phthisical disease being contagious*, the floating of these cells in the air is worthy of all attention."*

Greisinger also has observed that in malarious districts pneumonia is apt to assume an epidemic form,† and Dr. Aitken remarks that it is a disease of general and universal prevalence, *and sometimes appears as if it were epidemic.*‡ When I first came into the North of Devon, Dr. Christian Budd, of North Tawton, called my attention to a form of pneumonia which he asserted was infectious—an opinion which he formed no less than twenty years ago,—and he related many striking instances in support of his assertion. For example, he attended a farmer at Bow who was affected with acute pneumonia, and was nursed during his illness by his niece. His niece became affected with the same disease, and carried it to her husband. In another case, an old man affected with pneumonia reposed on an affectionate relative's breast during a great part of his fatal illness. The relative was very shortly afterwards affected with the same ailment. Dr. C. Budd appears to have been hitherto entirely alone in this belief of the general infectious character of pneumonia; the medical men practising in the same district did not, I believe, put the same interpretation on the striking facts before their eyes, and that gentleman has never published in any form the results of his large experience, which is greatly to be regretted.

During the present year there has, however, been so intense an epidemic of pneumonia in the district that I am connected with, and its infectious character so impressed the medical men that some of them indeed regarded it as a new disease—a sort of new plague. For example, a practitioner of considerable experience, who must have seen hundreds of cases of pneumonia, writes to me thus:—

"The disease alluded to in your letter and annual report has puzzled me much. It is unquestionably a pleuro-pneumonia, which creeps on insidiously first through one day, then the other. At the commencement of the first attack rigors and severe pain in the head, back, and legs, with, in some of the cases, persistent diarrhœa and great cerebral disturbance, have been unfailing symptoms." He then gives a list of cases, which, suppressing names, is as follows:—A man became ill of pneumonia in April, and died after ten days' illness. His wife caught the disease, her first symptoms appearing three days after his death. About the same date a farmer's daughter, living a mile from the house of the former patient, became ill of pneumonia, and five other cases followed, all in the same parish, consisting of a small village and a few scattered houses (population 470). "Since November," continues the writer, "I have had I should think twenty cases. A farmer in another parish became ill on April 16th. I was sent for on April 18th, and he died about midnight. The servant woman went home ill of the same disease about a week afterwards, and gave it to her married sister with whom she was staying."

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* Manual of Hygiene, p. 97.
† Infections Krankheiten.
‡ Dr. Aitken's Practice of Medicine.

This short letter then is fair evidence both of its epidemic and infectious character, and the evidence is further strengthened by other considerations, one of which is the extreme inequality of the deaths from pneumonia in the five rural districts as given below:—

Table showing the comparative frequency of Pneumonia as shown by the Deaths in the five Unions in 1874.

	Actual deaths from Pneumonia.	Proportion of deaths from Pneum. per 1000 deaths from all causes.
South Molton ...	20 ...	84
Okehampton ...	14 ...	48
Torrington ...	5 ...	24
Bideford ...	3 ...	22
Dulverton ...	1 ...	14

It should be remembered that these figures do not refer to the boroughs; they exclusively belong to the rural districts; the only one entirely different from the rest in geological features being the Dulverton district, which is in Somersetshire, and belongs to a different watershed.

The great increase of deaths from pneumonia this year may be gathered from the following table.

Table showing the actual Deaths and comparative frequency of Pneumonia during the half-year Jan. 1—June 31, 1875.

	Actual deaths from Pneumonia.	Proportion of deaths from Pneum. per 1000 deaths from all causes.
South Molton ...	15 ...	126
Okehampton ...	20 ...	98
Torrington ...	15 ...	111
Bideford ...	4 ...	71
Dulverton ...	9 ...	144

I do not wish to argue that each of these cases which have been returned as pneumonia was infectious; in all probability there are two common kinds of pneumonia, one possibly arising from cold or the like cause, the other zymotic; and these two forms are at the present time confused together, just as *typhus* and *typhoid* fevers were formerly distinguished by a common appellation. It is a noticeable fact that Grisolle asserted a discoverable cause (that is, in the nature of a chill) could only be affirmed in one-fourth of his cases, Ziemssen in one-tenth of his, and Dr. Wilson Fox could only trace any connexion between exposure to cold and the diseases in 16 out of 53 cases. A consideration of these facts, and also one or two isolated instances of pneumonia occurring in fœtal life,* has so far influenced medical opinion that ordinary pneumonia is, I believe, by the majority, considered as a blood disease, which the remarkable fall of temperature after the effusion has been poured into the lung, the frequent occurrence of albumen in the urine, and its whole course, unmistakably point to. Once considered as a blood disease, it is but a step to the idea of infection; but this idea of infection has hitherto been too hastily thrust aside, in a great measure from the frequency of a pneumonia as a complication of blood disorders. For example, it has been noticed in scarlatina, typhus, typhoid and rheumatic fevers, glanders, farcy, septicæmia, and erysipelas, and an inflammation of the lung is not uncommon in kidney diseases when the blood is loaded with effete products. In thus allowing that inflammations of the lung may be produced by a variety of causes, this admission in no single degree negatives the idea of a specific lung disease, in which the seat of election to which the poison determines is the air-cells; so that just as scarlet fever determines to the skin, typhoid fever to the bowel, hydrophobia to the spinal cord, the pneumonic germ culminates in the pulmonary tissues. Besides, there is an infectious pleuro-pneumonia in cattle, and just as we have a small-pox and sheep have a small-pox, and just as we have a scarlet fever and horses have a scarlet fever (strangles), and as we have a typhoid fever and animals have a typhoid fever, all of these not identical, all of these probably not communicable from one species to the other, but strictly analogous; so if it be established that man is affected with an infectious pleuro-pneumonia, it will only add another link in the mighty chain of evidence of the intimate connexion of the animal and human organisms.

With the powerful aids to clinical research of the present day, surely it is not too much to hope that the separation and identification of this form of pneumonia are not impossible. That such a form exists, *infectious, zymotic, self-propagating*, I feel in my own mind convinced.

Barnstaple.

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* F. Weber, Path. Anat. des Neugeb. und Sauglunge.

A CASE OF

RUPTURE OF THE RIGHT MEMBRANA TYMPANI DURING AN ATTACK OF VOMITING.*

BY H. BENDELACK HEWETSON, M.R.C.S.

MR. G. T——, aged forty-eight, consulted me in February last on account of deafness of the right ear attended by considerable and very persistent noises in the head. On inquiry I found that in the early part of November of the previous year he had suffered from a severe attack of retching and bilious vomiting. This having ceased, he discovered himself to be deaf of his right ear, which previous to the attack had been quite good. On his first finding that the ear was deaf he attempted to hear his own watch, but failed to do so, even when it was pressed close to the ear. Thinking from the absence of pain that the deafness would prove to be temporary, he delayed obtaining any advice until Feb. 23rd, 1875. At that time there was no discharge from the ear, the external meatus was healthy, as also the tympanum appeared to be, with the exception of a dark speck on the membrane lying slightly in front of the handle of the malleus, midway between that process and the edge of the drum. Air could be heard to enter the Eustachian tube and tympanic cavity during the act of deglutition, but no air passed out of the external ear through an opening in the drum when the tympanic cavity was forcibly inflated by a closure of the mouth and nose.

I suspected, however, the existence of a rent in the drum, from the fact that a slight streak extended upwards and downwards from the spot on the membrane.

After syringing the ear with warm water, and again inflating the tympanic cavity as before, air was expelled from the ear through a perforation in the drum, accompanied by a loud hissing sound.

The speck was, then, clearly some secretion which had stopped the exit of air and also prevented the close apposition of the edges of the tear, thus interfering with their union, the white streak above and below the speck being the extremities of the wound which had cicatrised. The syringing had removed the secretion, allowing the air free exit, during which the edges of the rent could be seen to separate. The watch was only heard when pressed upon the right mastoid process, and the ordinary voice, with the left ear stopped, was not heard at all. I recommended that the ear be syringed with a warm slightly alkaline solution of bicarbonate of soda, and that drops containing sulphate of zinc, in the proportion of three grains to the ounce of water, should be used thrice daily after syringing.

On March 2nd, 1875, after eight days of the above treatment, the rent in the tympanum had entirely closed, but if much pressure of air was brought to bear upon it from within, the new cicatricial tissue bulged outwards.

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* Read before the Leeds and West Riding Medico-Chirurgical Society.

On March 6th the watch was first heard when in contact with the ear, and the ordinary voice could be recognised at a distance of five feet.

A fortnight later the watch was heard at a distance of nine inches from the ear, and the voice at twenty feet. Since that time normal hearing has returned, the only remaining evidence of any previous malady being the cicatrix in the tympanum.

There are obviously several points of interest and practical value connected with this case. It seems clear that air must have been driven violently up the Eustachian tubes during vomiting, or retching, with sufficient force to rupture the right drum. The sharp concussion of air from without caused by the firing of cannon or a blow on the ear has been frequently the cause of a ruptured tympanum; but it seldom occurs that air can accidentally enter the tympanic cavity with enough force to produce such results. The case is interesting, therefore, from its rarity. The excessive deafness attendant upon rents in the tympanum, where there is no loss of substance, appears to be caused by the flaccid condition of the membrane deadening the sound, and preventing its conduction into the internal ear. A large amount of hearing remains in many cases of perforation of the tympanum apparently because the hole is so punched out as not to affect the tension of the drum in so serious a degree as would be the case if it were made flaccid from a rent.

The great power of repair in the tympanum is seen in the above case, as in many others of a like kind which have recovered without any treatment whatever. Some cases, however, do not get well without interference; and it is in those cases in which secretions collect between the lips of the rent, preventing the close approximation of the edges, that the above treatment will prove most efficacious.

Lastly, great care seems to be indicated in inflation of the cavity of the tympanum by Politzer's method in the event of Eustachian obstruction, when that condition complicates a recent rent or a healing perforation of the membrana tympani.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Procemium.

GUY'S HOSPITAL.

CASES ILLUSTRATIVE OF SOME OF THE DISEASES OF THE RECTUM.

(Under the care of Mr. Bryant.)

We this week continue the series commenced on the 4th inst. of cases illustrating some of the diseases of the rectum.

Prolapsus recti of twenty-seven years' standing due to the presence of polypus; removal of polypus; recovery. — (The following notes were taken by Mr. E. W. Deane.) Horace W——, a clerk aged forty-seven, was admitted into Job ward on the 1st of March, 1875. His family history was good, excepting that his father and sister were subject to what he called piles. He himself had tolerably good health, although when twenty years old he first noticed a pain when his bowels were open. Some seventeen years after this the pain had considerably increased, and he noticed that there was something protruding from his anus, which he used to put back. The protrusion occurred not only when he passed a motion, but also when he walked. He consulted surgeons, who treated him with lotions and medicines. His complaint was supposed to be piles, and he was advised to obtain admission to Guy's Hospital, where it was found that he had prolapsus recti. The bowel protruded for about three inches, and the rectum was very loose. Upon examination, a fibrous polypus was detected high up the bowel, which caused the prolapse. A doubled-threaded needle was passed through and tied, and the polypus was removed with a pair of scissors. A morphia suppository was placed in the rectum, and a subcutaneous injection given, after which he passed a good night. His progress towards recovery was uninterrupted. On the 16th of March a piece of protruding flesh was removed. There was slight bleeding, but he was much easier, and the following day he left the hospital nearly well.

Stricture of rectum; colotomy; convalescence.—(The following notes were taken by Mr. Chadd Johnson.) Mary Ann S——, aged thirty-six, was admitted into Lydia ward on the 12th August, 1873. Six years before she was troubled with piles, and passed her fæces with pain and difficulty. A year after she often passed blood and mucus, followed by diarrhœa; this continued, and she consulted a medical man. For nine weeks before admission she had been in great pain, but was able to pass her motions without medicine. She noticed, however, for some time, that the fæces had gradually become smaller.

On examination, the last three or four inches of the rectum were ulcerated and strictured, so that a urethral bougie (No. 10) could with difficulty be passed up the rectum.

She had been twice married. By her first husband, who was a sailor, she had one child, who died of thrush three weeks after birth; she also had two miscarriages. Her second husband was alive and healthy. She had no other children.

On August 19th colotomy was performed, the patient being put under the influence of chloroform. An oblique incision was made across the left quadratus lumborum muscle, the lumbar fascia was divided, and the descending colon caught and firmly ligatured to the edges of the wound, and then the posterior part of the colon was opened. The colon was moderately distended with fæcal matter. She had a good deal of sickness during the night, and complained of pain in her back. Pulse 106; temperature 100·2°.

Aug. 27th.—She fancied there was a well by her bedside; her appetite was better; her bowels had been opened; she passed a lot of purulent-looking water and wind per rectum, and again the next day she said she felt better, and seemed quieter.

Sept. 3rd.—The motions had passed freely by the opening; there had been no fæcal matter by rectum for two days. Pulse 116. She was ordered bark and iron.

11th.—She passed a restless night, and complained of shooting pains through the side; her head ached and she felt languid; a good deal of matter came away per anum; she was, however, better on the following day.

18th.—She had been progressing very well, and was sitting up. From this date to the day of her discharge she continued to improve. She was examined locally; there was no thickening nor ulceration, a little pus coming away occasionally. She left the hospital on the 10th Oct.

Since the patient left the hospital, the cancerous disease of the rectum has progressed, and has involved the buttock. The bowels act regularly through the artificial anus, and the woman was comparatively comfortable nearly ten months after the operation.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

CASES OF GLAUCOMA.

The following cases, for the notes of which we are indebted to Mr. Geo. Ernest Alford, complete the series commenced at page 345.

Case 4. *Acute glaucoma; iridectomy; cataract.*—(Under the care of Mr. Hogg.) S. S——, aged fifty-one, was admitted Feb. 4th. He said he had not been able to see light with his left eye for six weeks, and that he had had violent pains of a neuralgic character in the eye and in side of the face during that time. The pain came on suddenly, and the sight was entirely lost within a week from the time he first noticed that something was the matter with his eye. He was also very deaf, but had only been so since the eye became affected.

When admitted, there was no perception of light in the affected eye. The fundus was invisible; the pupil dilated, fixed, and of a greenish hue. He complained of violent pain in the eye and head. The tension was much increased —T + 2.

Under chloroform, Mr. Hogg did an iridectomy upwards and inwards in the usual way. Only a small piece of iris was removed. Atropine was instilled, and a pad and bandage applied to both eyes. In the evening more atropine was dropped into the eye. There was great pain in the eye for the next day or two, and the patient slept badly. He was ordered ten grains of iodide of potassium, with the bromide of potassium and bark, which subdued the pain. As he still slept badly, he was given ten grains of compound ipecacuanha powder on the 21st, and a few days afterwards, the pain having returned, one-third of a grain of acetate of morphia was injected hypodermically into the left temple with great benefit. On the 4th of March the pupil was quite clear, but the eye was still very tense and painful, so that Mr. Hogg removed a large piece of the iris upwards and outwards under chloroform. The eye bled very freely. This relieved the pain very much and lessened the tension. He went out on March 19th, still unable to see the light, but with no pain. He returned, and was readmitted on April 8th. There was a distinct cataract pressing the iris forwards. The pain had returned with increased severity, and the globe was very tense. Under chloroform Mr. Hogg removed the lens with a spoon through an incision at the upper margin of the cornea. The cataract was rather soft and much swollen. He had no more pain after the operation. The wound healed well. On April 23rd he went out, and although no vision had been recovered, he had had no return of the pain.

Case 5. *Acute glaucoma; iridectomy; extirpation.* (Under the care of Mr. Power.)—Thomas M——, aged forty-eight, labourer, was admitted on February 8th. The right eye had been affected only during the previous six weeks, and he had completely lost all vision in it a few days after it was first attacked. On admission he was unable to see the light with it, and had violent pain in the eye and head. Fundus invisible. To relieve the suffering, Mr. Power did an iridectomy upwards without chloroform, removing a large piece of iris. There was scarcely any bleeding at the time, but the anterior chamber was full of blood by the next morning. This was, however, soon absorbed, and by the 22nd the pupil was quite clear, and the globe no longer tense. He had very little pain after the operation. As some irritation was caused by the lashes of the lower lid being inverted, Mr. Power removed on March 5th an elliptical piece of skin close to the lashes, and brought the edges of the wound together with sutures. The wound healed very well, and completely cured the complaint. On March 11th he went out, with no pain in the eye, but still unable to see the light.

He was readmitted on April 19th. The pains had returned with increased severity; the eye was red and watery, very tense, and the pupil was of a deep greenish hue. The left eye was getting weak, and the vision failing. On April 23rd the right eye was extirpated, under chloroform, in the usual way. There was a great deal of ecchymosis afterwards, but this soon subsided, and the wound healed well. The patient had no more pain, and the other eye became as strong as ever. He went out on May 1st. On examining the extirpated eye a staphylomatous protrusion was found at the upper and inner part of the equator of the globe. At this point the sclerotic was very thin (about one-fourth of its normal thickness) and bluish. The retina was spotted all over with small hæmorrhages, and its vessels were large and tortuous. The optic disc was very much cupped. The retina was atrophied, and the large choroidal vessels showed through it distinctly. The vitreous humour was very fluid, and the lens quite clear.

Case 6. *Simple glaucoma; iridectomy; cure.* (Under the care of Mr. Cowell.)—Martha H——, aged forty-eight, married, was admitted Feb. 26th. She stated that four years ago she fell and struck her back against a fender, and that since then the sight of the left eye had been gradually failing; it had been getting rapidly worse during the last few months. She had had continuous pain in the eye and head, preventing any sound sleep and taking away her appetite. The sight, she said, was sometimes very much less acute than at others. She was very much constipated, and had frequently taken pills daily for a week before she could obtain relief; she was also very subject to rheumatism, and had had a great deal of trouble and worry during the last few years. She used No. 7 convex glasses for both eyes to enable her to read. With them she read at the time of admission No. 5 Snellen, and her vision was $\frac{20}{70}$ with the right eye; with the left she read No. 20 Snellen, and her vision was $\frac{20}{100}$. The right eye was hard: T+1. There was distinct cupping; media slightly hazy. The left eye was of stony hardness; T + 3; media very thick, just allowing the fundus to be obscurely seen; the disc was deeply cupped, looking like a pit, into which one or two vessels were dimly seen to disappear; the iris was pushed forward; lens clear; pupil dilated, sluggish and greenish. The patient saw halos round lights with both eyes. The field of vision was narrowed, especially in left.

On Feb. 27th Mr. Cowell made a small iridectomy upwards in left eye, without any anæsthetic. A pad and bandage were applied. She had no pain in the evening, and slept better than she had done for many weeks. The eye was bathed daily with warm water, and uncovered altogether on the sixth day. During this time she had had no pain, had slept well without any draughts, and her appetite had returned. She went out on March 6th, the eye looking quite healthy; no tension, no cupping, and a perfectly clear pupil, and the *right* disc was no longer cupped. Her vision was:—*Right* eye, $V = \frac{20}{70}$; with convex 10, $V = \frac{20}{30}$; with convex 7 she read No. 1. *Left*, $V = \frac{20}{100}$; with convex 10, $V = \frac{20}{70}$; with convex 7 she read No. 4.

On March 17th, with convex 7 she read No. 3 with left eye. She had had no more pain, and both eyes seemed to be getting stronger and clearer every day.

Case 7. *Subacute glaucoma; iridectomy; partial recovery.* (Under the care of Mr. Power.)—Elizabeth S——, aged fifty-nine, married, was admitted on March 27th, 1875. She said that the left eye had been getting dim for six months. The first thing she noticed was that in looking at a candle she saw circles of light round it. She had not suffered very much pain in the eye at any time, and it had not prevented her sleeping well. She was not at all subject to rheumatism or gout. Her health had always been good, and her bowels were regular, and she had had no great trouble lately. On admission there were a slightly marked circum-corneal zone, and a greenish hazy look about the pupil, and the iris was dilated and immovable; tension considerably increased (T + 1 or 2), and there was some hypermetropia. The media were too hazy to permit of an examination of the fundus. In the right eye the media were also hazy, but the disc could be seen to be free from cupping, and with its vessels very small. With the left eye she could only just distinguish light and shade. On March 29th Mr. Power did an iridectomy upwards, of moderate size, which was attended with no hæmorrhage, and which formed a pupil of the orthodox "key" shape. Atropine was instilled, and a pad and bandage were applied to both eyes. The eye was bathed daily, and atropine was dropped in; she had no pain in the eye, and she slept well. On the second day the right eye was uncovered, and on the third a shade only was worn, as the wound had quite healed. She was discharged on April 5th, with the pupil still slightly hazy. She had no pain, and was able to count fingers at two feet distance.

On April 9th (twelve days after the operation) the media were nearly clear, there was still slight cupping, the tension was normal, she could see all large objects about the room sufficiently well to enable her to walk about when the right eye was covered, and vision seemed to be improving daily. The right eye had completely recovered.

She has not been seen at the hospital since the above date.

A few general remarks on the above cases may not be out of place. In almost all, as is so commonly the case with hospital patients, the operation was performed too late to achieve the perfect success which almost invariably attends iridectomy for glaucoma when this plan of treatment is early adopted. Although vision was not much improved in some of the cases, yet in each there was much abatement of the pain,—in all temporarily, in most permanently. This fact alone would sufficiently justify the operation, as the pain is usually of the most violent description, preventing sleep, taking away the appetite, and rapidly weakening the patient. It may be added, that most of these cases had been previously under treatment by lotions and general measures, which had, of course, done nothing towards relieving the complaint. It is scarcely saying too much that, had they all come to the hospital when the disease commenced, they would all at present be enjoying good sight, instead of the majority being nearly blind. Probably there is no operation in surgery the early performance of which is so important as that of iridectomy in glaucoma.

EDINBURGH ROYAL INFIRMARY.

ANÆSTHETIC LEPROSY OF THE LEFT ARM; AMPUTATION AT SHOULDER-JOINT; RECOVERY.

(Under the care of Mr. Joseph Bell.)

For the notes of the following interesting case we are indebted to Mr. Holland J. Cotton.

Sarah M——, aged thirty-five, a widow, was admitted March 20th, 1875, suffering from a form of leprosy of the left arm and hand. She had had nine children, all of whom had died in infancy except one little girl, who was quite healthy, and betrayed no sign of hereditary syphilis. The husband was a healthy labouring man up to the time of his death, which occurred suddenly a few months ago of bronchitis. The patient herself looked delicate and despondent, but had always enjoyed good health until four years ago, when the disease first showed itself as two hard lumps just below the shoulder. These apparently ran through stages similar to gummata, and were followed by others lower down the arm, but in time they all ulcerated and cicatrised over. Two years later similar lumps appeared in the same region, and gradually spread down the forearm to the hand. These ulcerated as before, healing up above and then breaking out lower down, so that at the time of her admission into the hospital the whole hand was involved and was of great size. The patient had never been out of the vicinity of Edinburgh, and would admit nothing that would lead to the suspicion of syphilis.

The elbow-joint was found to be anchylosed at a right angle, and the arm slightly atrophied, and covered all over with cicatricial tissue, which broke down on the slightest irritation. The hand was much hypertrophied, and covered with a rough, hard, tubercular skin on the dorsum, which at one part seemed to be quite calcareous; whilst the fingers resembled most the tubers of a potato joined together, with claw-like nails hanging on. The middle and ring fingers were suppurating at the tips and exuding fetid matter; and the little finger had not enlarged, but was flexed on the palm. The limb was heavy, and the patient was very anxious to be rid of such a loathsome encumbrance. Accordingly, Mr. Bell, believing the case to be one of tubercular anæsthetic leprosy, amputated the limb at the shoulder-joint, but was compelled to make use of some of the cicatricial tissue in order to get flaps, so closely had the disease approached the trunk. Hardly any blood was lost at the operation. A drainage-tube was passed through the wound, and antiseptic dressings adopted.

The patient progressed most favourably, the pulse and temperature scarcely ever rising above normal, whilst at the daily dressing no discharge was found, but only serous oozing. The upper part of the wound healed by first intention, but the lower part included the portion of cicatricial tissue, and this formed a small slough, and separated in shreds, thus preventing the wound from being altogether antiseptic. Within a week of the operation the patient was very anxious to get up, but this was not allowed till ten days later, when all fear of secondary hæmorrhage had passed. The patient's general appearance and health improved greatly, but, owing to the sluggish character of the granulations which covered the small surface still unhealed, she was detained in hospital till the first week in May, when she was discharged quite cured.

DEVIZES COTTAGE HOSPITAL.

LIGATURE OF THE EXTERNAL ILIAC.

(Under the care of E. N. Carless, M.B.)

Henry ——, aged twenty-nine, a carpenter's labourer, was admitted on November 18th, 1874. Two months previous to his admission he noticed a swelling in the thigh, the size of a bean, which gradually increased.

According to the patient's statement he had suffered from syphilis some ten years before.

On examination, a pulsating tumour, the size of a Seville orange, with well-marked bruit and eccentric distension, occupied the middle of Scarpa's triangle. Treatment by compression was first resorted to, and the means used consisted of Signoroni's tourniquet applied to the femoral artery above the aneurism.

During three days, compression in this way was obtained for about three hours night and morning, with the result that, at the end of this time, the aneurismal tumour was observed to become smaller, harder to the touch, and the bruit less distinct. Under these circumstances this method of treatment would have been continued had not the patient at this time, on account of the pain which he experienced from the pressure, persisted in unscrewing the instrument and taking off the pressure.

After this, the tumour having rapidly increased, ligature of the external iliac artery was decided upon, but it was not until January 16th that the objection of the patient to the operation could be overcome, and accordingly on the following day ligature of the artery was performed. The tumour had attained the size of a fœtal head, and occupied the whole of Scarpa's triangle. The thigh measured, over the tumour, 24¼ in.; the other thigh measured 18¼ in. At 11 o'clock the external iliac artery was ligatured with a double thickness of carbolised catgut. The wound was brought together with three silver-wire sutures, and dressed with carbolic acid and oil. Carbolised tow was used as a pad; the limb was raised and enveloped in cotton wool. At 3.30 p.m. the patient complained of a slight feeling of cramp in the foot; no pain. At 8 p.m. no pain; bowels have been moved. Pulse 92; temperature of leg, 98°.

Jan. 18th.—10 a.m.: Has had no sleep. Tongue clean; pulse 92; temperature of leg 97·5°. Ordered five grains of compound soap-pill every three hours.—8 p.m.: Has had sleep. Temperature of leg 99°; pulse 88.

19th.—Slept well during night. Appetite good; takes beef-tea, milk, and soda-water. Thigh measures 23 in. A few drops of pus at outer corner of wound.

20th.—Thigh measures 22½ in. One suture removed.

22nd.—Remaining sutures removed.

28th.—Thigh measures 22 in.

Feb. 2nd.—Wound perfectly healed.

5th.—A small livid patch presented itself on the centre of the tumour, about the size of a shilling. Complains of pain in tumour. Tumour to be poulticed.

12th. — Tumour freely opened, when a considerable quantity of dark fetid discharge escaped.

20th.—Wound still discharging.

March 17th.—Dismissed cured.

August 11th.—Patient has been engaged at his usual employment since May, and is quite well.

Reviews and Notices of Books.

Diseases of the Kidney and Urinary Derangements. By W. H. Dickinson, M.D. Cantab., F.R.C.P. In Three Parts. Part I. Diabetes. London: Longmans. 1875.

Dr. Dickinson's treatise on Diabetes is intended to be the first instalment of a work on Diseases of the Kidney, of which the second is to consist of his account of Albuminuria, published some years ago, and now out of print. The character and scope of the latter are well known. The present volume is equally useful. It is so arranged as to be available for the student, the practitioner, or the scientific physician. A preliminary chapter on the physiology of glycogenesis and glycosuria discusses the various systemic relations of the subject; its pathological anatomy and pathology are next considered, and then its causes, symptoms, and treatment. The cases which illustrate the preceding statements are described at length in a separate chapter. The effect is to clear the pages of much loose material, which in some works is so great an obstacle to their convenient use. Diabetes Insipidus forms the subject of three concluding chapters.

The abundant investigations into the physiological relations of the excretion of sugar, with which the names of Bernard, Schiff, and Pavy are especially associated, have undoubtedly brought us a great and important step nearer to the comprehension of the real nature of diabetes. The account of these investigations is carefully and accurately written. It is not, indeed, a very full discussion of the numerous problems, primary and collateral, which are involved in the order and disorder of the formation and excretion of sugar, but it has the merit of advancing nearly all that is known with any approach to certainty.

The pathology of the disease is essentially a comparative one. It rests entirely on the facts of experimental research, every fact having been obtained at the cost of numerous experimental observations on the lower animals. The application of the results thus obtained to man has some, though probably only few, elements of uncertainty. There is little or nothing that is fresh in the description which Dr. Dickinson gives of the observations on the glycogenic functions of the liver and its derangements. He rejects, as unsubstantiated by clinical observations, all theories of diabetes which refer it to lessened consumption of sugar formed in the body in normal amount. Of these theories much has been and may be said, which the author has wisely omitted, since very little practical counterpart can be offered. Various conditions influencing increased supply are more fully considered. That view of the disease is accepted as most consistent with our present knowledge which regards its essential feature as perversion of hepatic function which, while it does not hinder, and possibly exaggerates, the disruption of protein bodies, substitutes in the issue sugar for glycogen. "Thus the material which should be retained as glycogen to form sugar only in small proportion, while it ministers in other ways to nutrition, is replaced by sugar, of which the bulk is necessarily expelled."

The pathological anatomy of the disease is described at length. The morbid changes were few until Dr. Dickinson's researches extended the range in which they are to be found by his discovery of alterations in the nervous centres. A considerable space is devoted to a description of these changes, which are so important and so constant as to justify, in the author's opinion, the inclusion of all cases of the disease as examples of an affection of the nervous system. He has examined the brain and cord in eleven cases of diabetes, and has found morbid changes in all. They consist of excavations about the arteries, or in the positions which arteries once occupied, the excavation being due to destruction of the adjacent nervous substance. The initial step is supposed to be the escape of corpuscles by migration, and subsequent changes in the tissue into which they pass. They occur chiefly in the optic thalami, corpora striata, pons, medulla, and cerebellum, and are also found in the white matter of the convolutions. They contain a translucent gelatinous material, or the products of granular degeneration of the tissue. The changes in the cord are similar, but less declared. Erosions around arteries are seen, especially in the transverse commissure, and occasionally in the grey substance. The central canal is often dilated. In one case patches of "miliary sclerosis" were found throughout the brain and cord. It has seemed to some that these changes are rather secondary to the morbid state of the blood than its cause. Against this view it is urged, however, that diabetic blood is not generally irritating to the tissues. Atheroma and vascular degeneration are strikingly rare in diabetes. The pulmonary change is peculiar to the lung rather than concurrent with similar changes elsewhere. The changes are apparent along the course of arteries rather than in the region of capillaries, where the mischief produced by a blood state would probably first show itself; and the process by which the alterations are produced, as far as can be discerned, points to an alteration, not in the quality, but in the distribution of the blood, as its first step. The changes in the nervous system are not special to diabetes; they are common to many other diseases of the nerve-centres: it is their special localisation in certain regions which sets up the morbid processes resulting in glycosuria. The nature of the change in the nerve-centres is hypothetically to irritate rather than to paralyse, and this accords with the evidence of experiments on animals. Irritation rather than loss of function seems to be the special effect of the nervous changes which, artificially produced, lead to the disease.

It is difficult, however, to believe that these facts furnish an adequate explanation of the nature of diabetes. The disease presents, in its clinical associations, no real alliance with diseases of the nervous system. Transient glycosuria may be, and often is, a result of morbid changes in a certain part of the cerebro-spinal centre, but these cases are very different in their character and course from those commonly included under the term diabetes, in which the glycosuria is progressive and often of great amount. In the latter cases, too, it is rare to meet with obvious nervous symptoms. If the minute changes which are scattered through the nervous system interfere so absolutely with the functions of one part of the nervous system as to lead to the severe form of diabetes, they should elsewhere cause other symptoms. If their occurrence is of the serious nature which Dr. Dickinson assumes, various paralyses and interference with mental power might reasonably be expected to be apparent. Instead of this we have only a gradual loss of physical strength uniform and equal, and much more suggestive of a blood than of a primarily nervous cause.

The pathological anatomy of the other organs is fully described, but does not receive any important additions. The changes in the liver are regarded, from their character, as probably secondary to vascular disturbance. The lung affection, so common in the disease, is rarely the result of true tubercle, being in most cases inflammatory in its origin.

To this chapter is appended, as important in connexion with the changes in the nervous centres, an account of the examination of the urine in a considerable number of cases of insanity. In such cases it is well known that alterations in the brain and cord, similar to those found by Dr. Dickinson in diabetes, are not uncommon. The investigation yielded the very remarkable result that in 106 cases of various forms of insanity, no less than 47 presented sugar in the urine. The grounds on which the statement is made are not, however, beyond question. Only 3 cases out of the 47 showed a considerable reduction of Fehling's solution. Of the remainder, 29 only showed a "trace of reduction." By this is meant that the colour was discharged when a mixture of two parts of urine and one part of Fehling's solution were boiled together. In the remaining 15 the test showed a "decided reduction"—i.e., a discharge of colour occurred when equal parts of the solution and of the urine were boiled together. It is doubtful whether the former test can be taken as evidence of even the slightest trace of sugar. No doubt the presence of the quantity it is supposed to indicate (1·2 per cent.) will cause the reduction as described, but it by no means follows that such reduction is evidence of that quantity, or, indeed, of any sugar at all. The normal urine has been shown to contain small quantities of substances capable of reducing copper, if the quantity of the urine is greater than that of the solution used. Kühne's assertion that the urine contains 1 per cent. of sugar—a statement not to be overlooked in estimating Dr. Dickinson's facts—has been shown by Seegen to be open to grave question. Seegen believes that the reduction attributed by Kühne to sugar is due in great part to other substances capable of reducing Fehling's solution, and that the quantity of sugar in normal urine must not be estimated at more than ·03 per cent. Dr. Dickinson's cautious mode of expression indicates, indeed, that he is aware that his results cannot be accepted as so conclusive as in a subsequent paragraph he assumes that they are.

The account of the etiological conditions and symptoms of diabetes is excellent. A careful and interesting comparison has been made of the geographical distribution of the disease in England and Wales, which seems to indicate that it is more abundant in the agricultural districts than where the inhabitants are engaged in manufactures and mining, and that it is more abundant in the colder than in the warmer counties. It is not especially frequent where ague abounds nor where cider is drunk. It is more common among tillers of the soil than among miners or manufacturers similarly situated.

Dr. Dickinson's observations support the theory of Prof. Haughton, that there is a relation between the production of sugar and of urea in the organism, the two being supposed to be the common product of the decomposition of albumen. The urea and the sugar in the urine increase and diminish together—a relation which points clearly to a community of origin. It is intimated that the excess of urea bears to the sugar very much the proportion which it should theoretically present—i.e., one to five.

On the treatment of diabetes Dr. Dickinson has nothing new to add. He gives a convenient dietary table, arranging in parallel columns what to eat, what to drink, and what to avoid, and appends the additions to the strict diet which constitute a modified regimen. He adds his testimony to the very general condemnation which the "skim-milk treatment" has received. Of drugs, he has found strychnine the most useful, and places cod-liver oil next in value.

The chapters on Diabetes Insipidus, with which the work closes, contain a good account of that curious disease. The author has made some interesting experiments on the effect of diet on the malady. The presence of diabetes insipidus in children, in whom the saccharine form is so rare, suggested a possibility that the two diseases might be essentially one, influenced by the varying conditions under which it occurs. It was therefore tried whether, by a very starchy diet, the insipid could be converted into the saccharine form. The result was negative, and the conclusion is drawn that the diseases are essentially different. An interesting case is narrated, in which polyuria resulted from pressure upon the abdominal sympathetic.

The book is illustrated by some well-executed woodcuts and lithographic plates of the morbid changes in the nerve-centres and other organs.

The Medical Vocabulary: containing a concise Explanation of the Terms used in Medicine, &c. By R. Fowler, M.D. Second Edition. pp. 552. London: Renshaw. 1875.

The preparation of a medical dictionary is a task that seldom brings much credit to the author. The difficulties of successful definition, in the face of the shifting opinions regarding diseases and their causes, alone suffice to explain the fact. In the vocabulary form of dictionary, however, conciseness is the most essential element, but this must not be secured at the expense of clearness and sufficiency of meaning. Bearing these points in mind, we are able to speak well of this second edition of Dr. Fowler's work, which exhibits the results of great care in its composition. Since the publication of the first edition two events affecting scientific terminology have happened—namely, the publication of an authoritative "Nomenclature of Diseases" by the College of Physicians of London, and the acceptance by chemists of important innovations in chemical nomenclature. Dr. Fowler's work bears the impress of these two advances in modern terminology. The author has also added a list of the ordinary medical terms in common use with their Indian synonyms (in the Roman character), with the view of rendering the vocabulary of use to those who are studying for, or practising, in our eastern dependencies.

The type of the work is good and particularly clear, and the eye at once catches the words which stand as the headings of the definitions.

The vocabulary is a good one, and we again commend it to the medical reader, on account both of its conciseness and its correctness.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

WINCHESTER.

St. Mary's College, Winchester, is the oldest public school in the kingdom. It was founded in 1387 by William of Wykeham, and for many years the scholastic institutions subsequently established were generally modeled on the Winchester system. The management is vested in a warden, the head master, the fellows, and the governing body. The school contains, on an average, about 300 pupils; of whom 70 are foundation scholars, formerly called "the children," and 250 commoners or boarders who pay for their board and education. The former sleep in the college, in seven large dormitories as old as the college buildings, on oaken bedsteads two centuries old; and eat their dinners off trenchers of wood, and we believe still drink their ale from the old "black jack." They are lodged, boarded, and educated without expense. The commoners are, so to speak, extra collegiate: they receive the same education as the scholars in the college schoolroom, but they live outside the college buildings, either in the head-master's house or in the houses of the assistant-masters, which are more or less distributed throughout the town.

The college buildings consist of two quadrangles, formed by the dormitories, the library, the dining hall, and the kitchen offices. A school-room, lavatories, urinals, privies, racket-courts, and a sanatorium, complete the premises. The dormitories, as we have said above, are as old as the building; they are somewhat low, but as none of them hold more than thirteen beds the cubic space is amply sufficient; they are kept scrupulously clean, and are held in high esteem and veneration by the boys themselves. The dining hall is a fine room, and the kitchen arrangements are all that they should be. Some years ago there were great complaints with regard to the food, especially the dinners, served to the scholars, and the manner in which it was served; from inquiries made among those who have recently left the school we believe that matters have greatly improved in this respect, as they have at Eton, where similar complaints were made. The schoolroom where the lessons are prepared, as well as recited, is a lofty, well-proportioned room; it struck us, however, the light might be better arranged. The sanatorium is comparatively a new building. It is satisfactory to state that, though cases of scarlet fever have been imported into the school within the last five or six years, there has been no spread of the disease among the other boys. The privies at present are extremely primitive; their contents fall directly into a running stream, which passes through the college grounds, and which in many places passes directly under the college buildings. This stream is derived from a larger, known as Lower Brook, which passes as an open sewer directly past the college gates; this Lower Brook practically receives the sewage of half the lower part of the town of Winchester. We understand the school authorities intend to provide earth-closets instead of the present privies, and also to divert the course of the stream passing through the college grounds; but we fear it will be impossible to restrain the town authorities from continuing to permit pollution of the Lower Brook, which must remain for some time to come an unsafe and unpleasant neighbour. The urinals in the college premises might be improved with advantage. The water-supply of the college is derived from two sources: the first and most used is the water supplied by the town water-works, which is of excellent quality, and is taken from a deep well in the chalk, and there is no danger of its becoming polluted; the other, which supplies the kitchen, jointly with the other service, is derived from the other side of the river, and we were not sure but that at times it might receive chance contamination, and we should advise its discontinuance. The college buildings are situated on the broad meadows which intervene between the river and the foot of the chalk downs, on which the principal part of the town is built. The soil consists of a bed of gravel and peat, about eighteen feet in depth, resting on the chalk. From the lowness of the situation, and from damming back of the river by the numerous mill heads, which hinders the natural drainage, the playing-grounds are not so dry as they ought to be. This should be remedied by artificial drainage, so as quickly to carry off the surface water. The school premises are situated quite at the outskirts of the town, and, if it were not for the abominable Lower Brook, would be quite independent of it with respect to sanitary matters.

The commoners reside in boarding-houses kept by the masters. The chief house belongs to the head master, and is situate in close proximity to the college buildings; and the sanitary arrangements and conditions are much the same. The houses of the other masters are nearer the town. These houses were private property, and no supervision was exercised over their arrangements. Now the governing body, in order to secure uniformity of management and a thoroughly good sanitary condition, have determined to buy up these houses, and relet them to the masters under certain specified conditions. In the houses that have, up to this time, been purchased by the governing body considerable improvements have been effected, and some are perfect models of construction and arrangement. The system of earth-closets has been generally introduced, and the system is to be extended to all the other houses and to the college buildings. Schoolmasters, who may be desirous of isolating their school from a defective and imperfect town drainage, should visit the new boarding-houses at Winchester and see the admirable manner in which the system is carried out. The domestic arrangement at the boarding-houses is excellent, and the diet good and abundant.

There is no regular medical supervision. There are three doctors nominally attached to the school, and the house master chooses which he prefers, when there is actual illness in his house. No regular medical certificate is required on a boy's entering the school, having reference to his physical condition and the nature of his previous illnesses, and it is left to the discretion of the house master to make such inquiries; nor are the parents required to furnish any certificate declaring that the boy has been free from zymotic disease, or been brought in contact with such disease during the holidays. There is no medical inspection on the boy's return to school, so that ringworm, scabies, scarlet fever, &c., might readily be introduced if any parent ignorantly or wilfully returned a boy suffering from such diseases back to school. As the boys only come under the care of the medical men when suffering from actual illness, nothing can be known of the actual condition of a boy prior to such illness. We have shown at Marlborough how excellently the system of medical supervision is worked there, and the advantages that the school has derived from it; how in many instances cases of actual breakdown have been avoided, and how, by timely removal for a term or so, a boy has been able to tide over his school career satisfactorily. We think the governing body at Winchester ought to adopt some such system. With the services of three medical men at their command, there could be no difficulty in having the foregoing particulars attended to, and a supervision as thorough as that of Marlborough instituted. The arrangement of the dormitories at Winchester is excellent. These contain, on an average, nine beds for boys of all ages; there is also a general sitting-room in each house, and a few studies for the senior boys. The hours of work are not excessive: two days a week a boy is in school six or seven hours, on other days four or five; sixth-form boys, however, when preparing for an examination may spend eight or nine hours; all lessons, as a rule, are prepared in the school-room. The system of fagging is more fully carried out at Winchester than at the other public schools, and even here it has been greatly modified of late years. The system is somewhat complicated, and it is difficult to understand the details. We could not learn, however, that it was in any way injurious to a boy who was fitted to be at a public school at all. We know that many parents object to the system, but we think, if carried out with proper supervision, it serves as a restraint in some measure to the growing luxury of schoolboy life, and taking the opinion of "fags" generally, we think it would be found they themselves are not at all averse to it.

In conclusion, we are able to state that the sanitary arrangements and condition of the school at Winchester are, on the whole, satisfactory (we wish we could say the same of the town), and show a marked improvement in this respect to its state some few years back, when it had a very bad reputation for ill-health; so much so, that the commoners in 1858 were reduced in number to 68. The fact that in the last ten years there have been only two deaths from zymotic disease in the whole school, and that no outbreak of scarlet fever has occurred now for some years, though several cases have been imported, and a serious epidemic occurred in the town about two years ago, speaks very favourably for the general management. The arrangement of the dormitories is most judicious; the number of beds is sufficiently large to afford protection against the possibility of immoral practices being even secretly carried out, whilst the number is not so great as to cause danger from the spread of zymotic disease casually introduced. What Winchester most requires is a thorough and complete system of medical supervision. Many of the younger schools have long since recognised the importance of this, and we feel convinced that Winchester cannot much longer delay following their example.

THE NEW HUMAN FLUKE.

To the Editor of THE LANCET.

SIR,—Professor McConnell's description of another human fluke, as given in your pages for August 21st, is of such high interest to helminthologists that I trust you will permit me space enough to say a few words on the subject. Without doubt the species is new to science, and ought to have some distinctive name by which it may be recognised amongst the trematodes. I propose to call it *Distoma sinense.* The evidence adduced by Dr. McConnell in proof of the specific distinctness of his entozoon is overwhelming, and his account of the parasite's anatomical structure presents features of special import. In regard, however, to the flukes obtained by Dr. J. G. Kerr, I have no doubt that they will turn out to be thoroughly characteristic examples of Prof. Busk's *Distoma crassum,* the opinion of Prof. J. Leidy (who so well describes the parasites) to the contrary notwithstanding. In the forthcoming issue of the *Journal of the Linnean Society* there will be a description of two more instances of the occurrence of Busk's fluke in the human subject, founded on specimens obtained from a missionary and his wife who placed themselves under the professional care of Dr. George Johnson and myself. Prof. McConnell's fluke is quite distinct from all the other human and animal trematodes at present known to science, and to this extent, therefore, the case is unique.

I am, Sir, yours truly,

Harley-street, Sept. 2nd, 1875. T. SPENCER COBBOLD.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 18, 1875.

The Act relating to Public Health that has just become law is confessedly imperfect in many ways; but its provisions can now be criticised with tolerable facility by those specially interested in them—i. e., those who are directly or indirectly called upon to administer them. It is already plain that materials will soon be forthcoming to show the weak points of the Act, more especially those contained in Part 3, relating to sanitary provisions. And here at the outset it is satisfactory to know that the medical officer of health will in urban districts be strengthened in the performance of his duty under the Artisans' Dwellings Act by those clauses of the Public Health Act that relate to sewerage and drainage. The power to purchase, to make, to maintain, and to cleanse sewers is vested in the local authority; and no stream or watercourse is to be fouled by sewage. But, though five or six subsequent clauses are devoted to sewage disposal, the whole question is still in cloudland, and we must wait for the report of Mr. Clare Read and his colleagues with a subdued hope that it will help us out of the great difficulty. The clauses that relate to privies, waterclosets, &c., ought to be sufficient if stringently acted upon; and we may recommend to the attention of urban sanitary authorities the important power given them as to providing urinals, closets, and ashpits for public accommodation. As regards removal of filth on the certificate of the sanitary inspector, no power is given, as in former Acts, to destroy as well as remove. This is a serious omission, for many filthy things require to be destroyed, inasmuch as it is not just to remove them from one district into another. The clauses relating to water-supply must be classed, like those referring to disposal of sewage, as tentative only, for both must be materially altered in accordance with the Rivers Pollution and other water Bills that may possibly become law during the next session of Parliament. But Clause 64, vesting the care of public cisterns, pumps, wells, &c. in the local authority, and Clause 70, giving power to the local authority to close polluted wells, public or private, are both most useful provisions, and calculated to aid practically in the prevention of zymotic disease. Clauses 71 to 90 inclusive, which relate to lodging-houses, should, in many cases, aid the medical officer of health in his duty under the Artisans' Dwellings Act, and ought, as one practical outcome, to result in the total abolition of all cellar dwellings. In the important clauses grouped under the head "nuisances," the law is simplified, in that a penalty may be levied in a summary way for neglect of the order to deal with a nuisance, and is amplified usefully, in that power is given to the local authority to proceed against a nuisance existing in an adjoining district. Ships are specially included as houses under this section, and training-ships are by a slight verbal change brought generally under the provisions of the Act, having been up to the present time exempt as "belonging to Her Majesty's Government." Offensive trades are specially dealt with, and much of the value of these clauses is, as we believe, due to energetic action taken by the Society of Medical Officers of Health, as also those relating to unsound food exposed for public sale. There are three clauses relating to mortuaries, which are rendered of little or no value because the erection of these places is not made compulsory. Mortuaries should be established in all urban districts. The seven clauses relating to the "prevention of epidemic diseases" are for the most part a summary or copy of the Diseases Prevention Act, and give, as is known, very great powers to the Local Government Board in the event of the outbreak of any "epidemic, endemic, or infectious disease."

Our readers are well aware that the clauses (fourteen in number) relating to infectious diseases and hospitals have already been criticised in the daily journals by both lay and professional persons. The provisions relating to conveyance of sick, maintenance of ambulances, destruction or disinfection of clothing, infected lodging-houses, and infected persons brought by ships, are all good enough, though they may not be sufficient to meet all emergencies. But the clauses above indicated are utterly spoiled in practical working, because no obligation exists on the local authority to provide hospital accommodation. They may or may not, and, as a matter of fact, in the vast majority of cases they do not, provide it, and apparently have no intention of doing so, unless compelled by law, or unless thoroughly alarmed by a formidable epidemic, and, as the consequence, a huge mortality. We do not care to discuss the various plans that have been proposed by different persons as to the best means of isolating infection. The object of this critical summary is merely to show some of the existing defects of the Act; and until these hospital clauses are rectified, we may look in vain for success in any solitary, combined, or systematic efforts, official or unofficial, to stamp out epidemic disease when once fairly introduced into a district.

It is not necessary to refer again to the provisions of the Act that give power to the Local Government Board to combine districts for the election of a medical officer of health, for the subject was very freely discussed in these columns in February last. The existing districts must necessarily be rearranged in a short time, and it is probable that a Select Committee will be appointed to consider the best principle to be adopted in dealing with this important subject.

The attention of sanitary officers should be called to certain schedules at the end of the Act, which include forms of orders &c. to be used in the ordinary course of work.

And here, for the present, we leave the Public Health Act.

Sir Robert Christison's defence of "the present system" at Edinburgh was thorough. It was conceived in the bold "no surrender" spirit. Not a lecture in the curriculum must be given up, and not one board of the famous nineteen that compete for the honour of licensing the candidate for practice can be dispensed with. Sir Robert's vision of the future, if "some vigorous reformers in the South" accomplish their projects, is something dreadful to contemplate. The prospect he drew may well scare—as it was meant to scare—all believers in the One-portal system, or even in that mild form of it, the Conjoint Board Scheme. The lions in the way are legion. It will be costly to the candidates; in addition to the cost of simple examination there will be the cost of 900 candidates travelling to London, and waiting their turn for examination; it will be absurdly unjust to university candidates; it will be a fountain of mediocrity "in all things medical—in education, in professional qualifications, and in scientific advancement";—the corporations may find their very *raison d'être* questioned; and, worst of all, the luckless examiners that may be called into laborious employment under the scheme described will find the work too much for the brain, and probably half of them will be landed in a lunatic asylum! This is the way in which Sir ROBERT CHRISTISON "lifted his warning voice" in Edinburgh against proposals for simplifying the system by which medical students are licensed to act as general practitioners in this country. It is fine to see the perfect satisfaction with which a youthful veteran like Sir ROBERT can survey "the present system," though rather painful to notice his fear of change.

As we were not convinced by Sir ROBERT's able address that there is anything absolutely and certainly right in a system which inflicts 140 or 150 lectures in one subject on a student, and 140 or 150 others upon other subjects, respectively, in the course of a winter session, so we are still unconvinced of the propriety of a system which leaves nineteen bodies to compete in the work of examining students for the purpose of licensing them to practise half their profession.

There are two points in the demand for a One-portal system which this journal has made for forty years, and which we mean to make till it is conceded. The first point is, that a diploma should be a complete instrument—not one-sided, not surgical only or medical only, but a complete licence to practise in every branch of the great art of medicine. The other is, that the body or bodies granting such a diploma should be above all commercial feelings—such as those of dependence on the fees of those whom they examine, of rivalry with other bodies doing the same work, &c. As regards the first point, we maintain that Sir ROBERT CHRISTISON himself is on our side. Here are his wise words:—

> "One condition, however, must be admitted to be indispensable. As every physician ought to be educated in Surgery and every surgeon in Physic, so every board which singly qualifies a man for registration must possess the power and the means of examining on all required subjects, medical and surgical."

Here is an admission of the necessity of examining men all round. Sir ROBERT CHRISTISON says that every board must possess the power of examining on all subjects; by which, we presume, he means that they either possess or must make themselves possessors of this power of testing a man all round. But here comes the absurd thing, that while, under the sheer force of public opinion, all the bodies but one or two examine a man completely—that is, both in Medicine and in Surgery,—they do not more than half license him, except the London College of Physicians, which gives a complete diploma to its licentiates. After Sir ROBERT CHRISTISON has admitted the necessity of every board making its examination complete, why does he not make the further admission, logically involved in his first, that the diploma which it gives should be also complete? Why should a man who is examined in Medicine by the examiners appointed for the purpose by the Royal College of Surgeons of England have no power of recovery in medical cases, while a man who has been examined in Surgery by the College of Physicians of London can recover in surgical cases? We should be most glad to have Sir ROBERT's answer to these questions. The whole system of one-sided diplomas is now out of date. Distinguished members of the College of Physicians do not think it beneath them to perform tracheotomy, and consulting surgeons do not disdain to use a stethoscope. For general practice general powers are still more indispensable. But they are not given in the single diploma of any body except that of the College of Physicians of London. This is the "present system" which Sir ROBERT CHRISTISON defends, and under which two-fifths of the men who register are only half qualified. It may continue by reason of the apathy of Parliament in such technical matters; but it is obviously unreasonable and out of date.

As to the other point, that a reduction in the number of licensing bodies is desirable, it is so generally admitted that we shall spend little time in refuting Sir ROBERT's objections, which seem to us strained and far-fetched. He and Mr. LYON PLAYFAIR probably fancy that they have changed public opinion on this point. But they have not. It is true that many of the existing bodies do their work tolerably well, though nobody would deny that they let through a good deal of "mediocrity." One board in each division of the kingdom would do the work equally well, and probably better. True, inspectors can be found to inspect nineteen bodies; but last year this inspection cost £500. Moreover, if it is possible to inspect nineteen bodies, the inspection of three might be much more thorough, in which case the boards, instead of being fountains of mediocrity, would be fountains of higher efficiency. As to the elaborate calculations by which Professor CHRISTISON shows the costliness of a One-portal system, we have to say only this—that the double diploma is to be had in Edinburgh for £16 and at the London College of Physicians for £15; and that there is ample material in the three metropolitan cities for three examining boards, without any such tax on the brains of the examiners as would send half of them to asylums. We have never believed much in Conjoint Schemes; but we believe in the One-portal system, as simple, just, uncostly, capable of being supervised, and sure one day to receive the sanction of the Legislature.

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THE medical profession in Ireland have reason to feel aggrieved and insulted at the very scanty remuneration which the Local Government Board has provided for the medical officers of health to be appointed under the Irish Public Health Act of 1874. Dr. O'LEARY, M.P., brought the subject before the House at the close of the session, and it is to be hoped that Government will at once see that sufficient remuneration is provided in order to secure efficient and responsible officers of health. By the terms of the recent Act it was made obligatory on the medical officer of the dispensary district to undertake its sanitary duties, the question of additional salary being left to the guardians. However, to prevent these from exercising any unwonted generosity, the Local Government Board has fixed a maximum for the increased salary, which in no case is to exceed £26 per annum! To do the guardians justice, they have, however, as yet shown no inclination to trench on this maximum, and have fixed the additional remuneration at an average of £10 per annum. The work to be done for this sum is immense, and not always free from danger. Take, for instance, Dunmore. Here the medical officer has a district containing a population of 8000 and an area of 30,000 acres. The officer of health has sent in 108 reports of 186 inspections; for this, and the time spent in giving evidence in Court when necessary, he receives the munificent sum of £10 per annum. Should he wish to resign such responsible and arduous duties, he will also be called upon to resign his appointment of dispensary officer. At Drogheda, for issuing 150 special reports on 230 cases of nuisances £20 is granted. Those medical officers of health in England who have Irish rookeries in their districts can readily sympathise with their brethren in Ireland, and understand the class of people they have to deal with. We learn from the *Dublin Daily Express* that only a few weeks since, in the county of Galway, "after the successful prosecution of an uncleanly cottager, the dispensary doctor was obliged to seek the protection of the magistrates, as the indignant delinquent had threatened the doctor's life should he again pass by his road." A common bricklayer's assistant would decline to undertake the inspection of drains, sewers, pumps, &c., let alone the other duties, even at the hitherto not approached maximum fixed by Government, of 1*s.* 7½*d.* a day. We are not surprised, therefore, to find that members of our patient profession begin to resent having such duties forced on them, and being compelled to perform them at the rate of 6½*d.* per day. A firm and manly protest against such treatment should proceed unanimously from the dispensary medical officers, and, if judiciously urged and worded, we are sure they would secure the attention and sympathy of the public; nor do we believe the Government could resist their just plea for more liberal treatment. It is stated that in England the allowance to medical officers of health for the same amount of work is double the maximum granted by Government for those in Ireland. We see no reason for this inequality, and we claim for our less fortunate Irish brethren the same scale as received by ourselves; and even then both would be underpaid for the important services rendered by them to the community.

It is somewhat appalling to learn that the prisoner in the Norwood poisoning case had in his possession three or four ounces of liquor strychniæ, and that up to this time the police have utterly failed to find out where it was obtained. Such a fact implies a serious defect either in the police system or in the state of the law, which it is to be hoped will receive illustration at the approaching trial. The particulars of the sale of poisons — such as opium, chloral, &c.—to non-medical persons by druggists would be a startling but instructive disclosure.

Annotations.

"Ne quid nimis."

MEDICAL CERTIFICATES IN CASES OF DEATHS FROM VIOLENCE.

A short time since a labourer in Somersetshire was knocked down by a train in a tunnel, and so injured that he died next day. By a singular succession of blunders, the body of this man was buried without any reference to the coroner, and without even the registration of the death. An inquest was subsequently held, the body having been exhumed for the purpose by order of the coroner, at which a point of some importance to the public and the medical profession was raised. It appears that the deceased was knocked down on the night of the 12th ult., but was not seen by a medical man until the next day, and died almost immediately afterwards. The medical attendant, although he had not been called in until the man was probably beyond assistance, was afterwards asked to give a certificate of the cause of death, and making no objection, certified that the man died from "injuries to the abdomen." In the ordinary course of events this certificate of the cause of death should have been delivered to the registrar of births and deaths, whose duty it would have been, on seeing that it was a death from violence, to communicate with the coroner before he registered the death or issued his certificate or notification which authorises the body to be buried. Through somebody's ignorance or negligence this medical certificate of the cause of death was, however, produced at the interment instead of the registrar's certificate, in consequence of which the officiating minister, after the burial, informed the registrar that he had buried the body of a person whose death had not been registered. In this case, in spite of so many blunders in the form of procedure, an inquest was eventually held, although it was necessary to disinter the body for the purpose, and the death was duly registered. The coroner—who, by the by, is a medical coroner—at the inquest somewhat severely criticised the medical attendant for having given a certificate of the cause of death in such a case, and we cannot but agree with the coroner when he said that if a medical attendant in the case of a death from violence takes upon himself to decide whether or not it was a case for an inquest, he usurps the functions of a coroner. When Mr. Lodge was asked to give a certificate of the cause of the death of this man who was knocked down by a train, he doubtless felt perfectly justified in certifying that the death was caused by "injuries to the abdomen"; but he was clearly not in a position either to say precisely how the injuries were caused, or whether they were the result of pure accident, gross negligence, or even suicide. These facts could only be ascertained by an inquest, and only on the improbable refusal of the coroner to hold one should this death have been registered on an ordinary certificate of the cause of death. We presume there are few members of the profession who would agree with Mr. Lodge when he stated at the inquest that he did not see why he should not give a certificate of the cause of death if a man were brought into his surgery with a bullet-wound through his head! In such a case it is not the duty of a medical man to attempt to decide whether the bullet-wound was inflicted by fair or unfair means, and it is moreover clearly his duty to refuse to give a certificate, and to order a reference to the coroner. Not only is it highly important that the medical man should take the initiative in bringing under the notice of the coroner all cases of death from violence, or even suspected violence, but it is also desirable that no certificate of the cause of death should ever be given which by any possibility could be refused acceptance by the registrar, and it would clearly have been the duty of the registrar of Brislington to have refused to register the above-mentioned certificate of Mr. Lodge without reference to the coroner.

SWIMMING.

With each recurring bathing season we expect to encounter paragraphs in our daily papers headed "Accidental Drowning," or with some such title; but it seems to us that the accidents from bathing have been unusually frequent this year. If Captain Webb's great exploit has led to many silly imitators on a small scale, and to some loss of life, it cannot be denied that his success has given an impetus to swimming, and led many to learn or practise that art. It is so easily learnt, so important and enjoyable, and so many facilities exist for acquiring it, that there is really little or no excuse for anyone being unable to accomplish it. And, to do the rising generation justice, physical education is not neglected as it once was, but youths of both sexes are now taught many things which even boys did not learn some years ago. In addition to the ordinary sea-bathing, most watering-places are furnished with good swimming baths; and, like everything that is worth learning, there is a right and a wrong way of learning to swim. Those who have begun young, and been taught regularly and systematically, will almost always surpass those who have acquired it by themselves. Happily, it is no longer considered hoydenish for a girl to learn to swim, ride, skate, and play at lawn tennis, or even cricket; and the gain in point of physique—to say nothing of the saving of physic—is great. The forcing of the intellect in the acquirement of accomplishments for which a girl might have no real taste, the confinement in overcrowded and heated school-rooms, and the absence of any exercise beyond that which arose in walking two and two in a body, by which "the young ladies" forming the school resembled a jointed animal like a serpent or alligator moving along the roadway, have given place to other and more varied occupations. We hear less now than in Sir Benjamin Brodie's time of weak spines, "hysterical joints," and the like, which the very imperfect training then in vogue had to answer for. No doubt many of those whose deaths have been recorded from accidental drowning were swimmers. Some of them, however, made little or no allowance for the strength of tide and currents; some, losing confidence, began to throw their arms up and became embarrassed in breathing by fear and struggles combined; and some were, perhaps, seized with that very popular cause of drowning—cramp. This cramp is an altogether peculiar affection. The swimmer goes down at once or rapidly—so rapidly as to lead to the belief that the diaphragm and muscles of respiration are the principal parts affected. Where people bathe in deep water, if there were a line of corks floating on the surface to show the direction of the tide, and if some boats, provided with steps and life-buoys, were always present, we think some of this loss of life would be averted.

CONTRADICTORY OPINIONS.

A few days ago a mother was summoned before the magistrate of the Clerkenwell Police-court for hiring a cab at the St. Pancras railway station to convey her child to the Fever Hospital, Liverpool-road. At first sight this appears to have been an offence of the greatest gravity. The surgeon at the hospital ordered the child into the hospital and the cab was disinfected. It seems, however, that the mother possessed a certificate signed by a surgeon at Belpore, where the child had been lying ill with scarlet fever, to the effect that it was "free from infection." The inspector who brought the complaint before the court is said to have expressed an opinion that the certificate was correct. The hospital surgeon differed, no doubt respectfully, from the surgeon at Belpore, who, it appears, had attended other children at the school where this one had been attacked, and the inspector, while he lodged the complaint, supported the certificate produced for the defence. Altogether there was so much contradictory evidence in the case that the magistrate dismissed it, and of course refused costs. It is much to be regretted that conflicting statements as to the danger of contagion should be promulgated by medical men. It is possible that the little boy when taken to the Fever Hospital presented symptoms which were not apparent when the surgeon by whom he had been treated at Belpore gave his certificate. But then, why was he taken to the hospital? The mother seems to have taken her son direct from the railway station to the hospital, and to have misled the cabman by telling him to drive to Liverpool-road, instead of naming the Fever Hospital as their destination, and while doing this she professes to have acted upon the certificate afterwards produced in her defence! We confess it is not easy to see why, under the circumstances, the magistrate allowed the summons to be dismissed. The whole facts did not probably transpire in court, but enough of mystery surrounded the case to call for a full inquiry. For the credit of the surgeon at Belpore it should be known *when* and *for what purpose* he gave the certificate of health? And for the honour of the lady concerned it should be explained why she took her child to the Fever Hospital so quickly, and with such strange precaution? We should like to add another question, why did the magistrate appear to regard the Inspector of Police as a sort of umpire between the medical men whose opinions were contradictory? When doctors differ is an Inspector of Police the most fitting person to say which is right?

SCURVY IN THE MERCANTILE MARINE.

During the past fortnight no less than four British ships have been reported with cases of scurvy on board. The brigantine *Cecilia* arrived in London from Lagos with two cases of the disease, and the medical inspector of the Board of Trade having discovered that the crew were not sufficiently provided with lime-juice, the captain was prosecuted and heavily fined on three counts under the Merchant Shipping Acts of 1854 and 1867. A large ship arrived in the Millwall Docks on the 6th inst., from Akyab, after a long voyage, with several cases of scurvy. The men are now under treatment in the Seamen's Hospital, and as an official inquiry as to the ship is proceeding, it would not be proper to prejudge the case. It is reported that nearly all the crew are more or less affected.

Most of our readers have seen paragraphs in the daily journals relative to two vessels recently arrived at San Francisco, and described as partly decimated by scurvy. It is futile to comment upon these apparently disgraceful circumstances until the facts are before us, but it is almost impossible to conceive that in a British ship, belonging to one of the largest owners in the kingdom, twelve men can have died and twenty-two been disabled from this eminently preventable disease. Be this as it may, it is the duty of the Board of Trade to watch the arrival home of the *Bremen*, and institute immediately afterwards, under the 14th section of the Merchant Shipping Act of 1854, a strict and exhaustive investigation into the circumstances. It is the more important that this line of action should be adopted and carried out in its integrity, because we have been lately congratulating ourselves on the decrease of scurvy in the mercantile marine. Last year only eighteen cases of scurvy were received into the Seamen's Hospital at Greenwich, as compared with an average of one hundred cases annually before the Duke of Richmond's Act came into operation. And, moreover, the facts above recorded may very properly be presented for consideration to gentlemen with ultra-Plimsollian tendencies who think that, if the ship is safe and seaworthy, it matters not as to the quality of her vital material. Good ships as well as bad ships are sent to the bottom, the latter because they are rotten, and the former because they are manned by men either rotten when they ship or made rotten by improper food and accommodation. This may be an unsavoury setting forth of facts, but the facts are reliable, and we may well wonder why, for the sake of saving a few shillings, owners and masters of ships decline to take the legislative means provided for ensuring to themselves a sound and healthy crew at starting. When the start is effected under such circumstances, the master must, in these days of preserved provisions, good antiscorbutics, and comparatively short passages, be very clumsy or very parsimonious if he cannot keep his men in fair working order, accidents and emergencies excepted.

GREAT EXPECTATIONS.

PUBLIC attention is for the moment strongly directed to the powers and functions of officers of health. This is only natural considering the prominent part which these gentlemen will have to play in the working of the new sanitary Acts. Nevertheless the notions which prevail are confused and contradictory. It may be well that some of them should be corrected. An organ which speaks of "appointments as parish or district doctors" as "plums" is not entitled to much weight. It must by this time be pretty well understood that the service of the Poor-law Board, as it used to be called, is not sought for the sake of its emoluments. As a rule these fall rather below the total of expenditure entailed by the duties imposed. It is well known that local practitioners generally take parochial or district offices because some medical man resident in the locality must be appointed, and the locality will not maintain a new-comer. It is no doubt true that "now the medical officer of health is master of the situation." Broadly, this assertion covers the case fairly enough, and we must accept the full measure of responsibility which the position entails. But it is startling to be told that "the pay is often good, and the work not over laborious." The acknowledgment that "the duties are large and vexatious, and the responsibility great," is more to the point, and better in respect of accuracy. The vexatious character of the obligations which now devolve upon the medical officer cannot be disguised. He is between two perils. If he leans towards the "local authority," which, as a rule, is chiefly concerned to keep down the local expenditure, he will probably neglect his duties. If, on the other hand, he exhibits a reasonable amount of zeal in the discharge of his functions, he is almost sure to run counter to the prejudices of his *employers*—the term is unfortunate, but it alone adequately expresses the position in which the relations are left—and they will have their revenge. It is most important that the public should realise the difficulties which beset officers of health. It is no less necessary that medical officers should clearly understand how much is required of them. It will be better to err on the side of doing too much than too little. At the same time officers will do wisely not to incur a risk of rebuff and discredit. They will most readily and successfully avoid the perils that surround them by remembering that, as a matter of fact, every "representation," although addressed in the first instance to the "local authority," is actually to be judged by the "confirming authority." Public opinion, as distinguished from local prejudice, will support the medical officer in the discharge of his duty, and if his representations can be successfully maintained before the Secretary of State or the Local Government Board he has really nothing to fear. The largest anticipations are cherished, and we believe they will be justified by the diligence and discretion with which officers of health will discharge their onerous duties. A single eye to the *public* interest will ensure success. Meanwhile the community at large will do well to bear in mind that without public support the medical officer must be practically powerless, and in too many instances probably he will fall a victim to his own enterprise.

THE WORCESTER INFIRMARY.

THE Executive Committee of the Worcester Infirmary still stands on its dignity, and refuses to make any alteration in the rule which has lately occasioned, and very reasonably occasioned, the resignation of the senior physician, Dr. Inglis. It does not augur well for the peace and welfare of a hospital when its honorary medical staff and its executive committee are at such variance that the medical staff can get no redress from the executive committee, and is compelled to appeal to the general body of governors. But this is the state of things in the Worcester Infirmary; and all because the Executive Committee will not agree to a slight alteration in the rules, to the effect that when an honorary officer cannot attend he shall try to secure the attendance of a colleague, and, failing this, the house-surgeon shall see the patients. More is conceded by the medical staff—namely, that when they cannot keep their infirmary engagements the particular reasons for their absence should be stated to the committee. It seems to us that these might have been taken for granted by the committee, unless absence became so frequent as to require explanation. We are not aware that explanations are demanded by the committee of any other hospital. We can only hope that the body of governors will more generously recognise the consideration due to busy practitioners who do their best to harmonise the claims of private practice and hospital duties.

YORKSHIRE VARIOLOPHILISTS.

GOOD service is being done to the cause of vaccination by some of its shortsighted or misguided opponents, who in some parts of Yorkshire have been able to enlist official influence on their side. Popular appreciation of the value of a great movement, which has for its object the prevention of disease, is apt to become languid unless kept alive by some obstruction, which, releasing from the influence of the reform a certain area, leaves the contrast distinct and conspicuous. Our readers are aware that certain towns in the West Riding of Yorkshire have proscribed vaccination, and afforded thereby an illustration of its value. The small towns of Keighley and Dewsbury have furnished 59 of the 348 deaths from small-pox which occurred in England and Wales during the second quarter of the present year, in Keighley no less than 47 deaths out of 404 being due to that disease. For most of these deaths the guardians of Keighley are morally accountable, and that they are not also legally responsible for them is only an instance of the imperfect way in which sanitary obligations are enforced in this country. The opponents of vaccination have found an advocate, of the usual character, in a member of the Leeds Town Council, who has made serious public charges against the medical officers of the Leeds Small-pox Hospital, of wilful inaccuracy in their reports. The chief part of the charges was so devoid of even the shadow of foundation, as to have been unable to bear repetition. They resolved themselves into an allegation of inaccurate returns concerning 8 out of 720 cases. To these the surgeons to the hospital, Mr. F. Hall and Mr. Libbey, were able to return a conclusive reply, which must have opened the eyes of some of the supporters of the anti-vaccination movement, as far as any opening of such eyes was possible, to the unfounded character of the statements on which their opinion was formed. The *Leeds Mercury* sums up the dispute in a very sensible article, which urges justly the need for some reparation to the surgeons whose character has been thus attacked. Their system of ascertaining the facts of the cases under their care is only liable to error from over-conscientiousness, an endeavour to do honest justice to the question, and their conclusions illustrate the familiar facts concerning the effect of perfect and imperfect vaccination in a very forcible manner.

UNJUST CENSURE OF MEDICAL MEN BY JURIES.

SOME people hold very curious views as to the binding duty of doctors to be ready at a moment's notice in the middle of the night to go anywhere and to anybody. A medical man may be ill, or he may have other cases as binding as the one to which he is called—but he must go; he must do incompatible duties, he must perform impossibilities, he must be in two places at once, he must take no account of the limitation of his own but human strength. Which of us has not been called, exhausted after a day's work or out of a heavy sleep, to do terrible duties, which we would have given five pounds to escape, and for doing which we have received neither thanks nor a fee. Unfortunately there are no coroner's inquests to investigate the neglects of ungrateful patients. But once let a doctor fail in ubiquity, or a patient die without seeing a medical man, and then comes the coroner's inquest, and the chances are that everybody will escape but the doctor who never saw the patient, and who is presumably least to blame for his death. These remarks are called forth by an inquest at Specton, near Hull, on the body of a harvester who died in the stable of his employer, Mr. Wilson, after several days of illness, during which it is not pretended that any advice was sought for him. When he got very ill, too ill to leave the premises, Mr. Wilson sent his groom for a doctor—not his own doctor. The first doctor applied to (Dr. Dawson, of Hunmanby) was engaged with a midwifery case; the second (Dr. Denton) was in a state of temporary exhaustion after an exceedingly hard day's work, requiring him at last to transfer a professional engagement to a friend. Being told that the patient was suffering from diarrhœa, he sent a mixture, and promised to go in the morning. Shortly after the groom returned the poor man died. Then came the easy inquest. No post-mortem examination was made; no medical evidence was asked, though the written opinion of Dr. Denton as to the probable cause of death was accepted as the basis of a verdict. The two doctors were freely censured by the jury, the coroner concurring. This was the more easy as they were absent, and had not the slightest idea that an inquest was being held till they saw the fact and the censure upon themselves in the paper. Their defence is ample, so ample that the jury must have directed their censure to other quarters if the usual English course had been followed, giving men whose conduct is blamed an opportunity of explaining it.

We have particulars of another case essentially similar, reported to us from Middlesborough, in which Mr. Henderson, of Middlesborough, was censured by a jury for not visiting a club patient while he was in attendance on a case of labour. Here, too, the coroner and the jury were unfair enough to do the easy business of censure in the absence of the medical man. This evil is really too bad and too common to be much longer tolerated, and we should advise medical men affected by it to make complaint to the Lord Chancellor.

NEW ACID FOUND IN THE URINE AFTER INGESTION OF CHLORAL HYDRATE.

MUSCULUS and De Merme have recently published, in the *Comptes Rendus*, an account of a curious acid which seems to be formed under the above conditions. Examining the urine of persons who were taking sixty to eighty grains of chloral hydrate per diem, they found it strongly acid, reducing copper solutions and rotating polarised light to the left. The acid is thrown down by basic lead acetate, and forms stellate crystals like those of tyrosine. It is a powerful acid, decomposing carbonates with effervescence, while its salts are unaffected by acetic acid. It is very soluble in water and alcohol, but not in ether, and reduces salts of copper, silver, and bismuth, and decolorises sulphate of indigo. It is said to contain 31·60 C, 4·36 H, and 26·7 Ch. All its salts are soluble in water except the basic lead salt, but insoluble in absolute alcohol. The discoverers propose to call it provisionally *urochloralic acid.* It would seem from this discovery that chloral, like benzoic acid, undergoes material change in the organism, and is excreted in a different form, though some passes unaltered. The quantity of the new acid found was from ten to twelve grammes per litre of urine.

ROYALTY AND TEMPERANCE.

THE gratifying announcement that Her Majesty the Queen would become a patron of the Church of England Temperance Society is followed up by the almost equally gratifying statement that the Rev. Basil Wilberforce has received a letter announcing that his Royal Highness Prince Leopold will become President of the Oxford Branch of the Church of England Temperance Society. The Church of England can do no higher service to this country than by enlisting the sympathy of Royalty and rank in the temperance movement. It is high time that the amount of drinking which goes on, not only in Liverpool, but in all parts of the kingdom, should be abated, as something intensely degrading and disgraceful, having no foundation in either sense or morality, as it certainly has none in physiology. Let us hope that we are at the beginning of a great religious and patriotic effort to increase the temperance of every section of the community. Mere patronage will not do it. But we shall have more assistance in this enterprise from the Royal Family than is implied in mere patronage; and not the least glory of the Victorian reign will be the perception of a great social vice by Her Majesty, and the desire personally to help in its removal.

TREATMENT OF HYDATID DISEASE OF THE LIVER.

THE prevalent belief that simple tapping of a hydatid cyst in the liver is sufficient for its radical cure, owing to the death of the echinococcus following the escape of its fluid contents, is not entertained by M. Verneuil, the eminent surgeon attached to the Hôpital de la Pitié (*Revue de Thérapeutique Medico-Chirurgicale*, August 15th). He believes that the remains of the cyst acting as a foreign body, if they do not suppurate themselves, yet set up suppuration in their vicinity. Recognising also the danger of peritonitis from escape of the hydatid fluid into the abdominal cavity, he does not adopt the so-called method of Recamier—viz., external application of caustic—nor other means of promoting adhesion; but he begins by puncturing the most prominent part of the cyst with a large trocar and canula. He then introduces through the canula a large gum-elastic catheter. Adhesions take place between the visceral and parietal peritoneum, and, there being constant means of escape, there is no retention of the fluid. Repeated injections of disinfectants, as solutions of carbolic acid or alcohol, are made into the cyst, the walls of which are thus allowed to slowly contract.

THE PREMIER IN A COLLISION.

The Prime Minister has been in a railway "accident," and, we are happy to be informed, has escaped without injury. The train in which he was travelling came into collision with an engine standing on the rails at a station, and, although the shock was severe, it is said Mr. Disraeli "never raised his eyes from the newspaper he was reading." It is not explained whether this is to be taken as a proof of the Premier's self-possession or of the absorbing character of the article he chanced to be reading. It might be interesting to learn the name of the paper and the nature of the piece of literature which proved so engrossing. At the same time it must not be supposed that the behaviour of Mr. Disraeli, taken by itself, was really so extraordinary as it may appear. A shock may for the moment deprive its victim of the power of movement, and, as a matter of fact, it is exceedingly likely to produce that effect. It does not follow, however, that no worse consequences can ensue from an occurrence of this class. The concussion may be momentary in its effects as it is instantaneous in its production, or it may have a double phase: the first part a mere shaking, like thoughtless nurses inflict on children when with a rough jerk they "quiet" them in the midst of a crying fit; the second, a concussion of the brain or spinal cord within the cranium or vertebral column, which leaves some injury—perhaps small, possibly severe—to the delicate organism so rudely shaken. It is of moment, in the interest of medical truth, that it should be widely understood how dangerous these shakings actually are, and how disproportionate to their immediate effects may be their remote consequences. The circumstance that a traveller is not startled by a collision in which he happens to be included determines nothing as to the result. He may even sleep through the "accident," and yet afterwards suffer evil consequences. We trust Mr. Disraeli has escaped; but it must not be assumed that everybody who exhibits unmoved composure in an accident is uninjured.

BURIAL OF STILL-BORN CHILDREN.

Although the provisions of the Birth and Death Registration Act, 1874, fell short of what was desired by those who wished to secure the strongest precautions against the burial of deceased children as still-born, it is satisfactory to find that cemetery authorities are careful to see these provisions duly carried out. Under this Act, a person who has "control over, or who ordinarily buries bodies in a burial-ground," incurs a penalty of ten pounds by permitting the burial of any deceased child as if still-born. A like penalty is incurred if the body of a still-born child is buried without the production of one or other of three formal documents: either a written *certificate* that the child was still-born, signed by a registered medical practitioner who was in attendance at birth or who has examined the body; or a *declaration* signed by a person qualified according to the Act to give information of the birth, stating that no registered medical practitioner was present at the birth, or that his certificate cannot be obtained, and that the child was not born alive; or, an *order* from the coroner in cases where an inquest has been held. An undertaker recently applied to one of the London magistrates for advice under the following circumstances:—He had taken the body of a still-born child from the Westminster Hospital to the Brompton Cemetery, with a certificate from one of the hospital staff, whose name not appearing in the Medical Register, the cemetery authorities refused to accept the certificate. As these certificates can only be signed by registered practitioners who have been present at the birth, or who have examined the body, it is necessary, in all cases where such a certificate is not forthcoming, to obtain and produce to the burial-ground authorities a declaration of the facts of the case (a form for which may be obtained from the local registrar), signed by the father or mother, or other person qualified to give information of the birth, including any person present at the birth. The provisions now in force, if strictly carried out, will doubtless check to a considerable extent the dangerous facilities which previously existed for burying deceased children as still-born; they err, however, rather on the side of laxity than on that of interposing any unnecessary obstacle in the way of the interment of still-born children. It is desirable that the comparatively new law on the subject should be more widely known and more thoroughly understood.

ABSORPTIVE POWER OF THE SKIN.

A. von Wolkenstein has recently made some experiments on the skin of frogs, kittens, rabbits, and mice. He divided the skin at the upper part of the thigh, and then withdrew it over the toes; the sac thus formed was filled with distilled water, and immersed in test solutions of various salts. The results obtained were:—1. The skin is permeable to watery solutions, but not for concentrated solutions. 2. Increased temperature augments the absorptive capacity of the skin; in fact, absorption stands in direct relation to the temperature of the fluid. 3. In young animals the skin absorbs better than in old ones. 4. The presence of hair and wool diminishes absorption. 5. Some alkaloids likewise undergo absorption through the skin, and toxic phenomena can be thus induced. The skin of dead aborted fœtuses of the above animals is only permeable at a high temperature.

UNINQUIRING INQUESTS.

When a man, lately left in comparative health, is found dying, with a bottle of prussic acid at his side, his friends cannot complain of a verdict like the following: "That the deceased died suddenly, but from what cause there is not sufficient evidence to prove." This kind of inquest and verdict are reported in the case of Henry Staffell, aged seventy-three, of Glastonbury. The coroner, Dr. Wybrants, did not order a post-mortem, on the ground that he considered it would be of little use. We regret that such a course should have been followed by a medical coroner. The odour of the acid might have been looked for. Its absence would have gone far to remove the public impression that will be left by the doctor's evidence, that in his opinion the deceased had taken some of the acid, though the odour of it was obscured by recent smoking. The presence of it would, of course, have confirmed this impression. As the object of inquests is to give precision to the record of the cause of death in doubtful cases, a post-mortem should not be omitted, especially by a medical coroner.

THERAPEUTIC PROPERTIES OF SALICYLIC ACID.

Some very important observations by M. Wagner on salicylic acid appear in a recent number of the *Journal für Pracktische Chemie*. His results are thus summarised by Dr. Stevenson in the August number of the *Journal* of the Chemical Society:—(1) Salicylic acid is superior to phenol (carbolic acid) as a disinfectant for fresh wounds and old sores. (2) A disinfecting action is insufficient for venereal sores, and corrosion is requisite. (3) In eczema of the head and face, with discharge, salicylic acid is extraordinarily efficacious, presumably because it quickly destroys the contagium. (4) In all cases where fermentative changes occur in the contents of the alimentary canal salicylic acid acts more efficaciously than other antiseptic substances, since it can be administered in larger doses. (5) Its use is highly promising as a prophylactic in all diseases in which it is believed that the morbid processes are connected with microscopic organisms. In diphtheria, not only is salicylic acid a powerful restorative remedy, but it also appears to shorten the course of the disease.

THE PRESYSTOLIC MURMUR AND THE CARDIOGRAPH.

IN an article on the Presystolic Murmur in our issue of September 4th (p. 351), we regret to find that we overlooked the researches of Dr. Mahomed, who has devoted so much time to the exposition of the clinical worth of the sphygmograph. From a letter we have received from Dr. Mahomed, it appears that he anticipated by nearly three years the results obtained by Dr. Galabin in the application of the cardiograph to demonstrate the auricular systole in cases of mitral stenosis. The account of his researches is to be found in his paper on the "Physiology and Clinical Use of the Sphygmograph" (*Med. Times and Gaz.*, vol. i., 1872, pp. 427 and 509), where are given "several cardiographic tracings in cases of mitral contraction, which exactly correspond with those since published by Dr. Galabin." He further adds that "in paper No. 6, pp. 569 and 570, you will find that I have especially pointed out how completely they refute Dr. Barclay's theory." We hasten to bestow honour where honour is due, and regret that Dr. Mahomed's labours should have received no acknowledgment in the article referred to.

THE LATE DR. FREDK. W. HEADLAND.

WE have to record the death of the late Dr. F. W. Headland, at the early age of forty-six. His health broke down about two years ago, and since that time he has lived in seclusion. Dr. Headland distinguished himself as an undergraduate of the University of London, and obtained some of the highest honours in that institution. He was a Master of Arts and Doctor of Medicine of the University of London, and a Fellow of the College of Physicians at the time of his retirement from the profession in 1874. Dr. Headland was senior physician to Charing-cross Hospital, and was well known in the profession both at home and abroad by his work on the Action of Medicines in the System, for which he was awarded the Fothergillian Gold Medal by the Medical Society of London in 1852. He was the author of Lettsomian Lectures on Materia Medica, and of several lectures and papers on subjects of practical medicine, published in THE LANCET.

Although his manner was retiring, Dr. Headland was greatly esteemed by his professional brethren and by those friends with whom he was intimate. In his professional relations he was guided by a high sense of honour and probity.

WILLAN AND BATEMAN.

WE understand that the "Delineations of Cutaneous Diseases" of these two authors, which at one time enjoyed such great popularity, is about to appear in an improved edition; or rather Willan's book is to form the basis of an atlas after having been remodeled so as to represent the dermatology of the present day, and at the hands of Dr. Tilbury Fox. The work will consist of eighteen monthly parts of four plates each, and half of the seventy-two plates will, according to a prospectus in our hands, be new. Willan and Bateman were two able workers of whom English medical science has much reason to be proud, for they undoubtedly "succeeded in reducing for the first time the leading facts of dermatology from a state of comparative confusion into a simple, systematic, and easily comprehended arrangement," and it is so far satisfactory that their chief classical publication is likely, in its improved form, to be available for scientific purposes.

QUEEN'S COLLEGE, CORK.

THE chair of Materia Medica at the above-named College is now vacant. Dr. Macnaughton Jones, who has for many years been identified with tutorial departments of the College, is, we believe, a candidate. Those who have had opportunities of observing the manner in which Dr. Jones always engaged the attention and interest of his pupils must feel that if he be elected he will succeed in making his lectures on Materia Medica and Therapeutics as interesting and profitable as his lectures on Anatomy.

A CLERICAL ERROR.

WE regret that, owing to an unfortunate clerical error, the town of Huddersfield was on the 4th inst. reported by us to be suffering from an outbreak of scarlet fever. It ought to have been printed Hurdsfield instead of Huddersfield. The outbreak in question occurred in the Hurdsfield portion of the borough of Macclesfield. It was the vicar of Hurdsfield —not the vicar of Huddersfield—who refused to close his school when requested to do so by the sanitary authority. We are glad to state that since the school in question has been closed, on the recommendation of the Lords of the Education Department, the epidemic, which at one time threatened to be severe, has considerably abated.

IT is satisfactory to receive information of some improvement, however slight, in the sanitary condition of Simla—a locality on the hills that may be termed the health-resort of India, but which would seem to require an energetic medical officer of health. Thither sick officers and civil servants are sent to regain their bodily vigour; no effort should therefore be spared to enhance the natural salubrity of Simla. According to the Indian correspondent of *The Times*, the cholera epidemic is disappearing, after having caused nearly two hundred deaths, of which number, be it observed, only eight or ten were Europeans. How much remains to be done will be seen when we state that the night-soil is buried in trenches a few hundred feet below the most populous part of the station, and when the wind blows up the hills the stench is intolerable. The drinking-water is said to present occasionally the appearance of milk. The correspondent hopes that the warning of this year will be taken to heart, and that we shall hear no more of cholera at Simla.

THE *Times of India* comments upon Dr. Blanc's report on the last outbreak of cholera in the Yerrowda Gaol, which is stated to be a very interesting contribution to the medical history of the disease. The investigation would seem to establish the conclusion that cholera poison is communicated through water. The Sanitary Commissioner for the district in which the prison is situated insists that the practical lesson to be learnt from the outbreak is the great danger of allowing persons (as is so commonly the case throughout India) to drink water from a river which has been polluted by "dhobies" washing dirty clothes in it, and by other impurities.

The Commission appointed to inquire into the working of the Factory and Workshops Acts concluded its sittings at Glasgow last Saturday. A good deal of valuable information was given by members of the profession. Among others examined was Dr. Eben. Watson, who expressed his belief, judging from the great number of cases of deficient development in children, that there is a deterioration in the physical condition of the factory population, and that if it were not for the protection of the medical examination and certificate, the race would rapidly and universally deteriorate. He thought the very fact of the surgical inspection of every young worker prevented parents from presenting weakly children. Another physician, Dr. Irvine, was of opinion that the town population would soon die out if they were not constantly recruited from the country.

An important meeting of dentists was held at Manchester lately, under the presidency of Mr. C. J. Fox, for the purpose of taking measures to improve the position of the dental profession. The following resolution was passed, "That it is desirable that a committee be formed to see what steps can be taken to arrest the continued influx into the profession of illegitimate practitioners, by the adoption of the principles of registration and compulsory education." It was also resolved to authorise the opening of a subscription list to defray the expenses of such committee in making an appeal to Parliament next session upon the subject. We are given to understand that the movement is supported by the leading dentists in London.

In consequence of the prevalence of cholera in Bangalore a cholera camp is to be established about two miles from the cantonment. All incoming trains will be overhauled by a medical officer, and such passengers as may be suffering from the disease will be detained. Other stringent sanitary regulations have been adopted, which we hope will prove successful in dealing with the outbreak.

In a report on the Royal Gardens at Kew, Dr. Hooker, referring to the attempts made to acclimatise various plants in other than their native countries, says that the prospects of ipecacuanha cultivation are far less encouraging than those of the chinchona. He recommends, however, perseverance in the cultivation of the former.

We understand that the outbreak of scarlatina among the children in the married quarters of the Royal Engineers at Chatham has subsided. As a precautionary measure, children living in the recently infected quarter will not be allowed to attend the school of the corps for some time.

In London last week 1492 deaths were registered, including 2 from small-pox, 25 from measles, 71 from scarlet fever, 5 from diphtheria, 69 from whooping-cough, 26 from different forms of fever, and 190 from diarrhœa. Different forms of violence caused 49 deaths in the period.

From Dresden we learn that a serious outbreak of trichinosis has occurred among the military stationed there. In all about 50 soldiers have been attacked. Regulations against the consumption of half-raw pork have now been issued by the authorities.

It is intended shortly to increase the accommodation for in-patients at the Royal Westminster Ophthalmic Hospital. The surgical staff have suggested an additional storey to the building. Last year 2434 operations were performed in the institution.

FOOT-AND-MOUTH DISEASE.

The contagio-infectious vesicular fever of animals, commonly known as "foot-and-mouth disease," has for some time been extending more or less rapidly over the country, and is now prevailing to an alarming and most harassing degree. For nearly forty years, when it was introduced into Britain from the Continent, it has prevailed more or less, its virulence being greater, apparently, during the warm weather, and its prevalence more notable when cattle, sheep, and pigs are moved about; indeed, its extension always coincides with the increased movement of animals.

For a long time the disease has been particularly annoying to the cattle-dealers and the agricultural community generally, and there can be no doubt whatever that it has very materially tended to increase the price of meat, not only from the depreciation it occasions in the value of the animals affected, but also from the restrictions it gives rise to on the part of the authorities, who attempt, after a fashion, to check its spread, and in doing so more or less hamper the trade in cattle.

The disease in itself is not at all a serious malady—at least, so far as the mortality from it is concerned,—and this is, perhaps, the reason why no efficient steps have been adopted to extinguish it, as the cattle-plague was extinguished. Indeed, there are few maladies to which animals are liable which require less skill and medical treatment to restore the sick to health than this. Hence we find that the columns of the daily papers teem with remedies, all of which are highly lauded, but nearly all of which are quite unnecessary—some are even hurtful—if the sick animals are properly fed and cared for.

Though so trifling as a rule, yet with young animals, as pigs, it is sometimes exceptionally destructive, and if neglected it may even be productive of much mortality among adults. What renders it a most embarrassing and costly disease is the great facility with which its contagium can be diffused by means of roads, pastures, commons, watering ponds, market and fair places, manure-carts, clothing, creatures not themselves susceptible, railway-cars, cattle-ships, and many other ways too numerous to specify here. There is also good evidence to prove that this contagium is possessed of a considerable degree of vitality, and can withstand the influence of atmospherical changes for a long time. Cattle, sheep, and pigs have also a wonderful aptitude for the reception of the virus, so that but few of those exposed to infection escape; and as the period of incubation is short, and does not vary much, we may have wide tracts of country infected in a very short time if no precautions are taken to isolate the sick and prevent conveyance of the virus. Thus it is that during the pasture or grazing season, when freer communication takes place between herds and flocks, and when strange animals bought at fairs are mixed with the home stock, we have nearly every county suffering more or less extensively, and in proportion generally to its importations, the intelligence and honesty of its cattle-owners, and the energy and knowledge brought to bear by the local authorities.

The damage it causes to fat and milch stock is very heavy, particularly at certain periods. Perhaps it could scarcely be estimated at less than three pounds for a milch cow or fat ox, and ten shillings for a sheep or pig. The pecuniary loss, therefore, becomes alarmingly high in the aggregate. A few days ago it was reported that no fewer than 3186 animals were affected in Bedfordshire; and in West Sussex, during the month of August, 3145 cattle, 7330 sheep, and 156 pigs were stated to have been attacked. In many other counties the number has not been less, and in some it is steadily increasing. The disease now prevails in England, Scotland, and Ireland; and though the returns of the numbers affected are sufficiently startling, yet they are very far from giving anything like an idea of the extent to which the malady is raging. To our knowledge, farmers and others will not report the existence of the disease if they can possibly help it, and in some counties the local authorities appear to be quite indifferent to its being either reported or checked. It must be remembered that all expenses connected with it are defrayed out of local rates and magistrates, in only too many instances, try to keep these down as much as possible, though their doing so may bring heavy loss upon the community at large.

Then the system of inspection is utterly worthless; the principal agents being the police, who, in addition to their being utterly incapable of performing the difficult task of successfully contending with contagious diseases, are undoubtedly active bearers of the contagium. Competent veterinary surgeons are rarely employed, and these merely to certify to the presence of the disease, not to trace it to its source, to discover how, where, and when it was diffused, and to carry out those sanitary measures which alone will suppress it. Indeed, the whole system is absurd in the extreme, and it is very questionable whether it does not do far more harm than it is capable of effecting good. There is no veterinary organisation to control this or other contagious diseases of animals, consequently our animal losses from them might be reckoned by millions. It is true we have a Veterinary Department of the Privy Council, but it appears to be impotent to do more than issue a few returns which, even if reliable, are of very little value.

The greatest abuses exist with regard to these maladies, the prevalence of which brings forth a class of people who trade upon the misfortunes of others. Butchers, dealers, and others, buy diseased or contaminated stock at a low price, travel it along the public highways, expose it in fairs, journey it by rail or ship, and, except in the rarest cases, without let or hindrance.

Not only is the present trifling with the malady futile, but in several ways it is very unfair and oppressive. For instance, the total absence of any uniformity in attempting to carry out the orders of the Privy Council leads not only to no useful end, but is sometimes a source of hardship, as when the local authorities in a county are very severe and stringent, and those in the surrounding counties are just as remiss. From the want of competent advisers, local authorities are also not unfrequently guilty of most unreasonable acts, which, while they may have no good result, cause nothing but annoyance and loss to individuals.

There is ample proof that Irish cattle are a fertile source of infection, and, though we are continually assured that contagious diseases are very rare in that country, yet we know that stock from it is dreaded by those who have suffered from such a malady as the foot-and-mouth disease or lung plague. The fact is that in Ireland, as in England, the police are the sanitary inspectors of animals, and though it also boasts a Veterinary Department, it is really of as little utility as that in Whitehall-place.

As for "Port" inspection, without other precautions which are not adopted, it is altogether fallacious. Thousands of animals may be, and are, passed as healthy in the very cursory examination to which they are subjected, and yet each might be an active propagator of disease. This more especially applies to Irish cattle, which, even if sound when embarked from Ireland, may nevertheless become infected on board the steamers that carry them across to this country, as these are never properly disinfected; and what between the exhaustion of the animals, the foul air, and the high temperature, we can scarcely doubt that the poison germs, lurking everywhere on board, find a ready and a congenial soil.

Lax as is the traffic between Ireland and England, it is, comparatively, excessively severe with regard to that from foreign countries; and we are certainly of opinion that, looking at the manner in which home and Irish stock is dealt with, foreign importers have much to complain of in the way of unfairness.

The fact is, that unfairness, embarrassment, heavy annual losses, higher and still higher prices for meat, and danger to our own species will be the order of the day until the public takes the matter up, and insists that these diseases shall be dealt with by a central authority, that an efficient organisation like that of Germany shall be instituted to carry out the measures devised by that authority, and that the expenses incurred be defrayed by the country. A tithe of the losses sustained every year from this disease alone would suffice to extinguish it and other animal contagions, and secure to the country valuable services besides. Until this is done it would be better to abolish the Veterinary Department of the Privy Council, and allow its measures to lapse, as they are inefficient, and only stand as a sad evidence of our national method of conducting sanitary affairs.

TOBACCO IN RELATION TO HEALTH.

DR. RICHARDSON, F.R.S., delivered a lecture on this subject before a very large audience at Birmingham on Wednesday evening, the 15th inst. The lecture was delivered in connexion with the Laws of Health class of the Midland Institute. After speaking of the introduction of tobacco to Europe, and its enormous consumption at the present time, the lecturer said: The nature of the luxury forms a subject of discussion on which the extremest views prevail. On one side tobacco has been held up as the most harmless of luxuries; and on the other side it has been denounced as the originator not only of mere functional, but of some worst forms of organic disease. Following out the researches made by himself, he showed the constituents of tobacco smoke and their results upon the human body, and pointed out the effect exerted by different kinds of tobacco. Speaking of the influence of smoking on the mental faculties, he said: When mental labour is being commenced indulgence in a pipe produces in most persons a heavy dull condition; but if mental labour be continued for a long time, until exhaustion is felt, then the resort to a pipe gives to some *habitués* a feeling of relief; it soothes, it is said, and gives new impetus to thought. This is the practical experience of almost all smokers, but few men become so habituated to the pipe as to commence well a day of physical or mental work on tobacco. Dr. Richardson carefully discussed the question whether the practice of smoking could be considered, fairly, as a cause of those fatal diseases, consumption, cancer, and apoplexy. The argument, he stated, was conclusive against this extreme view. The same conclusion was arrived at in respect to insanity, epilepsy, St. Vitus's dance, heart disease, and chronic bronchitis. At the same time, immoderate smoking cannot be carried on without danger, sometimes even to life itself.

Correspondence.

"Audi alteram partem."

WOOD v. THE MANCHESTER, SHEFFIELD, AND LINCOLNSHIRE RAILWAY COMPANY.

To the Editor of THE LANCET.

SIR,—I am unwilling to trouble you with any further remarks on this case, but trust you will allow me to make a few observations with regard to two points mentioned in Mr. Fox's letter last week, because I think they will leave a false impression of the amount of evidence offered on the part of the plaintiff, and of its credibility. And I wish to disclaim altogether the feelings of a partisan in the matter, my former letter being written rather with a desire to represent the medical features of the case impartially, and not from any wish to raise a discussion on its merits from a legal point of view. I thought the doubt which seemed to exist with regard to the state of Peyer's patches, during the different stages of a case of enteric fever, might be of interest, and that perhaps some more definite understanding might be arrived at on the subject. I am glad to find that you think this difference of opinion is worthy the attention of the profession.

Now, with regard to the amount of evidence offered in favour of the view of traumatic meningitis, will you permit me to draw your attention to the fact that it is not all contained in the report of the inquest, voluminous as it is, which was forwarded to you by Mr. Fox. I was not present at the inquest, and consequently the evidence I gave at the trial does not appear there. I was very anxious not to obtrude anything of a personal nature into my letter, but in consequence of what has fallen from Mr. Fox, I will ask you to allow me to make this short explanation.

I was present at the post-mortem examination only at the request of my partner, Mr. Lister, and should have taken no part in it but that Mr. Morris, who was making it, cut his finger soon after examining the brain, and I then finished the examination. I however watched Mr. Morris in his dissection of the brain, and very carefully noted all the appearances presented. Mr. Morris made the examination in the main exactly as it would be made in a hospital post-mortem room. I knew none of the gentlemen who were present, and had not seen the deceased during his life, and as I did not expect to be called at the inquest, what observations I made were entirely without bias. The appearance of the brain membranes was such as to leave no doubt at all in my mind that acute meningitis had been present, and the facts which I noted were briefly these:—That the arachnoid was inflamed, thickened, and covered with patches of effused lymph; that its layers were adherent, and that there was smearing of turbid serum over the brain. The pia mater was congested, the meningeal vessels turgid —some vascular injection of brain-substance; no effusion in lateral ventricles. There certainly were adhesions between the layers of arachnoid, and I am sorry that Mr. Fox should vaguely hint that when he admitted there were these several "filaments or pieces," not being "blood-vessels," between the layers of arachnoid, he was thinking of the Pacchionian glands. He did indeed attempt to prove that there might be these filaments in the healthy brain, but his friend Dr. Leech was obliged to differ from him about that, as I also believe do the numerous anatomical authorities Mr. Fox has so kindly recommended to my notice. Will you allow me also to point out another difference of some importance between Dr. Leech and Mr. Fox, who both visited the patient together during his life. Mr. Fox discovered a *rose rash*, which gradually became, on being asked particularly about it, an "ill-defined one." It was so "ill-defined" that Dr. Leech could see nothing at all of it.

With respect to the value of the evidence given by me, I have been assured, in a communication from one of the three eminent gentlemen to whom Mr. Fox submitted the evidence as given at *the inquest*, that if my evidence had been given before the coroner, he should have advised the Railway Company not to go into court at all. I therefore feel that the report of the inquest does not convey a correct impression of the relative value of the evidence given at the trial with respect to the "conflict of statements" which appears in the report. I think we none of us perhaps agreed with the *description* which Mr. Morris gave of the adhesions, since he described them as being firmer and more dense than would be the case; but for the truth of the broad facts stated by him, I can only say I had the evidence of my senses, and was in a particularly favourable position for judging correctly.

There are two questions in connexion with this case which seem to me to be the ones of chief interest. Firstly, does any recognised opinion exist with respect to the condition in which Peyer's patches would be found after death on the sixteenth day of enteric fever? Would the absence of ulceration be sufficient to exclude the existence of the fever for that length of time? Secondly, accepting as facts in a case the existence of congestion of patches and of mucous membrane, but not *ulceration*, after an acute illness of sixteen days, together with an undeniable previous history of blow on the head, and severe nervous shock, followed by headache more or less persistent till the time of the acute illness, which acute illness might point either to acute meningitis or to enteric fever, but did point to the former for some time before death, and was treated as such by the medical men in regular attendance, and that after death there was found some evidence of recent and acute inflammation of the membranes of the brain, would not the presumption be very strong that death had resulted from traumatic meningitis?—I am, Sir, your obedient servant,

Doncaster, September 6th, 1875. J. B. Withington.

SERJEANT WHEELER ON INSANITY AND FRIENDLY SOCIETIES.

To the Editor of The Lancet.

Sir,—You have done good service to the medical profession and the public by calling attention to what you aptly designate the "singular lucidity of statement" in Serjeant Wheeler's summing up and address to the jury in the recent case before him of Lovell v. Behrens, tried in the Marylebone County Court.

This may perhaps be a fitting occasion also to call attention to a judgment of that learned judge delivered in his then court at Liverpool upon the moot question, so important to the poor, whether insanity was bodily sickness, entitling the members of friendly societies to the benefit of the sick fund. The decision then given to this question has not hitherto been brought with sufficient prominence before the public, although I am glad to say that it is now published in the eighth edition of "Tidd Pratt's Law of Friendly Societies," and will doubtless be extensively read. The state of the question at the time the judgment was delivered was to this effect: that in the opinion of the late Mr. Tidd Pratt, Registrar of Friendly Societies, and other authorities, "Insanity is not to be regarded as bodily sickness, because by sickness is meant a state of bodily disease, and has no reference to lunacy, which is a derangement of the mental faculties."

The judgment of my friend Mr. Serjeant Wheeler was delivered soon after the death of my friend Mr. Tidd Pratt, and is based on physiological grounds, and in accordance with those organic laws of nature, upon a knowledge of which the stability of human laws must depend. "It is necessary," says Serjeant Wheeler, "in considering the question, to bear in mind the natural and essential relations of mind and body. Every manifestation of mind in this life is made by and through its bodily organ, the brain; and the mind is so influenced by the brain that the condition of the former is an invariable index to the constitution and condition of the latter. Hence all causes of temporary or permanent disturbance in the health of those parts of the brain that manifest the mind produce in the same degree the signs of mental derangement, and, *vice versâ*, all symptoms of mental derangement indicate a proportionate disturbance in the sanitary state of the mind's bodily organ, the brain. Some years since, when it was the habit to examine the brain with the aid only of the naked eye, it was not possible in many cases to discover those lesions of brain structure which produce and accompany insanity. But now, by the recent application of the microscope, the minute structure of the brain is revealed, and pathologists can trace distinctly the seat and nature of those morbid changes which are the real essence of insanity. Hence Schroeder Van der Kolk, an eminent German anatomist, says that 'he does not remember to have dissected the brain of one lunatic during the last twenty-five years without finding a satisfactory explanation of the phenomena observed during life.' Dr. A. Combe, in his work 'On Mental Derangement,' lays down this principle: 'Every derangement of function is accompanied by disorder, either in the structure or mode of action of the organ which performs it, and without the removal or cure of which the function cannot be restored to its healthy state.' From ignorance of, or want of confidence in, the fact that the brain is the medium for manifesting mind, our predecessors were contented to regard mental derangement as an affection of the immaterial principle of mind, or as a particular dispensation of Providence which they could not be expected either to understand or to remedy; and, accordingly, while this view continued to influence their practice, all sorts of barbarous and useless measures were adopted against the miserable patients. The latest expression of authoritative opinion upon this subject is Dr. Maudsley's, in his Gulstonian Lectures 'On the Relations between Body and Mind.' That gentleman thus speaks:—'I have given a survey of the physiology of our mental functions, showing how indissolubly they are bound up with the bodily functions, and how barren must of necessity be the study of mind apart from body. I now propose to show that the phenomena of mental derangement bear out fully this view of its nature, that we have not to deal with disease of a metaphysical entity, which the method of inductive inquiry cannot reach, or the resources of medical art touch, but with disease of the nervous system, disclosing itself by physical and mental symptoms. It seems then that the question is concluded both by reasoning and medical testimony, and it appears to me that insanity is just as much bodily disease as paralysis and apoplexy, which are notoriously affections of the brain and therefore admitted to be bodily disease.'"

The practical issue of this judgment was an order given by the Secretary of State for granting sick allowance in cases of insanity.

I remain, Sir, your obedient servant,
W. U. Whitney.

Great College-Street, Westminster.

PAYMENT FOR DISTRICT MEDICAL RETURNS.

To the Editor of The Lancet.

Sir,—I have received a letter from the Local Government Board, dated Sept. 13th, 1875, acknowledging my report, in which the following statement occurs, which will, I think, be received with satisfaction both by district medical officers and medical officers of health, and points out the wish of the Local Government Board to interpret the new Public Health Act in a just and liberal spirit.

"Adverting to your remark, on page 28 of the Report, that there seems to be no means in the present law of giving a district medical officer remuneration for information respecting sickness in his district, which he may furnish to the medical officer of health, I am directed to state that the Board consider that it is competent for the urban sanitary authority, if they think proper to do so, to enter into an arrangement to pay the district medical officer reasonable remuneration for supplying you, as medical officer of health, with information which you require for the efficient discharge of your duties."

Feeling that the refusal of the district medical officers, both in my urban and rural sanitary districts, to furnish me with returns was purely a matter of principle, in which I myself sympathised, I thought it right to mention the matter in my report, and it gives me much pleasure to find that it has elicited so important a decision.

I am, Sir, yours faithfully,
Horace Swete, M.D.,
Medical Officer of Health, Droitwich Rural and Urban Sanitary Districts.

Leamington, Sept 14th, 1875.

PARIS.

(*From our own Correspondent.*)

MEETING OF THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AT NANTES.

The accounts which have reached Paris of the fifth session of the French Association for the Advancement of Science, recently held at Nantes, all speak of the very great success of the meeting. In all the sections members were most active; several important communications were made, and gave rise to valuable debates. Of the proceedings of the medical section I shall give you a special and condensed account in my next letter. In the section of Anthropology the communications of Professors Vogt and Broca were especially interesting.

The local authorities had done their best to enhance the interest and attractions of the Nantes meeting, and all the notable inhabitants of the city of the west and its environs had co-operated in ensuring its success, either by joining as members, or exhibiting private collections of art or science, or sending invitations to their estates, &c.

Many sectional or general excursions were made into picturesque old Brittany, full of prehistoric associations and remains and of present attractions. The Agricultural section visited the School of Agriculture of Grandjouan under the guidance of M. Rieffe, who had invited them to luncheon, and the model estates of M. de la Haye-Jousselin, who, with great courtesy, accompanied them over his grounds.

The anthropologists made two interesting excursions—one to the Lac de Grandlieu, where (*inter parentheses*) they were very nearly arrested by a suspicious *gendarme*, whose mind was made uneasy by the wanderings of these strangers; the other to the renowned commune of Bourg de Batz, a small peninsula between le Pouliguen and le Croisic, inhabited by the descendants of four or five families, and remarkable for the robust vigour and developed stature of the inhabitants, especially the women. As the system of intermarriages is exclusively practised there, the handsomeness and strength of the inhabitants bring out the theory that consanguineous marriages are bad only in the case of diseased or degenerated relatives.

One general excursion was a protracted one: it lasted three days, and included Auray, Lorient, Belle-Isle, Vannes, Locmariaquer, and Gaor Inis. The visit to this last locality was especially interesting, on account of its immense dolmens and the curious hieroglyphic figures with which they are covered, and which have until now baffled the interpretation of savants.

It is decided that the next meeting of the Association shall be held at Clermont-Ferrand, amidst the beautiful mountain districts of Auvergne, and that Professor Dumas, the illustrious chemist, will be president.

CONTEMPLATED CATHOLIC UNIVERSITIES.

Great exertions are being made amongst the religious associations and clergy for the rapid foundation of several universities. As you are well aware, a recent vote of the National Assembly has authorised the establishment of free universities besides those belonging to the State. A council of bishops has been held here, and it has been decided that Paris shall have its free university, supported by the clergy, and including the faculties of law, letters, and sciences, besides courses of medicine. It is expected that the university will be opened in November, one of the clerical organs here, *l'Univers*, asserting that the requisite number of professors and students already exists. The Bishops of Toulouse have also met for the purpose of founding a like university for the South of France, and those of Anger are likewise busy preparing an establishment in the West.

MEDICAL DESCENT OF MARSHAL MACMAHON.

In the last issue of the *Journal des Connaissances Médicales*, there was an interesting piece of news touching the medical descent of the President of the French Republic, who, according to the article, is descended from, or nearly related to, several medical men. Thus his grandfather, Jean Baptiste MacMahon, was a medical man, and a Doctor of the Faculty of Reims; his grand uncle, Dr. Jean MacMahon, was a graduate of Paris; and more recently, his cousin, Patrice MacMahon, also a Doctor of Paris, was Librarian to the School of Medicine of this city.

Amongst the medical talk of last week there are some topics of interest to your readers. Thus it is said that Professor Depaul, who occupies the clinical chair of Accouchements at the Faculty, has been invited to Brazil to assist the daughter-in-law of the Emperor in her approaching confinement. His honorarium will be a handsome one, £10,000, and £2000 for travelling expenses. Duchenne de Boulogne, the well-known promoter of the medical uses of electricity, and the author of the exhaustive treatise on the same subject, is suffering severely from illness. Bouillaud, the veteran clinical professor at the Charité, is contemplating retirement from hospital work, not on account of health, notwithstanding his ripe old age of eighty, but to seek rest and quiet after a life of hard work, crowned by every honour and success. The illustrious physician is full of life and vigour, and his intellectual abilities and powers of oratory are as bright as ever.

Paris, Sept. 15th, 1875.

Bequests, &c., to Medical Charities.—Mrs. Mary Price, of Woodhatch, Reigate, bequeathed £500 to the Sussex County Hospital, £300 to the Reigate Cottage Hospital, £300 to the Surrey Dispensary, £200 to the Ophthalmic Institution in London, £200 to the Truss Society, £100 to the Medical Benevolent Society, Epsom, and £100 to the Asylum for Idiots, Earlswood. Mr. Charles James Kilpin, of Ossington-street, Bayswater, bequeathed £100 to University College Hospital and £100 to the Hampshire Hospital.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 2nd and 9th:

Angove, William Thomas, Mount Pleasant, Cambourne.
Dowding, Alex. William Woodman, Leighton Buzzard.
Duke, Herbert, Clapham-road.
Grimwood, Harry Charles, Stowmarket, Suffolk.
Lendon, Edwin Harding, Maidstone, Kent.
Mapei, Luigi Vincenzo, Golborn, Lancashire.
Wickham, Henry, Tetbury, Gloucestershire.
Whitmore, William Tickle, West London Hospital.

The following gentlemen passed the Primary Professional Examination on the same days:—

Alexander Boswell, Geo. Adolphus Boodle, and Thomas Baker, St. Bartholomew's Hospital; Edward Nundy and John Webster, University College; Reginald Paul, Middlesex Hospital; James Taylor Tweedale, Owens College, Manchester.

It is stated that Mr. Baily Denton forwarded to the corporation of Colchester a scheme for intercepting and treating the sewage of the town, which now falls into the Colne. The cost of the sewage works is estimated at £30,000, and the annual cost of treating the sewage at £2000.

Glasgow Medico-Chirurgical Society. — The following office-bearers for the ensuing session were elected at a meeting on the 3rd inst.:—President: Dr. James Morton. Vice-Presidents: Dr. D. Richmond (Paisley), Dr. Robert Perry. Council: Dr. R. Stewart, (Coatbridge), Dr. James Scanlan, Dr. Alex. Patterson, Dr. James Dunlop, Dr. D. Taylor, (Paisley), Mr. A. Macfarlan, Dr. Thomas Reid, Dr. T. M'C. Anderson. Secretaries: Dr. Joseph Coats, Dr. Gavin P. Tennant. Treasurer: Dr. Hugh Thomson.

Sir Charles Locock's Will. — The will and codicil, dated July 22, 1871, and December 7, 1872, of Sir Charles Locock, Bart., was proved on the 18th ult., the personal estate being sworn under £100,000. He gives the various presents received from Her Majesty the Queen, the Emperor and Empress of the French, the Prince Imperial, the Crown Prince of Prussia, the Duc de Nemours, to his eldest son; he also leaves upon trust for him absolutely, as his successor in the baronetcy, £50,000; upon trust for his son Frederick for life, £5000; and the residue equally between his sons, Charles Brodie, Alfred Henry, Sydney, and Herbert.

The Hospital Sunday Fund.—Some little surprise has been expressed at the delay in distributing the fund collected for the metropolitan hospitals and dispensaries on Hospital Sunday, the 13th June last. The fund, up to Monday, and including interest, amounted in the aggregate to £26,703 7*s.*, as against a total of £29,817 3*s.* 9*d.* received last year. It will be divided within the next fortnight among 122 institutions — namely, seventeen general hospitals, four chest hospitals, eight children's hospitals, four lying-in hospitals, five hospitals for women, and twenty-one other special hospitals, including dental and homœopathic hospitals, seven convalescent hospitals, one fever hospital, three cottage hospitals, forty-eight dispensaries, and four infirmaries and sanitaria. The arithmetical bases of distribution have been provisionally settled by the committee, but these may probably be affected by the verbal statements which the managers of the special hospitals may make in explanation of their accounts and position. Deputations from twenty of such institutions have, or had, to be seen, and the delay has arisen through the difficulty in getting people together in the holiday season.—*The Times.*

Medical Appointments.

Allison, J., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Bridlington Urban Sanitary District, vice Denton, resigned.

Archer, A. L., M.D., L.R.C.S.Ed., has been appointed Visiting Surgeon for Plymouth, Devonport, Dartmouth, Ivy Bridge, and Plympton, under the provisions of the Contagious Diseases Acts (Women), vice Digan, deceased.

Bannister, W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Bedhampton, Farlington, Hayling North, and Hayling South Districts of the Havant Union, vice Stedman, superannuated.

Beavan, J., F.R.C.S.E., has been appointed a Surgeon to the Brighton Hospital for Sick Children, vice Johnstone.

Berry, O. W., M.R.C.S.E., has been appointed Medical Officer for the Lower Wimbledon District of the Kingston-on-Thames Union, vice Johnson, resigned.

Callan, P., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer to the Workhouse and Fever Hospital, Ardee Union, Co. Louth, vice M'Iver, deceased.

Day, Mr. G. C., has been appointed Resident Medical Officer, for a temporary period, to the Notting-hill Provident Dispensary and Maternity, vice Morrill, resigned.

Edwards, B., L.R.C.P.L., M.R.C.S.E., has been appointed a Surgeon to the East Suffolk and Ipswich Hospital, vice Sampson, resigned, and appointed a Consulting Surgeon.

Fennell, D., L.R.C.S.I., has been appointed Resident Medical Officer to the Dudley Dispensary, vice Bateman, resigned.

Glen, J., M.D., C.M., has been appointed Medical Officer for No. 3 Division of No. 3 District of the newly formed Middlesborough Union.

Graham, J., M.R.C.S.E., has been appointed an Hon. District Surgeon to the Royal South London Dispensary, St. George's-cross, vice Verdon, resigned.

Harris, W., F.R.C.S.E., has been appointed House-Surgeon and Secretary to the Royal Cornwall Infirmary, Truro, vice James, appointed House-Surgeon to the Hull and Sculcoates Dispensary.

Hart, E. J., M.R.C.S.E., has been appointed Medical Officer for the Brighton District of the London, Brighton, and South Coast Railway Provident Society, vice Philpott, resigned.

Hearn, R. T., M.B., L.R.C.S.I., L.M., has been appointed Resident Medical Officer and Hon. Secretary to the Bournemouth General Dispensary, vice Hirons, resigned.

Hedley, J., M.R.C.S.E., has been appointed Medical Officer for the D District of the Middlesborough Union.

Hobley, S. H., L.R.C.P.L., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Loyal Englishman Lodge of Odd Fellows, Manchester Unity, Southampton.

Hollis, E., M.B., C.M., has been appointed House-Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital, vice Madeley, resigned.

Howson, J. J., L.S.A.L., has been appointed House-Surgeon to the Stockton Surgical Hospital.

Johnstone, A. A. W., F.R.C.S.E., has been appointed a Consulting Surgeon to the Brighton Hospital for Sick Children.

Jones, R., F.R.C.S.E., has been appointed Consulting Surgeon to the Warneford, Leamington, and South Warwickshire Hospital, on resigning as Surgeon.

Kebbell, W., M.R.C.S.E., L.R.C.P.L., has been appointed Junior Assistant Medical Officer to the Three Counties Asylum, Beds.

Keith, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for No. 2 Division of No. 3 District of the Middlesborough Union.

Laidler, J., M.R.C.S.E., has been appointed Medical Officer for the No. 2 District of the Middlesborough Union.

Lloyd, S., M.R.C.S.E., has been appointed Medical Officer for the Workhouse of the Parishes of St. Giles-in-the-Fields, and St. George, Bloomsbury, vice Bennett, resigned.

Longbotham, G., M.R.C.S.E., has been appointed Medical Officer for the A District of the Middlesborough Union.

Lucas, H., M.R.C.S.E., has been appointed Medical Officer of Health for the Godmanchester Urban Sanitary District, vice Syson, whose appointment has expired.

Mackenzie, R. F., M.B., L.R.C.S.Ed., has been appointed Medical Officer for the C District of the Middlesborough Union

M'Millan, H., M.D., C.M., has been appointed Resident Medical Officer to the Macclesfield Infirmary, vice Boulger, resigned.

Morris, J., M.R.C.S.E., has been appointed a Surgeon to the Warneford, Leamington, and South Warwickshire Hospital, vice R. Jones, resigned.

Nally, W. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Attendant to the Royal Irish Constabulary, Kinvarra, Co. Galway, vice Hynes, deceased.

Owens, Dr. —, has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballycroy Division of the Achill Dispensary District of the Newport Union, Co. Mayo, vice Roe.

Parker, W. A., L.D.S. R.C.S.E., has been appointed one of the Consulting Surgeon-Dentists to the Birmingham Dental Hospital.

Pearson, T. R., M.D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the B District of the Middlesborough Union.

Pierce, E., M.D., F.R.C.S.Ed., L.F.P. & S. Glas., has been appointed Public Vaccinator for the Llanrhaiadr District of the Ruthin Union, vice Williams, resigned.

Powell, J., M.R.C.S.E., has been appointed Medical Officer for the Penbryn District of the Newcastle-Emlyn Union, and Medical Officer of Health for the Penbryn Sub-district of the Newcastle-Emlyn Rural Sanitary District, vice Evans, deceased.

Rogers, E. C., M.R.C.S.E., has been appointed Senior Assistant Medical Officer to the Three Counties Asylum, Beds, vice Dr. Sutherland Rees-Philipps, resigned.

Rosten, W. M., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Yardley District of the Solihull Union, vice Warner, resigned.

Sawyer, R. H., M.R.C.S.E., has been appointed Medical Officer of Health for the Shaftesbury Rural Sanitary District.

Seed, W. H., M.B., C.M., has been appointed Second Assistant Medical Officer to the Warwick County Lunatic Asylum, Hatton, vice Peacock, resigned from ill health.

Smailes, T., M.R.C.S.E., has been appointed Medical Officer to the Borough Police, Honley, Yorkshire, vice Todd, deceased.

Sleightholme, J. P., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for No. 1 Division of No. 3 District of the Middlesborough Union.

Staines, J. F., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed District Medical Officer to the Parishes of St. Giles-in-the-Fields, and St. George, Bloomsbury, vice Bennett, resigned.

Thompson, J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Higher District of the Aysgarth Union, Yorkshire.

Wade, A. L., M.D., L.R.C.S.I., has been appointed Assistant Medical Officer to the Warwick County Lunatic Asylum, Hatton, vice Woods, appointed Medical Superintendent of the Kerry Lunatic Asylum, Killarney.

Waterworth, E. A., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Carisbrooke District of the Isle of Wight Union, vice Wilkins, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Atkinson.—On the 2nd inst., at Bampton, the wife of J. P. Atkinson, M.D., of a son.

Corley.—On the 2nd inst., at Lower Baggot-street, Dublin, the wife of A. H. Corley, M.D., of a daughter.

Watts.—On the 23rd ult., at Sharnbrook, Beds, the wife of A. N. Watts, L.R.C.P.Ed., of a son.

Weir.—On the 29th ult., at St. Mungho's, Great Malvern, the wife of A. Weir, M.D., of a son.

MARRIAGES.

Bligh—Searle.—On the 7th inst., at All Saints, Upper Norwood, Samuel Edmund Bligh, M.B., C.M., British Guiana Medical Service, to Eliza Constance, only daughter of Samuel Searle, Esq., of Upper Norwood.—No Cards.

Douglas—Robertson.—On the 8th of April, at Dunedin, Otago, N.Z., T. Kennedy Douglas, M.B., C.M., to Johanna, youngest daughter of the late D. Robertson, Esq., of Friarton, Perth, N.B.

Harricks—Vokes-Dudgeon.—On the 22nd of May, at Trinity Church, Port Mackay, Queensland, J. Hugh Harricks, M.R.C.S.E. (son of John Harricks, Esq., Surgeon, of Liverpool), to Christmas Annette, eldest daughter of T. Vokes-Dudgeon, Esq. (late of H.M.'s 99th Regiment), Collector of Customs, Port Mackay.

Munro—Taylor.—On the 8th inst., at London-road, Kilmarnock, Robert Munro, M.A., M.D., of Kilmarnock, to Anna Black, youngest daughter of Wm. Taylor, Esq.

DEATHS.

Adams.—On the 5th inst., at the residence of his nephew (Dr. A. M. Adams), Lanark, W. D. Adams, M.D., F.R.C.S.E., of Hyères, France, and formerly of Edinburgh. Friends omitted will please accept of this intimation.

Agnew.—On the 3rd inst., at Islington, Liverpool, Wm. Agnew, M.D., aged 72.

Bennett.—On the 1st inst., at North Shields, Robt. Bennett, Surgeon, aged 29.

Bennie.—On the 13th inst., at Chatham-place, Brighton, Andrew Bennie, L.R.C.P.Ed.

Crane.—On the 6th inst., at Leicester, E. J. Crane, L.R.C.S.Ed., Surgeon-Major Royal Artillery, aged 41.

Gillespie.—On the 7th inst., at Accrington, Lancashire (of congestion of the brain), John Morris Gillespie, M.D., L.R.C.S.Ed., aged 49. Deeply regretted.

Harrington.—On the 30th ult., at Fisher-street, Swansea, N. Harrington, M.R.C.S.E., aged 44.

Headland.—On the 4th inst., at St. Leonard's-on-Sea, F. W. Headland, M.D., aged 45.

Hooper.—On the 9th ult., at Battersea, Thos. Robt. L. Hooper, M.R.C.S.E., aged 38.

Thring.—On the 2nd inst., at Batheaston, R. S. O. Thring, M.D., aged 57.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Magnifying an Office.

Those useful officials, the inspectors of nuisances, are, it seems, aggrieved at the prominence given to medical officers of health under the new Act. They are moved to indignation by having been described as "underlings and henchmen" of the medical officers. We should be sorry to offend the sensibilities of men who, if only intelligent and industrious, will do excellent service; but it may not be tolerated that a class of subordinate and irresponsible officers, who cannot possibly possess the knowledge requisite to enable them to act except under direction, should be allowed to usurp the functions of those above them. Great tact will evidently be required in the management of these officials. They complain that medical officers are sometimes "too overbearing." This is an evil against which there should be a special watch kept by those who desire to live and work pleasantly. The most serious peril we recognise is that which must result from the inspectors playing into the hands of inert or cantankerous "local authorities." Medical officers will do wisely to clear their way of this danger by an early and courteous assertion of the position they occupy. The inspector of nuisances is not the colleague or in any sense the coadjutor of the medical officer of health. He is an independent officer of the local authority, and in so far as he comes into business relations with the officer of health, he is his subordinate. Practically, the inspector of nuisances is a person whose duty it is to look after and report minor matters affecting the health of a district. The more important concerns of the district are all under the sole superintendence of the medical officer, and for their due administration he is personally responsible. There can be no sharing authority with the inspector, and we venture to hope so unprofessional a course of conduct will not anywhere be adopted or allowed.

Mr. Geo. Fenton.—Any guardian may sit upon a general or special committee to which he has been regularly elected by his colleagues, but not otherwise, and none other than those so elected can attend or vote.

Dr. R. Caton, (Liverpool.)—We shall be very happy to receive it.

Illegitimate Mortality in Glasgow.

The vital statistics of Glasgow, as handled by its medical officer of health, Dr. Jas. B. Russell, are full of interest which is more than local, and contain valuable information illustrative of the waste of life in large towns—information that may be looked for in vain in nine out of every ten medical officers' reports. Dr. Russell's report for the year 1874 includes some very suggestive figures bearing upon the infantile mortality of illegitimate children. During the year 1785, illegitimate children were born in the city equal to 8·5 per cent. of the total births; this number and proportion differed but slightly from those in recent years. Infant mortality in Glasgow during 1874, measured by the proportion of deaths under one year to births, was equal to 16·0 per cent., against 15·5 in London, 20·0 in Leeds, 21·5 in Leicester, and 23·3 in Liverpool. Among the infants born in wedlock the mortality, measured in this manner, was equal to 14·9 per cent., whereas among the illegitimate infants it was equal to 27·7 per cent. If the mortality among the illegitimate infants had been at the same rate as prevailed among those born in wedlock, the deaths of illegitimates, under one year, would have been but 266 instead of 495; in other words, 229 infants under one year of age died in Glasgow, victims to the accident of their being born of unmarried women. In four of the registration subdistricts of Glasgow the proportion of deaths of illegitimate infants under one year, to illegitimate births, exceeded 30 per cent., and in one was equal to 32·7 per cent. It is to be regretted that information on this point is not more frequently given in English health reports, more especially as statistics of this character, beyond serving as a wholesome check upon much indirect infanticide, afford the means for discovering the localities in which baby-farming may be carried on.

Mr. Thomas Walley, (Edinburgh.)—Declined with thanks.

Vivisection *v.* Sport.

To the Editor of The Lancet.

Sir,—Now that the vivisection question is in a fair way of being settled, it would be well if Lord Hartismere or some other of the philozoists would extend their sympathies to another class of suffering creatures—viz., those which are subject to *torture* as objects of *sport*, or in the course of preparation as articles of food. It is well known that every year thousands upon thousands of game birds, hares, and rabbits, are more or less mutilated without being killed outright; that they escape into cover, riddled with shot or with shattered limbs, to die a lingering death of torture, or in some few instances to recover, after a long period of suffering, with crippled legs or wings. Who has not seen, after a *battue*, hares and rabbits limping away on three legs, and found them afterwards with the broken bones protruding? Who has not at the table met with instances of bones of game animals wonderfully united by overlapping of the broken ends? Did they ever think of the amount of misery these poor creatures endured? So with pigeons at a match. How many escape to die in solitude? But we are told that this is sport, and sport is necessary. Therefore the torture of these animals is allowable! Well, take the case of sheep which the farmer puts on his turnips to eat off the tops, and, in order that they may not eat the roots, breaks off all the front teeth. Is there any cruelty in this practice? Or the frequent bleeding of calves to produce white veal. Would it come within the sphere of the Vivisection Committee, after considering with Mr. Leo Hunter the claims of the "expiring frog," to turn their steps to the nearest fish-market, and watch the operations of an old fishwoman chatting to her neighbour and skinning eels? See her deliberately cut off the brute's head; then turn to make a remark to her friend; then drag the skin half way down the body; another bit of gossip, and so by degrees the skin comes off. Is the eel dead the while? By no means—writhing and twisting about, and full of life (of a sort) for hours after. But then this is not an experiment. At any rate, if it is, a physiologist must not make it.

It would be easy to multiply examples of torture far exceeding in amount and degree anything that is done by physiologists; and while admitting that experiments should be conducted with as little cruelty as possible, and always under the influence of anæsthetics, it is not easy to understand why the same measure of mercy should not be dealt out to a far more numerous class of sufferers. In the terms of Lord Hartismere's Bill, why should not "the performance of vivisection (for sport) require a special licence at the cost of £10?" "with power to a justice of the peace to issue a search warrant," and with a "definition of the term 'vivisection.'" Why should not the Bill be entitled "A Bill to Prevent Abuse and Cruelty in the Destruction of Animals for the purpose of *Sport* or Food"? By it any person for these objects may torture a live animal, "provided that the animal be first *made insensible* and killed afterwards." "Licensed persons may torture without the use of anæsthetics, provided certain conditions are complied with—viz., that the operation is solely for the purpose of *sport* &c., and that insensibility would frustrate the object," &c. &c. "A register of all such tortures is to be kept," &c.

I would commend this subject heartily to the consideration of the Vivisection Committee on the termination of their present labours.

I am, Sir, yours truly,
A Game Bird.

September, 1875.

Holidays.

Mr. T. F. Sagar approves of our views on holidays for medical men, and thinks they should be good ones—not for a night or two. He points out the difficulties, of which the difficulty of getting a good *locum tenens* is one of the greatest. This is true; but the difficulties are not insuperable.

Mr. John Milne.—We should have been glad of the newspaper reports of the case. For purposes of comment these are preferable to private reports. It will be seen that the case is noticed in another page.

A. B.—We see no harm in the notice to which our correspondent objects. It can serve no private end.

Mr. Bollon, (Doneraile.)—Apply to Messrs. Baillière, medical publishers, King William-street, Strand.

J. A.—We never recommend a particular physician or surgeon.

Death of a Child from Uræmic Poisoning.

On Tuesday, the 31st ult., Mr. Donaldson, the deputy coroner for East Middlesex, held an inquiry at the "Lord Cecil" Tavern, Lower Clapton, into the circumstances attending the death of a child named Henry Vincent Gurney, aged four years. Mr. Thomas Gregory Gurney, the father of the deceased, residing at 52, Rushmore-road, and a clerk in the Law Institution, stated that the child about four months ago suffered from congestion of the kidneys. Last June twelvemonth he had scarlet fever, and before he was two years of age had hydrocele, which was followed by his becoming ruptured. Witness named the medical men who attended the deceased, and added that on the 27th ult. he appeared worse, and he (witness) administered some simple remedies, but had no reason to suppose when he left home that the child would die in the meantime. Upon his return that evening, however, he learned that death had taken place about half-past six o'clock. Dr. Joseph, assistant to Dr. Aveling, said that a few months ago the deceased was treated for Bright's disease, and seemed to get a great deal better. There had been no post-mortem examination, as witness was satisfied death was due to uræmic poisoning from disease of the kidneys. The jury returned a verdict in accordance with the medical testimony.

Mr. C. E. Garman.—As our correspondent says a communication has been made to the "proper channel," we cannot further interfere in the matter.

"Two Unusual Cases."

To the Editor of The Lancet.

Sir,—A correspondent, writing from Berwick, and signing himself "M.D.," sent me, through the medium of the halfpenny post, a card to the effect that in my report of "two unusual cases" in The Lancet of the 14th ult., Case 1 was epileptiform, and the fractured acromion the result of the kick of a horse frightened by the coachman falling down. He states, in addition, that the "bitten and bleeding tongue *clearly points* to an epileptic seizure"; that, "unless the patient be put under the influence of bromide of potassium, he will most probably have another similar seizure ere long, irrespective of any injury"; and concludes with, "If so, pray say so in The Lancet."

Now, Sir, more than six weeks have elapsed since the accident (no great length of time certainly), and I was last Sunday informed by Dr. Elliott, in whose practice the case occurred, that no sign of epilepsy had yet presented itself. Added to this, I, when called in on the morning of the accident, before examining the body of the patient for injury, very closely questioned the man and his friends as to the occurrence or non-occurrence of fits of any description—the possibility, nay, further, the probability, of epilepsy being *then* uppermost in my mind; but neither in the past history of the man nor up to this date has epilepsy or any form of seizure existed. I am constrained, therefore, to adhere to my former opinion; and so far from the bitten and bleeding tongue *clearly pointing* to an epileptic seizure, it, to my mind, most distinctly indicates that such complications may, and, as we *nearly* all know, do, in many instances, result from the application of sudden violence, altogether apart from and foreign to epilepsy.

I have replied to "M.D." somewhat sooner than he desired me; but the performance of two duties suggest themselves—1stly, to explain that "M.D.'s" view had only been by myself relinquished when I no longer had reason to retain it; and 2ndly, to bring before the notice of "M.D." what appears to me a great error on his part. I think that "M.D." would not have, on maturer reflection, addressed any description of *anonymous* communication to any individual, especially one *uncovered*, and *upon a professional subject*. I am willing to presume that it was done unthinkingly; but if not, the habit of doing so savours either of ignorance and a want of knowledge of the world, or of discourtesy, and occasionally gives rise to considerable inconvenience and annoyance. Most decidedly, I think, correspondence upon such subjects should be forwarded under cover. Moreover, what a person or individual objects to put his name to, should not be written, still less sent.

I am, Sir, your obedient servant,
Edward C. Anderson, B.A. Caius Coll. Cambs.
Catford Bridge, Sept. 6th, 1875.

A Young Surgeon.—It is not easy to reply to our correspondent's query. We do not think a medical witness is strictly entitled to more than a guinea per diem, no matter how many cases he may have to attend at a particular sessions; but in practice he will probably receive a little more than this, as he would have something with each subpœna, and the sum for daily attendance would probably be apportioned between the several cases.

The Yeovil Case.

As this is *sub judice*, our correspondent must excuse us from going into the matter.

A Growing Evil.

To the Editor of The Lancet.

Sir,—The enclosed card was placed in my hands by the husband of one of my patients, recently confined. It is evident these cards are posted off to all names appearing in the list of births in the daily papers, and must in some cases work very detrimental to the cause of vaccination. This is worse than quackery, and a proper case for the Medical Council to take up and prosecute, not only in support of our profession, but to prevent the public being misled by such deceitful means. If such slurs and the persistent infringements by quacks upon our profession are allowed to continue without a decided check, what use is there in our registering and paying our five-guinea fee? These fees are supposed to form a fund which should be used by the Medical Council to suppress quackery of all sorts and support the professional status. If not, the sooner the Medical Council is put in possession of such powers the better.—Yours faithfully,

Rickmansworth, Sept. 7th, 1875. Roderick W. Henderson.

*** The enclosure is an offensive post-card, signed by "W. Young, Hon. Sec. to the Society for Suppressing Compulsory Vaccination." It is quite beneath notice.—Ed. L.

The Culinary Art.

The School Board of London has arranged to have 300 girls selected from its schools taught cookery by the teachers of the National Training School in two centres—one in Marylebone, the other in Greenwich. Five free Scholarships in this much neglected but important branch of knowledge are offered by the Society of Arts, and the Education Department gives 4*s.* a year to public schools on behalf of each girl taught cookery according to the recognised code. Thus we shall by and by, it may be hoped, lessen the great disparity which subsists between ourselves and our French neighbours in the matter of the skilful and economical preparation of food.

Army Medical Department.

To the Editor of The Lancet.

Sir,—If any unprejudiced person were to judge of the condition of the Army Medical Department from the letters and articles that have lately been written about it in The Lancet and other periodicals, or even from some of the speeches in Parliament during the last session, he could hardly avoid coming to the conclusion that the medical officers were dissatisfied, and had good reasons for being so. Nevertheless, the "authorities" not not only seem to be indifferent to any existing causes of discontent, but have just gone out of their way to devise an altogether new source of irritation. I refer to clause 125 of the War Office Circulars for the present month, a copy of which I shall presently subjoin, lest the new rules concerning the sick leave of medical officers should not have attracted your attention. Hitherto medical officers, when placed on the sick-list, have enjoyed the same privileges as regimental officers, and have neither been mulcted in pay nor subjected to curtailment of their ordinary leave on account of any time that they may have spent on the sick list. But the object of this new regulation appears to be to deprive them of this advantage. If a medical officer hereafter should suffer from illness—say typhoid or any other fever,—and should be compelled thereby to remain for more than a month on the sick-list, even though such illness may have been contracted in the performance of his duties, he would by this regulation be liable to lose not only his pay and allowances for all sick time exceeding one month, but also a portion of his privilege leave, unless the general or other officer commanding recommended that this part of the order should not be enforced. Nay more. To those who are acquainted with the form upon which the pay and allowances are drawn, it will not appear at all improbable that these penalties will fall upon any medical officer who may happen to be sick for more than thirty days altogether in any one year; for the vagueness of the order is evidently open to this construction. We can well imagine the air of surprise and innocence with which medical officers, when they complain of this new order, will be told that they are only placed in the same category with other departmental officers, and that therefore they have no special or legitimate grievance. Such arguments have been used before, and are well suited to throw dust in the eyes of those who are not already sceptical as to the value of official statements. But it cannot be denied that, although it may please the authorities to style the medical service of the army a "department," this restriction of sick time is an *innovation* as regards the medical officers, whatever it may be with respect to the officers of other departments. After all, what are the other departments? They are the chaplain's department, the control department, the clerks of works, and a few others. But the medical officers are not on the same footing with chaplains, control officers, and clerks of works, either in respect of their duties or of their liability to tropical service. A chaplain, for example, will seldom require to go on the sick-list, for he must be very ill indeed to be incapacitated for the performance of such duties as ordinarily fall to his lot during the week; and even if he should require to declare himself unequal to his Sunday's duty, it would be seldom that he would remain on the sick-list when the Sunday had passed. Nor are the duties of the control officers usually such as require a large expenditure of mental or bodily energy. Probably the majority of the control officers do their work in comfortable offices, where they are not exposed to the weather, and where they have no difficulty in postponing until the morrow any task to which they may feel themselves unequal to-day. Neither control officers nor chaplains have any night work, except on the rarest occasions, and whenever they are ailing they may very certainly calculate on a whole night's rest in bed. With the medical officer all this is very different. Ill or well, if not on the sick-list, he is liable at any moment to be called upon to face the gravest emergencies. He has no power of choice; he cannot postpone his serious case for to-morrow's consideration; nor can he excuse himself from turning out of his warm bed in the middle of the most inclement night when called upon by those who are entitled to his services. Again, neither control officers nor the chaplains are required to serve in India; and it is Indian service, as is well known, that breaks down the health of the medical officer and shortens his life. Lastly, neither chaplains nor control officers are exposed to the contagion of disease as medical officers are. For all these reasons it is manifestly most unjust that a restrictive rule, which has hitherto been applied only to *quasi*-civilians, should now be brought to bear upon those so much exposed to the causes of disease as medical officers.

However, it is perhaps fortunate that this season of the year has been chosen for the announcement of this innovation. The medical schools are about to reopen, and medical students will now be deciding as to their future career. Let us hope that the professors and teachers in their introductory addresses will warn all medical students against entering the medical department of the army—a department in which service is now neither pleasurable nor profitable, and for which there is clearly no prospect of better things.

I am, Sir, your obedient servant,
September, 1875. Climax.

Copy of Clause 125 *of Army Circulars, September*, 1875.

"Sick Leave of Departmental Officers.—1. When a departmental officer is sick at his station, whether in hospital or quarters, his absence from duty on account of sickness will be recorded in the form upon which his pay and allowances are drawn, *but no loss of pay or allowances will be entailed by such absence*, if duly certified by a medical officer, and *if not exceeding one month in duration*. This absence on account of sickness need not be included in the period of leave with pay allowed by Articles 442 and 448 of the Royal Warrant of 27th December, 1870, if the general or other officer commanding at the station considers that the circumstances of the case warrant such a concession."

N.B.—The original is not in italics. See Army List for September—Appendix.

Medical and Relieving Officers.

It is a monstrous anomaly of the law that in the administration of medical relief the medical officer is at the mercy or the discretion of the relieving officer, who has power to withhold articles ordered by the doctor. This relation has been the very proper subject of discussion by the Guildford Board of Guardians. They resolved to remind the relieving officer of a resolution passed by the Board in 1873, to the effect that when a recommendation given by the medical officer is refused by the relieving officer, the matter should be reported by the relieving officer to the Board. Relieving officers, as one guardian said, should be very particular in granting medical orders, and when they give them they should have very good reasons for refusing to honour the recommendations of the medical officer.

Sigma.—Our correspondent can recover for medicine and attendance. We cannot at present refer him to a case in point.

T. T.—Consult the advertising columns of this journal.

Dr. Charles White is thanked.

Mr. J. Cruickshank.—It would be against our rule to comply with our correspondent's request.

W. L. H. will find a good account of jungle fever in Reynolds's "System of Medicine," vol. i., art. "Remittent Fever."

Filth and Filters.

To the Editor of The Lancet.

Sir,—The article in your issue of Sept. 4th on "Concentrated Filth" aims such a direct blow at the system of water-filtration that we hope you will allow us a small space for a few explanatory remarks.

There can be no doubt that the present condition of the water-supply of London is all that you describe, and that the whole system of drawing water from a polluted source is a disgrace to our civilisation. Although the Water Companies nominally comply with the Act of 1852, and filter the water before delivery to the consumer, the mode of filtration adopted is so unsatisfactory that, as you justly observe, "it seems intentionally designed to ensure a subtly impure condition" of the fluid. We have in our possession samples of water drawn *directly from the mains* of five London Companies on the 3rd of May last. These samples were placed in well-stopped bottles, and when first drawn were all tolerably clear; but after standing for a few days they began to develop a large number of animal and vegetable organisms, and at this moment present the appearance of the foulest, stagnant ditch-water. It is therefore evident that the water must have contained a quantity of germs which the filtering process failed to remove, and such water stored in a cistern which the householder is too apathetic to have cleaned out, must soon get into a condition more easily imagined than described.

Of course there are plenty of people ready to suggest a remedy for the evil; and judging from the schemes which make their appearance from time to time, it would seem the easiest thing in the world to bring pure water enough from Wales or Cumberland, at a trifling cost of fifteen or twenty millions of pounds, to supply the daily necessities of four millions of human beings. But it is probable that we of the present generation shall all be in our graves before this desirable improvement can be brought into operation, and therefore paterfamilias of the period must make up his mind to put up with his present supply, and do the best he can with it under the circumstances.

Now, assuming that the house-cistern is kept scrupulously clean, we still find that the water when delivered contains sufficient impurity to render it unfit for human consumption, and the question arises, "What is the most practicable way of dealing with it so as to prevent all risk of disease resulting from its use in the household?

We all know that perfectly pure water is only to be obtained by distillation. But can distillation be made available for general purposes, and, if so, who would care to drink water so distilled? We are, therefore, thrown upon domestic filtration as the only available method of purifying our drinking-water, and that this method may be made *perfectly efficient* in depriving water of every injurious property is as capable of demonstration as that two and two make four.

Standing by the side of the bottles of water above mentioned is one containing the same water after being passed through a silicated carbon filter; and although three months have elapsed since this was done, the sample is still brilliantly clear, and will bear the most severe chemical examination, without showing the least indication of organic matter. Properly constructed, and capable of being cleaned at short intervals (every day if thought necessary), the domestic filter is the *only* apparatus at present known by which water can be effectively purified *immediately* before use; and wherever this is done, and the head of the household will take the trouble occasionally to see that his filter is kept clean, he can afford to wait patiently for a solution of the difficulty as to a better supply for the metropolis.

We are, Sir, yours faithfully,

London, Sept. 6th, 1875. The Silicated Carbon Filter Co.

Flowers *versus* Fever.

The healthful influence, both physical and moral, of the presence of flowering plants, is strongly insisted on in the last report of Dr. Ross, medical officer of health of St. Giles's district. This influence is referred to the power possessed by odoriferous plants—as the mints, lavender, mignonette, wallflower, &c.—of developing ozone, and in this way of assisting in the destruction of miasmatic poisons. The obvious inference is that, especially in crowded localities, the cultivation of sweet-scented plants should be encouraged to the greatest possible extent, in windows, forecourts, and little back yards. In the same report Dr. Ross testifies to the improved sanitary condition of the district in which he labours.

Surgeon.—We would advise our correspondent to communicate with the compiler of the Directory.

Campbell.—Society for the Relief of Widows and Orphans of Medical Men, Berners-street, London.

Dr. Kitchener has no cause to complain. The Company is not liable, as they put him upon his guard.

A Trustee.—Without seeing the site, and comparing it with other available sites, it would be extremely difficult to pronounce a definite opinion. The source of the water-supply is not mentioned. Speaking generally, it is obviously preferable to avoid the immediate vicinity of a cemetery; but the site in other respects appears to be a good one.

A. W.—It is a reliable text-book.

Mr. Geo. Fleming (Chatham) is thanked for his courtesy.

Cholera.

To the Editor of The Lancet.

Sir,—A case of cholera such as I have never before met with has occurred in my practice, the symptoms of which were so very like those of Asiatic cholera that I think it worthy of a place in your journal.

On Thursday, Aug. 26th, about 9 p.m., I was sent for to attend H. F——, residing in a colliery village about two miles from my residence, who I was informed had been ill with purging and vomiting since the night before. I found him to be a thin, wiry-looking man, aged fifty-five years. The symptoms then were purging, the stools being of a rice-water character, and vomiting of a greenish, bitter fluid. The pulse was small and weak; the surface was cooler than natural, and covered with clammy perspiration; the tongue was thickly coated with a white fur, and the tip and edges were of a dull red colour. I was informed that during the day he had been severely cramped in the legs, and that large lumps had formed on the calves. I ordered a large mustard plaster to be applied to the bowels; a mixture composed of a weak solution of soda and prussic acid, with chloric ether; and pills containing a grain of opium in each, one to be taken every two hours. The diet I ordered to consist of milk, with brandy and lime-water. On Friday morning the vomiting had entirely ceased, and all the symptoms much improved. On the Saturday he felt so well as to have (contrary to my instructions) resumed his usual diet. On Monday night I was again sent for, and was told he was then worse than before. I went, and found this to be indeed the case. The vomiting, purging, and cramps had again set in; the pulse was scarcely perceptible; the surface was quite cold, and covered with perspiration; the features were sunken, and of a dusky hue; his voice was altered much, being low and husky; his tongue was cold to the touch, and thickly coated; his urine was suppressed, he having passed none all day; his intellect was quite clear, and he answered all questions readily. A mustard plaster was again placed over the bowels, and the previous treatment resumed. Hot bottles were also placed round his body. Thinking the bladder might contain urine, I used the catheter, but to no effect. I was particularly struck with the difficulty in passing the instrument, owing to a spasmodically contracted state of the urethra. On Tuesday morning I again saw him. To all appearance he was then dying. There was no pulse at the wrist; the surface was intensely cold, as was also the tongue; the vomiting had ceased, but the purging continued; the stools were still of a rice-water character, having a most offensive odour. During the night he had passed no urine. I ordered a mustard plaster to be laid over the kidneys, and brandy and milk to be continued. At 11 p.m. he had a fit, which was followed by others until 6 a.m. this morning, when he died.

I am, Sir, yours &c.,
W. Bennett, L.R.C.P. Edin., &c.

Chester-le-Street, Durham, Sept. 1st, 1875.

A Constant Reader of The Lancet, (New Zealand.)—There is little doubt that it constitutes a nuisance.

Mr. Needham is thanked for the newspaper cutting.

Coroners' Inquests.

To the Editor of The Lancet.

Sir,—Will you kindly insert this letter in your next issue, that I may have the opinion of any of your readers on the matter, and I should be glad if you would also yourself express an opinion.

A. B——, multipara, was confined on the 16th ult. of a living child. No medical attendant had been retained, nor had a midwife. However, a midwife was fetched, who arrived about three hours after the child was born, and she removed the placenta. There was considerable loss of blood at the time, estimated at from one to two gallons. The midwife saw her twice during the next few days, and though the woman was not progressing favourably, it was attributed to "weakness," and no demand was made for further advice.

I was called to see the patient on the 25th ult., the tenth day after confinement, when I found her perfectly exsanguine, skin the colour of parchment, pulse 152, and almost moribund. I expressed an opinion to the mother and sister (who nursed her) that the case was hopeless, and that they had been guilty of gross and culpable neglect in not procuring medical aid sooner. The woman died on the 29th, the fourth day of my attendance.

Instead of certifying the cause of death to the registrar (who is an old medical practitioner in the place), I sent him a brief sketch of the case, in substance like the foregoing, concluding by asking him to "decide as to the propriety of an inquiry, or whether a certificate should be given in the usual form." To this he replied, "If you were her only or last medical attendant, it is your duty to state the cause of death on the usual form." This I at once did. Next day I received a note from the surgeon registrar, saying, "I am unwilling to take the responsibility of deciding in the case, and have therefore written to the coroner, enclosing your letter, my answer, and the certificate of death." The coroner replied, "On reading all the letters, I do not think it necessary to hold an inquest."

Now, Sir, the point on which I solicit your opinion is, whether it is not clearly a case in which an inquest should have been held—not to elucidate the cause of death, as that was perfectly clear, but to apportion the blame in such a patent case of neglect; for, as I take it, the woman's life was lost simply from the lack of timely medical aid, and this was virtually admitted by those who nursed her. It also forcibly illustrates the great want of certified midwives, as no doubt many lives are annually lost through the present ignorant female practitioners of the obstetric art.

I am, Sir, your obedient servant,

September, 1875. Fiat Justitia ruat Cœlum.

*** Supposing the above to be a perfectly correct narrative of the facts, we entirely agree with the writer of this letter, and think the coroner was very much at fault in not investigating a case which illustrates the lamentable ignorance of midwives, and the hard case of puerperal women in the poorer ranks of life.—**Ed. L.**

SHIP SURGEONS.

M.D. would be glad to be introduced to a *confrère* in London who has made voyages to the colonies as ship surgeon, and who would kindly give some information which is desired.

Nemo (Liverpool) will find the subject commented on rather fully in our number of August 7th.

ARMY MEDICAL EXAMINATION.

To the Editor of THE LANCET.

SIR,—Allow me to correct an error in your remarks of the 4th inst. relative to the candidates for the A.M.D. examination.

There were 22 candidates. One failed physically, one retired from the examination, 4 failed to pass the qualifying test, and 15 were accepted; of whom one at least did not obtain the number hitherto necessary to pass—viz., 1500, or half the total possible, 3000. The vacancies, as per Army List and Army Estimates, are fully 40. The navy had 3 candidates: one failed, 3 passed, and 3 have been taken who *qualified* for India, but for whom there were not vacancies. For India there were 10 vacancies, 30 candidates, all qualified. What a contrast! Yours truly,

September, 1875. A. M.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Mr. H. Smith, London; Mr. Hutchinson, London; Mr. G. Lawson, London; Mr. Teevan, London; Dr. Woodman, London; Mr. Burdett, Greenwich; Dr. Bland, Macclesfield; Mr. Walley, Edinburgh; Mr. Andrew Clark, London; Dr. Dunlop, Alderton; Mr. Grainger, Stoke Newington; Mr. Garman, Bow; Dr. Mahomed, London; Mr. Maskell, London; Dr. Denton, Bridlington; Mr. Morris, Leamington; Dr. Eddison; Mr. Hewetson, Leeds; Mr. Solomon, Birmingham; Mr. Bollon, Doneraile; Mr. Fenton, London; Dr. W. H. Jones, London; Mr. Wigner, London; Mr. Ellis, Newcastle-on-Tyne; Mr. Cripps, Cirencester; Mr. Hastings, London; Mr. Henderson, Rickmansworth; Mr. Bramwell, Newcastle; Dr. Kitchener, Middlesborough; Dr. Smith, Glasgow; Messrs. Levy and Co., Dundee; Dr. Dobie, St. Andrews; Messrs. Cruickshank and Co., London; Dr. Tattersall, Clayton-le-Moors; Mr. Martin, Paisley; Mr. Nelham, Poplar; Mr. Dence, London; Mr. Broome, Ruabon; Mr. Biggs, Salisbury; Dr. Hall, London; Mr. Geo. Fleming; Mr. Francis Headland; Mr. Bradley, Manchester; Dr. Arches, Stoke; Mr. C. J. Walsh, Castlebar; Mr. Dickson, Bristol; Dr. Swete, Leamington; Mr. Lupton, Stratford-upon-Avon; Dr. Royle, Milnthorpe; Dr. Jamieson, Fort Edward; Dr. Leftwich, Ratcliffe; Messrs. Reed and Co., New York; Mr. Hewitt, Cork; Mr. Wilson, Peterborough; Mr. Weston, Newton Abbott; Mr. Evans, Birmingham; Mr. Collins, Bristol; Dr. Buck, London; Mr. Thorburn, Cockermouth; Dr. Malcomson, Middlesborough; Mr. Elliot, Scarborough; Dr. Dalby, London; Dr. Allen, London; Mr. Rogers, Baldock; Mr. Callard, Bridgnorth; Mr. Smith, Shepton Mallet; Dr. Faber, Wurtemburg; Dr. Allt, Beckley; Mr. Maclehose, Glasgow; Mr. Robinson, Denbigh; Mr. Shone, Great Marlow; Mr. W. R. Smith, Winchester; Mr. Powell, Rhydlewis; Dr. Cameron, Glasgow; Mr. Sagar, Leeds; Mr. Wisken, Brighton; Mr. Legge, Aberdeen; Dr. Hetherington, Downpatrick; Mr. Holderness, Huntingdon; Dr. Taylor, Nottingham; Dr. Chance, Sydenham; Mr. Jolly, Birmingham; Mr. Ingles, Worcester; Dr. Lammeman, Tunbridge Wells; Mr. Vachell, Cardiff; Mr. Manners, Hull; Mr. Messer, London; Juvenal; A. B.; E. H.; Climax; Frater; L.S.A.; M. A. H.; M.D.; Fiat Justitia; The Director-General of the Medical Department of the Navy; Campbell; Subscriber; Surgeon; Pelham; A. Z.; A Young Surgeon; Chirurgus; M.B.; A Trustee; Quidam; G. H. O., Aberford; Not Cerberus; A. W.; Somers Town; Hope, Jubbulpore; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Lawrence, London; Mr. Slimon, Hackney; Dr. Long, Hackney; Mr. Nankivell, Chatham; Dr. Westland, Highgate; Messrs. Black and Leech, Bath; Mr. Eastwood, Blackburn; Dr. Bennett, Mottram; Mr. Wheeler, Holloway; Messrs. Lindop and Thomson, Newport; Mr. Webb, Northleach; Mr. Sharp, Woodside; Mr. Bromwich; Mr. Simpson, London; Dr. Allt, London; Mr. Etheridge, Teignmouth; Mr. W. Row, Market Overton; Mr. Dale, London; Mr. C. F. Ruiston, New York; Mr. Fisher, London; Mr. Steel, Stafford; Dr. March, Rochdale; Mr. Johnson, Southport; Dr. Harris, Leighton Buzzard; Mr. Wither, Coventry; Mr. Soars, Horncastle; Mr. Clark, Glasgow; Mr. Shaw, Attercliffe; Mr. Robinson, Ham; Mr. Murphy, Cork; Mr. Brown, Sheen; Mr. Bampton, Shepton Mallet; Mr. Le Page, Durham; Mr. Norman, Middlesborough; Mr. Brown, Ashford; Mr. Hales, Atherstone; Mr. Ironsdale, Uttoxeter; Dr. Browne, Aldborough; Mr. Holden; Dr. Douglas, Perth; Mr. Hall, Chesterfield; Messrs. Sloman, Farnham; Mr. Farr, London; Mr. Harding, London; Dr. Dixie, Lee; Mr. White, London; Mr. Wiggins, London; Mr. Worsley, Haywood; Dr. Ramsden, Manchester; Messrs. Raitill, Willenhall; Mr. Evans, Seaford; L.R.C.P., Dalston; M.D., Bayswater; M.R.C.S., London; B. S. H., Bury; Delta, Liphook; M.R.C.S., Kensington; Alpha; A.; Physician; A Constant Reader; A. Y.; M. M.; F. R. M., London; Medicus, Swansea; M.D., St. Ives; L. M., Ramsey; Medicus, Bedworth; F. S. A., Leeds; M.D., Newark-on-Trent; T. M., Milford Haven; F. M. J.; Medicus, Charlton; Scholar; C. T., London; M.D., York.

Southsea Observer, Welshman, Newcastle Chronicle, Western Morning News, Animal World, Worcestershire Chronicle, Cork Constitution, Huddersfield Chronicle, Manchester Guardian, Surrey Advertiser, East London Observer, Birmingham Morning News, Aldershot Gazette, Macclesfield Advertiser, Isle of Man Times, Record, and *Jarrow Express* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, SEPT. 16TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vàcuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Sept. 10	29·96	E.	53	56	72	65	54	...	Overcast
„ 11	30·13	E.	54	57	78	65	54	...	Overcast
„ 12	30·33	E.	60	62	99	72	56	...	Overcast
„ 13	30·25	E.	58	60	104	78	59	...	Overcast
„ 14	30·20	E.	60	63	105	72	59	...	Hazy
„ 15	30·19	E.	59	61	107	72	57	...	Hazy
„ 16	30·14	E.	55	57	...	...	54	...	Fine

Medical Diary for the ensuing Week.

Monday, Sept. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 22.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1¼ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Sept. 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 25.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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A Clinical Lecture
ON
THE PULSE: ITS DIAGNOSTIC, PROGNOSTIC, AND THERAPEUTIC INDICATIONS.

Being Lecture IV. delivered at St. Mary's Hospital in the Summer Session of 1875,

BY W. H. BROADBENT, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—My lecture to-day cannot strictly be called a clinical one; it is, however, on one of the most important subjects connected with clinical medicine: the pulse—the method of examining it, its mode of production, and the information to be obtained from it.

At every visit to the wards I call your attention to the distinctive characters of the different kinds of pulse, and endeavour to impress upon you the value of the indications, diagnostic, prognostic, and therapeutic, to be derived from these. Not to speak of heart diseases for the moment, some of you have seen, during the present session, a diagnosis of renal disease arrived at simply by placing the fingers on the wrist, reversing a first-sight opinion in the direction of syphilitic disease of cerebellum; prognosis, not otherwise obvious, based on states of pulse—of death, or of incurable condition, or of protracted convalescence, verified by the event; successful treatment by active purgation thus suggested, when the prominent complaint was of great weakness. I propose now to systematise these ward-teachings, and explain the basis on which they are founded.

I have long been in the habit of saying that the examination of the pulse was one of the lost arts till it was restored to us by means of the sphygmograph. It was with astonishment that I learnt, when I first took up the study, that every single element of the pulse revealed to us by the sphygmograph had been previously recognised by the old school of physicians, and that a nomenclature existed ready made for all its teachings. It is maintained that this knowledge has never died out, but that it has been perpetuated as a sort of tradition through a succession of able physicians; but if you look through the records of cases in the medical journals you will find that medical men have usually been content to note the rate of the pulse with the addition of an occasional more or less unmeaning remark as to its character. This was not so with our predecessors, who used carefully to describe the exact character of the pulse as recognised by the finger very much as we now do by the aid of the sphygmograph.

Mode of feeling the pulse.—First, let me speak of the mode of feeling the pulse. Three fingers should be placed lightly upon the radial artery. Attention is first to be directed to the frequency of the beats, remembering always, before forming conclusions, that the rate is liable to be influenced by position, by food or drink recently taken (especially stimulants), by exertion (particularly when the patient is weak), or by emotion or excitement. You will make allowance for these disturbing causes; and when dealing with an excitable, nervous, or weak person, keep your hand on the pulse for some time, conversing perhaps on other symptoms or on indifferent subjects, or you may examine the rate a second time, getting an idea of the frequency before looking at the watch, which, by attracting the patient's attention, may send up the pulse by ten or twenty beats. Of course, while ascertaining the frequency, you would note also the regularity or irregularity of the rhythm.

Next, or at any rate as a separate act of attention, estimate the size of the artery, whether large or small, and the resistance it offers to the fingers. I do not mean here the strength of the pulsation, but the feel of the vessel and its general condition. Carry the fingers along it longitudinally on the one hand, and, on the other, try if it can be rolled transversely like a cord. I shall describe later the indications to be derived from the size of the vessel; but I may just say here that degeneration of the artery is revealed by inequalities felt as the fingers glide along its length, and by a kind of rigidity, or if the artery imparts to the finger somewhat of the sensation of a string of beads; while undue tension is recognised by the cord-like character of the vessel during the intervals between the pulsations.

Finally, you test the strength of the pulsation, which, as I shall explain to you later, may differ greatly from the estimate derived from first impressions. I said you should place three fingers lightly upon the artery; you should now, with the finger nearest the heart, steadily exercise compression, till the wave no longer passes to be felt by the remaining fingers. The pressure should then be repeatedly or continually varied with one, two, or all three fingers—now to complete occlusion of the artery, now a mere touch,—till you form a definite idea of the force with which the blood is being driven.

The pulse: what is it?—We must now analyse the information we obtain by the simple act I have described. But, first, what is it that we feel when our hand is on the pulse? Is it an enlargement in the diameter of the artery? or is it an elongation and curving of the vessel—a locomotion, as it has been called? It is neither. I do not absolutely deny that there is lateral dilatation of the artery, or that it is in some places thrown into curves. That there is some increase in diameter in the large arteries has been demonstrated, and sinuous movements may be seen any day in the temporal arteries of an old person; but this is not what we feel, nor what the sphygmograph records. To feel the pulsation in an artery, or to take a sphygmographic trace, pressure must be applied to it; and, as you all know, we must have a bone behind it against which it can be compressed. In the intervals between the pulsations, when the internal tension or pressure by the contained blood is at its lowest, we flatten the tube of the artery more or less; then comes the wave of blood and forces, or tries to force, the vessel back to its cylindrical form; *and this change of shape from the flattened form impressed upon it by pressure, to the round condition which it assumes under the distending force of the blood within it, constitutes for us the pulse.* Such a pulse can be felt on a larger scale by the foot placed upon the leathern hose of a fire-engine in action, which, I need scarcely say, exhibits no increase of diameter or serpentine motion. This explanation is important.

Factors of the pulse. — There are three factors in the production of the pulse, and of the different modifications of it which we find in practice; and we shall only fully estimate the significance of these modifications by referring them to their respective causes. These three factors are (1) the action of the heart, (2) the degree of resistance to the passage of the blood through the capillaries and arterioles, and (3) the elasticity of the large arteries. On the action of the heart will depend the rate, rhythm, and force, or, in other words, the frequency, regularity or irregularity, and strength of the pulse. On the degree of contraction of the arterioles and the amount of resistance offered to the free passage of the blood by them and the capillaries will depend the size of the radial artery and the blood-pressure within it—in other words, the character of the pulse, whether large, short (or quick), and soft, or small, long, and hard. On the elasticity of the great vessels will depend other modifications; to each of them we must devote a few moments' consideration.

Frequency. — The heart, then, may act frequently or infrequently, regularly or irregularly; and its contractions may be abrupt and rapid, or slow and deliberate—strong, again, or weak. The frequency of the heart's action is under the control of the nervous system. Physiological experiments have taught us that the heart has a system of ganglia of its own, on which its action immediately depends; but that the sympathetic is an excitor, the pneumogastric a controller or inhibitor, of the heart. As yet we cannot apply this knowledge clinically in any important degree, as it is to be hoped we shall some day do, but only reason backwards, so to speak, and say that under given circumstances the sympathetic or pneumogastric is stimulated or paralysed, because the action of the heart is rapid or slow. We need not therefore dwell on these physiological details, but simply mention the more important clinical indications of the pulse-rate. It is not often that is rendered much slower than the normal rate for the individual by disease.*

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* This rate, as is well known, varies greatly, 72 beats per minute being the average for adult healthy males. It is more frequent in women of about eighty, and especially in children. But a pulse of 60 is often met with; sometimes perhaps of 40 or even less, or, on the other hand, of 90 or 100.

In jaundice this is sometimes the case. In the intervals of relapsing fever, in the later stages of meningitis, and notably in some instances of fatty degeneration of the heart, slowing of the pulse is met with; so also in some affections of the nervous system. But I do not know that there is much on which I need dwell. Increased frequency is infinitely more common; and, indeed, disturbing influences of whatever kind are attended with this result. Such apparently opposite conditions as pyrexia and debility alike render the pulse frequent. We have no right, perhaps, to put pyrexia and asthenia into contrast, but still they affect the pulse-rate in a different way. Pyrexia, for instance, neutralises to some extent, debility exaggerates, the effect of change from the standing to the recumbent posture.

In pyrexial diseases the pulse-rate is, as I have said, raised, and sometimes the mere frequency has great significance. It has been said to indicate the "alarm" of the nervous system at the attack; and when this expression of "alarm" or "apprehension" of the nervous system is unusually emphatic, we may be sure that the constitution has been staggered by the blow. At the onset of a fever, of whatever kind, a sustained frequency above the rate usual at that stage of the particular fever may be a long way in advance of other unfavourable prognostic indications, which, in most cases, will inevitably follow. When the pulse and temperature are apparently in contradiction, the excessively frequent pulse threatening danger, which is not borne out by excessively high temperature, it is the pulse which we must take as our guide in prognosis. On the other hand, a very high temperature would be a mark of danger independently of excessive frequency of pulse. Usually, however, the pulse and temperature coincide in their indications. It is, perhaps, in puerperal affections that this racing pulse most frequently gives the alarm, while as yet other symptoms have not assumed a serious character. Sometimes, again, an exceedingly rapid and at the same time weak pulse is the most striking feature of an early stage of collapse, and gives the first alarm. In pneumonia a rapid pulse is always indicative of danger, even though the extent of lung involved may not be considerable.

Unnaturally rapid and violent action of the heart for a short time is extremely common, and is known as palpitation. Its significance is very different in different cases; but usually it is of no great consequence. It is a familiar observation that the patients who come to us complaining of the heart, of uneasy sensations or pain in it, or of palpitation, are rarely suffering from heart disease. Nervous and weak people, women especially, suffer from palpitation on the slightest provocation. An emotion, a little exertion, flatulence, or food may set it up; or the heart may suddenly start off without any apparent cause, sometimes during sleep. Gouty and dyspeptic subjects, again, are liable to palpitation. Usually attacks of palpitation are of no long duration, but at times we meet with instances in which the unnaturally rapid action goes on for twenty-four hours or more. Dr. Farquharson has lately contributed an interesting article on this subject to the medical journals. I have also met with several similar cases. Not long ago I was asked to see a lady's maid, who was supposed to be suffering from some sudden affection of the lungs; she was sitting up in bed, with a pale and anxious face, almost gasping for breath, and from time to time coughing a single short cough. Placing my finger on the pulse I found the radial artery persistently full; but the only pulsation to be felt in it was an occasional feeble beat, or rapid succession of several such weak, small beats, followed by a pause. When I came to examine the heart, however, it was beating at the rate of nearly 200 a minute, regularly and equably, but somewhat feebly, which was not to be wondered at, as the attack had already lasted more than twelve hours. This rapid action kept the artery at the wrist full of blood; but few of the individual pulsations reached this vessel, either because they were too weak, or more probably because the brief diastole afforded no time for blood to enter the left ventricle. The usual heart-sounds were not to be distinguished; what was heard was a rapid series of short puffs, reminding me of the sound of a distant locomotive. There was nothing the matter with the lungs; the attack had been induced by over-exertion. I gave belladonna, with ammonia and ether, and the excitement of the heart gradually subsided in the course of another twenty-four hours, and it was then seen that there was no heart disease. The patient was very much shaken, and it was long before she was able to resume her work. I have seen several such cases. In one in which mitral disease was complicated by a tendency to attacks of this kind, the patient would lie insensible for hours while the palpitation lasted, the pupils being dilated and insensible to light. I do not propose to enter minutely on the indications of increased frequency of the pulse. The pulse-rate is universally noted, and receives adequate attention; and I wish to call attention more particularly to the features of the pulse which are less obvious and more neglected.

Rhythm of pulse.—Usually the pulse is regular, and the beats equal in force and at equal intervals. Departures from this rule, however, are not uncommon. They are of two kinds: intermittence and irregularity.

Intermittent pulse.—The rhythm, otherwise equal, may be broken by the occasional omission of a beat—an *intermission.* Frequently the intermission is perfectly regular, a pulsation being missing every fourth, or tenth, or twentieth beat; but sometimes we have, say, ten or twenty beats, then an intermission, and very soon another. When the intermissions are frequent—i. e., every four or six beats—they are more likely to be regular. The most remarkable instance I ever met with was in a man fifty years of age, who had two pulsations and then two intermissions. When counting the pulse, it occurred as one, two beats, then one, two intermissions. The man went out of the hospital in two or three days, to my great regret, and I was unable to make a careful investigation of the case. Intermission of the pulse is rare in young people, and I should think more seriously of it early in life. After middle age it is not uncommon; in some cases it is habitual, in others occasional only, and induced by dyspepsia, constipation, smoking, drinking, &c. One patient of mine has intermittent action of the heart produced by a particular kind of tea, another by a particular brand of cigars. Some patients are entirely unconscious of the intermissions, especially those in whom it is habitual; others feel as if the heart rolled over or stopped, and are made uncomfortable. Although the pulse is absent at the wrist, the heart's action is not usually absolutely suspended; on listening, an imperfect beat can be heard just after the last proper beat, the sounds audible being a feeble first sound and a weak pulmonary second sound. The aortic second sound is usually absent, as if the pressure in the left ventricle had been insufficient to raise the valves, while in the pulmonary artery, where the resistance is less, some little blood appears to pass.

Intermission of the heart's action is usually attributed to some affection of its innervation, and the chief cause is, according to Dr. B. W. Richardson, shock, anxiety, or grief. The subjects of this affection are apparently none the worse for it, and I have met with it in many hale old men long past the usual term of life, and some have said they have had an intermittent pulse for very many years. Still it is stated that, though equal to the ordinary occasions of life, they break down more readily, and withstand attacks of disease badly. An intermittent pulse does not contraindicate chloroform; I have often known the intermittence disappear during its administration. I am speaking always of those cases in which an intermittent pulse is not a symptom of disease in the walls of the heart, of which there are other indications.

Irregularity of pulse.—The other form or kind of departure from the normal rhythmic action of the heart is generally called irregularity: the pulse is irregular both in force and frequency; the beats are unequal in strength, and follow each other at irregular intervals. The most common and striking instances of irregularity are those resulting from mitral regurgitation. In fact, this is the condition which of all others is attended with irregular pulse. Other diseases of the heart, whether of its walls or valves, give rise to conspicuous irregularity of the pulse only when the heart is failing or when it is tried by some pulmonary or other complication; but in mitral regurgitation it goes on for years. I do not know that there is any generally accepted explanation of this, but we may seek one by the method of exclusion. The irregularity of the pulse cannot, then, be due to any structural change or functional weakness of the walls of the heart or to any derangement of the cardiac innervation, or it would accompany other heart diseases. It cannot, again, be due to simply the influence on the dilated right ventricle of the respiratory movements, or it would occur in mitral constriction, in which the right ventricle is also dilated. One cause, no doubt, is the variable amount of blood which escapes back into the auricle, or, rather, which the ventricle finds to propel into the aorta: in one systole the valves get better into position, or they are backed by good pressure in the auricle and pulmonary veins, the ventricle meets with a due degree of resistance and sends on its contents into the systemic arteries; in another, for some reason or other, the regurgitation is considerable, the ventricle has no work to do, is disappointed, contracts hurriedly, and is thrown out of step. But I am disposed ultimately to attribute it, more than to anything else, to the varying pressure on the dilated left auricle during respiration; more particularly to the negative pressure or suction action on this auricle in inspiration preventing it from contracting fully and carrying its blood on into the ventricle. But I ask myself, why have we not the same result in mitral obstruction, when the auricle is even more dilated; or in tricuspid regurgitation, when the right auricle and ventricle are similarly situated? The explanation is incomplete unless we can answer this question. I shall consider this more fully on some other occasion, but I may say briefly that an answer is to be found in the difference between the steady pressure in the pulmonary veins and left auricle in mitral constriction and the fluctuating pressure in regurgitation, and again in the fact that the right auricle receives veins from outside the chest, and during inspiratory suction fills itself from them, while the pulmonary veins, as well as the left auricle, and even in a greater degree, are exposed to the negative pressure of the active inspiration.

That the action of the heart is greatly influenced by the respiratory movements is well known, and can be made evident at any time by taking a deep inspiration or by holding the breath; and the nearest imitation of mitral irregularity of the pulse is met with in bronchitis and emphysema, in which respiration is laboured.

Other conditions attended with irregularity of the pulse are some affections of the nervous system.

Force or strength of pulse.—As to the strength of the pulse, I have told you how it is to be estimated. It is of course entirely dependent on the force of the heart's action, but the apparent strength is greatly modified by the condition of the artery. If the walls of the vessel are relaxed, its calibre is enlarged, and at the same time the general tension or blood-pressure within it is low, so that in the intervals the artery is easily flattened by the finger; under these conditions the sudden filling of the large vessel gives the impression of a very forcible pulsation, which may sometimes be corrected or reversed by finding that it is easily extinguished by pressure. On the other hand, if the artery is contracted and small, the tension will be high; it will not be flattened by the degree of pressure usually applied in feeling the pulse; the pulsation therefore will be comparatively slight; but let the attempt be made to extinguish it, and the real strength will become apparent. It is of the greatest importance that you should be alive to this.

There are circumstances in which the pulse is really feeble, and not apparently so merely, while the heart is beating with great force, and this quite independently of disease of the valves. For instance, in pneumonia or bronchitis there is often so much obstruction to the pulmonary circulation that the blood does not reach the left ventricle in proper quantity, and a forcible contraction of the ventricle has no effect on the arterial system, unless there is blood to be expelled; the pulse therefore is weak and small, and the face pale, while the action of the heart is very powerful. A similar result is sometimes produced by mere excessive frequency of the heart's action: the diastole is so short that the ventricles have not time to fill, and cannot therefore send on blood.

One more point with respect to the action of the heart. This may be deliberate or sudden. I have avoided the use of the terms "slow" and "quick" in speaking of rates of pulse, because they have a double application—to the mode as well as to the frequency of the heart's contraction; whether, that is, the contraction is deliberate, and occupies an appreciable time, on the one hand, or is swift and soon completed, on the other; or, in other terms, to the character as well as to the rate of the pulse—whether, namely, this is long, and lingers under the finger, or short, sudden, and gone immediately. The heart, of course, contracts with very different force at different times, but, the force it exerts being equal, the gradual or abrupt character of the contraction will depend entirely on the resistance it has to overcome. If this is considerable, the contraction is steady; if very slight, it is abrupt. Now the resistance is determined by the state of the peripheral arterioles, and we are coming to the consideration of this—the second great factor of the pulse.

Condition of arterioles as a factor of pulse.—You are all aware that the function of the arterioles is to regulate the blood-supply to individual parts. This it does by means of the muscular fibres in the walls of the minute bloodvessels; and under the influence of the sympathetic nerve, which is the motor nerve of these fibres, you have the muscular walls contracting and narrowing the vessels. There is also said to be an active dilatation of these vessels, not mere distension. Now not only are particular arteries relaxed or contracted, but at times general relaxation or contraction of all the vessels throughout the body occurs, though dilatation of one very large arterial area will affect the general blood tension; as, for example, of the gastro-hepatic system, after taking food, when the blood-pressure throughout the body is reduced. You will easily see the effect of dilatation or contraction of these minute arteries on the pulse. When the muscular walls of the vessels are in a state of relaxation the diameter is increased, and the pulse feels *large*. The blood is more easily and quickly propelled through a wide tube; the pulse is therefore *quick* or *short*. Finally, there being little resistance, there can be no sustained pressure; you have low arterial tension, the pulse is therefore *soft*.

If the vessels be contracted, the converse occurs in each particular: the artery feels contracted—that is, *small*,—the blood takes a longer time to travel through it, and remains longer under the finger; the pulse is, therefore, called *long*. The resistance to the passage of the blood requires high pressure for its propulsion; the pulse is, therefore, *hard*. By arterial tension or intravascular pressure is meant the pressure of the blood on the walls of the containing vessels, or the distending force within the vessels. The characteristics of a pulse of high tension are that it is small, long, and hard. But, before the pulse can be studied as a whole, the elasticity of the walls of the large arteries must also be taken into account. This equalises the blood-stream, and promotes the flow. We may illustrate this by a simple experiment:—Take two tubes, the one rigid and the other elastic. If now water be pumped through them in intermitting jets, it will issue from the rigid tube in a similar manner to that in which it entered it—namely, by jets; while from the elastic tube it will flow in an unintermitting though pulsatile stream, and a larger amount of fluid will pass in a given time. Other less obvious modifications of the pulse will best be illustrated by means of sphygmographic tracings, which we shall briefly consider in the next lecture.

BEQUESTS, &C., TO MEDICAL CHARITIES.—Mr. Richard Minter Mount, of Wingham, bequeathed £10,000 to the Kent County Ophthalmic Hospital, Maidstone, £100 to the Kent and Canterbury Hospital, £100 to the Canterbury Dispensary, and the "residue" of his estate to the Royal South London Ophthalmic Hospital. Mr. Thomas Bless Pugh, of Clapham-road, bequeathed £3000 to the Royal Sea-Bathing Infirmary, Margate, £300 to the London Fever Hospital, £300 to the Samaritan Society of St. Thomas's Hospital, and £10,000 Consols, at the death of his wife, to the Medical Benevolent College at Epsom, for the creation of pensioners to receive annuities without residence. The Rev. Henry Charles Morgan, of Goodrich, Herefordshire, and Oakfield, Berkshire, bequeathed £1000 each to the Royal Berkshire Hospital, the North London Consumption Hospital, University College Hospital, Middlesex Hospital, London Hospital, St. Mary's Hospital, St. George's Hospital, Queen Charlotte's Lying-in Hospital, Lock Hospital, Westminster Hospital, King's College Hospital, Royal London Ophthalmic Hospital, Earlswood Asylum for Idiots, Hereford Infirmary, Society for the Relief of Widows and Orphans of Medical Men, and the Ross Dispensary; and £100 to the Metropolitan Free Hospital, Devonshire-square. Mr. John Spriggs Morss Churchill, of Pembridge-square, bequeathed £500 each to the Royal Medical Benevolent College at Epsom and the Medical Benevolent Fund.

Clinical Lecture
ON
SOFT CHANCRES IN THEIR RELATION TO SYPHILIS.

By JONATHAN HUTCHINSON, F.R.C.S.,
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(*Concluded from page* 410.)

Amongst the important practical questions which are connected with this subject we have chiefly—1st, At what period in the course of a chancre can the surgeon venture an opinion as to its nature? 2ndly, Are the characters of the two forms of chancre, soft and hard, often mixed? And 3rdly, Can a chancre which presented at one stage all the characters of a soft one subsequently become indurated? If I have made my meaning clear in what I have already said, you will be at no loss to find an answer to these questions. My position is that the soft sore results simply from pus-contagion, this pus being more or less peculiar, and its peculiarities being due to its having originated in syphilitic inflammation. I have insisted that this pus may or may not contain the germ-matter of syphilis. We are therefore much in the position of a farmer who sows in his field two seeds mixed together of very different rates of germinating power—clover and barley, for instance. The one which grows quickest is the one which first attracts attention, and it may be that one conceals the other. So it is if the fluid which conveys syphilis be an admixture of contagious pus and the specific germs of the true disease. The pus will irritate directly; the syphilitic germs need their period of incubation. Thus you will have first an inflamed pus-secreting ulcer, entirely free from induration. This may go through its course and heal, and then, at the end of a month, when the syphilis-incubation period is past, you may find proof in the induration which comes on that another and wholly different kind of seed had been sown at the same time. It is much the same as with the farmer when he cuts down his barley and finds the clover growing at the bottom. I might carry this agricultural simile yet further, and might remind you that if the barley has been particularly heavy, if it has been laid and matted, it may kill the clover altogether. It is just so when a contagion of mixed material occurs in syphilis. If the soft sore is a very bad one—or perhaps I ought to use the reverse epithet,—it may altogether destroy the germs of the other poison which were implanted with it. Probably in this way many a soft sore does really prevent the development of a hard one. In practice, however, this happy result is by no means universal, and it is a very common event to see a transitory soft sore followed by specific induration.

Let me here insist upon the extreme importance to the reputation of the practitioner of the rule never to give an opinion as to the nature of a chancre until the incubation period is over. Patients will come to you with sores contracted a few days or a week or two before, and will expect you to be able to tell them whether or not they are likely to have syphilis. Now, there is never anything in the conditions which are either present or absent which will justify the most practised observer in giving any opinion at such a stage. It is very rare indeed that an infecting sore acquires any induration within three weeks of the date of contagion, and more commonly it is a month or five weeks. Until such induration takes place, nobody can tell whether it is coming or not.

Very various indeed are the conditions which may have been present during the preceding period. Your patient may have had a soft sore, which may have been severely inflamed, or even phagedænic; he may have had a bubo, and that bubo may have suppurated; or he may have had no sore at all, and no bubo. Let your rule be, I repeat, to give to your patient no opinion whatever as to his chance of escape until he can assure you that it is one month since his last exposure to risk. It is a matter of constant experience to be told by patients that the medical man first consulted assured them that the sore was only a soft one, and would not infect; and, under such circumstances, it is always very difficult to restore the patient's confidence in his adviser's knowledge. If the contagion of syphilis were always effected with the same care as to purity of the virus as is exercised in the case of selection of lymph for vaccination, it would not have been necessary to teach this doctrine of caution now. No one thinks of speaking as to the prospect of the success of vaccination during the first few days, nor would he be able to do so even so soon as that were it not that the vaccine vesicle is enabled to develop itself uncomplicated by other morbid processes. It is not so, however, with syphilis, and hence the variety of the results which we witness during the first two or three weeks after contagion. If the virus be introduced in a pure, or almost pure, state, then it is probable that in many cases the patient experiences nothing excepting, perhaps for a few days, a little red pimple, which disappears, and leaves him, as he thinks, quite well for another three weeks or a month. At the end of that time the part begins to itch a little, and again becomes red, and gradually within a week or so a well-characterised induration is developed. If, however, the contagion have been effected by a mixture of contagious pus and specific virus, then you have a very different course of things. Within the first few days the contaminated part may inflame sharply, and an ulcer may result which will probably send the patient in great alarm to his surgeon. This sore is, of course, soft; it secretes freely, and its secretion may contaminate other parts, and you may have what are termed multiple soft chancres. You may inoculate it, if wished, on the patient's skin, and produce other similar sores, and thus prove that you have to do with a non-specific secretion. But all this does not prove that the specific poison is not there, and whatever may be the course of these soft sores, whether easy to heal or obstinate, there remains the risk that specific induration may ultimately be developed. Probably the worse the sore, the more the inflammation, and the deeper the ulceration, the greater is the patient's chance that the specific virus may be thrown off; whilst if the sore heals in a few days the danger of true syphilis is considerable. We often, from patients who are the subjects of tertiary disease, hear the statement that the original sore healed in a week, and gave scarcely any trouble. Such cases are, I suspect, examples of the early healing of a conspicuous soft sore, which was followed some weeks later by an inconspicuous and unobserved hard one. Should the soft sore, however, be of protracted duration, it is, I suppose, possible that its characters may extend over the whole period of induration proper to the specific one. Under these circumstances the characters of the specific sore may be masked, and even good observers may never have been able to detect the characters of specificity in sores which yet proved infecting. At any rate, I am sure that you must be prepared to find that occasionally syphilis will follow from sores which you have had frequent opportunities of examining, and which from beginning to end you had thought to be soft and suppurative. If the sore should not only ulcerate, but become phagedænic, it is then usually quite impossible to diagnose induration; yet, under such circumstances, secondary symptoms often, or indeed usually, follow.

If the argument which I have used be correct, it follows that whenever you detect induration you will be certain that constitutional syphilis will follow, but that, however sure you may be of the absence of induration, you can entertain no security unless a long period has elapsed. You will ask, naturally, If this be so, would it not be well, bearing in mind the very serious consequences which syphilis entails, to deal with all soft chancres as if they were infecting ones? Candidly, my belief is that there would be great wisdom in adopting this rule, at any rate so far as local applications are concerned. In very many cases I have no doubt that the soft sore occurs exactly over the site of a coming induration; and should your patient consult you within a reasonable period of the exposure to contagion, I cannot but think that it is good practice to destroy it by deep and free cauterisation, rather than to attempt merely to make it heal. Some of the published records of attempts at abortive cauterisation of chancres prove that it is not possible in all cases to prevent the subsequent development of induration; but a few failures of this kind by no means make it certain that the practice would not be productive of good results in the long run. It might fail sometimes and succeed sometimes. It unfortunately happens that we should know when we failed, and should never know when we succeeded. It is very difficult, however, to believe that the progress of imbibition of the syphilitic virus is so rapid that there is no stage during which it exists only in the contaminated spot. How long this stage may be it is exceedingly difficult to tell, but for the present I cannot but think that it is wise to act as if it comprised the first week or ten days after inoculation. I have been alluding hitherto only to treatment with the object of utterly destroying by cauterisation the portion of tissue in which the poison is suspected to lurk; but there remains the question as to how early we ought to attack the virus by its antidote. It is, I am glad to believe, becoming increasingly the rule of English practice to give mercury as soon as ever specific induration can be recognised; but it is quite possible that we may, in the future, go further than this, and think that it is best to prescribe this remedy for all sores occurring within a month of contagion. We should no longer do so under the impression which formerly prevailed, that it was necessary in order to make the sore heal, for we now know that the soft sore is not syphilis, and cannot be influenced by its specific. The reason for giving it would be the fear that the patient may be passing unnoticed through the incubation stage of a true chancre. The soft sore proves that he has been contaminated with venereal pus, and shows that it is not improbable that he may have received the syphilitic virus also. It is quite possible that the antidotal efficacy of mercury may be much greater in the early stage than in the later ones. I wish, however, to have it distinctly understood for the present that I am merely suggesting, and not recommending. I am often pressed by patients to allow them to take mercury on speculation for soft sores, but hitherto have for the most part declined to do it; my reason being, that until some proof has been afforded that we have to deal with true syphilis, we have no data by which to determine the requisite length of treatment.

THE

TREATMENT OF SECONDARY AFFECTIONS OF THE HEART.

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THIS class of affections of the heart is a very large one, becoming of more and more importance as the power to recognise such affections enlarges. This form of heart ailment, for it is not strictly correct to term it "heart disease," is largely found in persons of advanced life. It is this class of affections which has been found so intractable to the well-worn remedial measures ordinarily in use. The consequences of such measures usually were very unsatisfactory; often, indeed, the results of treatment were a condition more intolerable than the primitive one for which relief was sought. That such should be the case is in no wise incomprehensible when we reflect upon the very imperfect physiological knowledge of most practitioners; and when we consider how physiology held the only key which would unlock the approach to a knowledge of how the heart could be affected secondarily, and how accordingly the plan of treatment was to be directed.

It is not the writer's intention to allude in this place to genuine neurosal affections of the heart. In order to make clear what secondary affections of the heart are, it will be necessary to review briefly some points in connexion with the circulation. The heart in its contraction, or rather in the contraction of the ventricles, and more especially the left ventricle, has to overcome the resistance offered to its contraction by the fluid contents of the arteries. If the arteries are tensely filled with blood a more powerful ventricular contraction is required to force the blood from the ventricle into the arteries than is necessitated when the arteries are comparatively unfilled. This is intelligible enough; it would be surprising if it were not so. Conditions of sustained high arterial tension usually result in hypertrophy of the left ventricle, as is seen so commonly in chronic Bright's disease. Under these circumstances the hypertrophy is not a disease—it is a compensatory growth; and it is a fortunate circumstance for the patient that such growth is set up. Unfortunately, however, some confusion exists on this matter, and one man regards this hypertrophy as a disease, and speaks of it as such, while another has learned to recognise in it a conservative growth by which the patient's existence may be prolonged, and consequently he neither regards it nor speaks of it as a disease. This apparent antagonism of medical opinions is often very perplexing to the patient, and it is very desirable that a more distinct understanding should exist on this matter. If the different medical gentlemen could only have an opportunity of talking the matter over together, the apparent contradiction would vanish, and this result would be very acceptable to the patient.

Where such hypertrophy exists in good degree, the rule is that the patient does not feel ill, and consequently does not consult the profession. At other times the heart is unequal to the demands upon it, and consequently falters. Then the patient goes to a medical man for aid. If the resistance offered by the blood already in the arterial system is greater at one time than another, then there usually results a condition of matters of this kind: at times the heart is equal to the successful overcoming of the resistance offered to the ventricular contraction, and the patient feels well; at other times the heart is not equal to the effort required, and then palpitation, a laborious effort, or irregularity in the heart's action is induced, which alarms the patient and leads to his consulting his medical man. If the true state of matters be not recognised, that consultation will be of small avail to the patient.

It is obvious enough that under these circumstances the heart is not primarily at fault, and that the correct treatment is not to spur on the heart, but to relieve the condition which causes the heart to give evidences of lack of capacity. In order, however, that this may be done, it is absolutely requisite to bear in mind clearly the physiology of the circulation. The heart is a hollow muscle which, by its contraction, throws a certain quantity of blood rhythmically into the elastic arterial system. By virtue of its elasticity, the arterial system maintains a steady flow in the smaller peripheral vessels. All arteries contain muscular fibre; in the large vessels the muscular fibre is present in but small proportion; in the smaller vessels the wall is comparatively muscular. By contraction of the muscular walls of these smaller vessels their lumen is diminished, the blood-flow through them is obstructed, and then the blood-pressure in the larger vessels rises,—in other words, there is an increase of arterial tension, and then the heart is involved; the ventricle must either contract more powerfully or the heart is embarrassed. If the ventricle is equal to the demand upon it all is well, and the person is unconscious of the working of his heart; if not quite equal to the demand, the heart's action will probably attract the attention of the individual.

It is only within the last few years that we have known anything accurate about arterial tension. We were all familiar with the firm, incompressible pulse of well-filled arteries, and the slow steady action of the heart which accompanies this condition in health; and also the opposite condition of unfilled, easily-compressible arteries, with the fast action of the heart which goes along with this state of matters. More recently, however, the invention of the sphygmograph has rendered the varying condition of the vascular system more demonstrable, and even written them on enduring tracings. These tracings are not mere matters of curiosity. They form ocular demonstrations of the condition of the arterial system; they are faithful witnesses of the actual state of matters, and their testimony undergoes no impairment of accuracy by time—there is no traitorous memory to fear in their case. In 1866 Dr. Lauder Brunton observed, by means of the sphygmograph, that during an attack of angina pectoris the blood-pressure rose. Hitherto this terrible affection had been regarded as a primary failure in the heart itself. All the remedial measures usually employed in these cases were tried, and proved simply useless, and the man was about to leave the Edinburgh Royal Infirmary unrelieved, when a bright thought crossed Dr. Brunton's mind. He bethought him that experimental research had revealed an agent which dilated the arteries, and especially the small terminal arterioles. Theoretically, this agent should counteract the arteriole contraction, on which the increased arterial tension rested, and so relieve the embarrassed heart. The result demonstrated the correctness of the inference, and the dreadful attack was at once shorn of its terrors. This beautiful practical application of knowledge, reached by physiological experiment, attracted at once the attention of the late Dr. Anstie, and he tried this remedy in a similar case with like results. This correct synthesis erected by Dr. Brunton has opened up a much wider field in the territory of therapeutics than was ever anticipated by him at the time. Not only is nitrite of amyl—as this agent is termed—achieving great results for itself, but it has pointed out a new direction, a new line of practice, for the successful treatment of a very large class of affections of the vascular system. The relief of an embarrassed heart by abolishing the condition of the terminal vessels by which this embarrassment was brought about, was the foundation-stone of what promises to be a goodly therapeutic structure.

It has long been known that hypertrophy of the left ventricle was very common in chronic Bright's disease, and that in such cases the muscular wall of the arterioles was also thickened. The researches of Johnson, Traube, and Grainger Stewart have established this beyond dispute. The obstruction offered to the blood-flow by these hypertrophied arterioles stands in a causal relationship to the ventricular hypertrophy. Not only so, but a rise in arterial tension is found to be the cause of much disturbance in the heart. Especially is this the case in persons of middle age and of advanced life. It is in them that we find the true angina pectoris—not mere neurosal angina,—whether in its fully developed or in its imperfect forms. Its fully developed form is a comparatively rare but well-marked disease; its imperfect forms are very frequent, variable, and more or less obscure affections. What is practically worse, these forms of imperfect angina are but badly understood, and, from their rooted antipathy to the study of physiology, many practitioners are even unaware of the actual existence of such conditions of the vascular system. Having once learned to recognise the forms of the affections of the heart dependent upon increased arterial tension, their detection and the appropriate treatment suited to them become easy and effective. Cases that before were intractable and unintelligible are now recognisable, and consequently can be beneficially treated. It has been found that to spur on the heart in these conditions by digitalis and iron produces a hammering action of the heart—an additional cause of distress—in many cases, while in a few or none is relief experienced. As a matter of fact, it is not good treatment in such cases to approach the heart first, but rather to reach it indirectly by removing the condition of the arterial system which embarrasses the heart. Once remove the abnormal condition in the peripheral vessels, and then the blood-pressure in the arteries falls and the heart is relieved.

The conditions under which abnormal arterial tension is produced are chiefly those of lithiasis and hysterical spasm of the arterioles. A low temperature produces an increased arterial tension from the contraction of the cutaneous vessels. This was well seen in a patient of mine at the West London Hospital, who suffers from aneurism of the ascending aorta. He observed himself that during the cold weather of last Christmas the tumour was more prominent, and the pulsation more distinct; while in the warmer weather which followed, the aneurism was quieter, less prominent, and its pulsations calmer. When there is a rise in the arterial tension, the heart will be less or more embarrassed according to the amount of the rise on the one hand, and the condition of the heart on the other. If the rise be great, even a strong and hypertrophied heart will palpitate and give out active evidences of its incapacity to cope successfully with the increased obstruction to be overcome at each systole. If it be small, the strong heart will not render its owner conscious of what is going on. But if that heart be but hypertrophied to a slight degree only, the lesser rises of arterial tension will embarrass it; if there be no hypertrophy, and the heart be feeble or dilated, slight rises, like slight efforts, will call out evidences of cardiac adynamy. It is obvious that betwixt the two extremes a multitude of combinations is possible, and, as a consequence, each case has to be carefully appraised as to its different factors, after it has been relegated to a certain class. This it is, in these cases, which tests the knowledge of the medical attendant—firstly, as to his general acquaintance with this class of ailments; and, secondly, as to his capacity to estimate the exact requirements of each individual case.*

It also does not follow that in chronic Bright's disease there is necessarily a purely hypertrophied left ventricle, especially in women; in them it commonly happens that there is a tendency to dilatation. Consequently, when there is any accumulation of nitrogenised waste in the blood, producing arteriole spasm and a heightened blood-pressure within the arteries, there are evidences of cardiac embarrassment present. When there is genuine hypertrophy of the left ventricle there is usually good general health, fair and often great capacity for exertion, an atheromatous condition of the arteries—a slow and gradual pathological change,—and a liability to apoplexy from the high arterial tension rupturing the thin-walled cerebral vessels. In these cases the heart only becomes an object of attention after fatty degeneration of its structure has cut down the capacity furnished by the hypertrophy, and that is in the later stages of the malady. But when there is not genuine hypertrophy, but only a combination of hypertrophy and dilatation, in various proportions, the cardiac complications often attract attention, and call for treatment. These cases form a large proportion of the cases of heart trouble in persons at or over middle age which we are called upon to treat; and, for successful treatment, it is absolutely necessary that the exact pathological condition be recognised, and the indications for treatment so furnished be correctly estimated.

(To be concluded.)

CONTRIBUTIONS TO AURAL SURGERY.

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No. II.—ACCIDENTS TO THE EAR.

(Continued from vol. i., p. 753.)

An account of accidental rupture of the tympanic membrane would be incomplete if mention were not made of this injury as a very frequent result of injudicious attempts which are at times made to extract a foreign body from the external auditory meatus. Any out-patient room devoted to affections of the ear, and every-day experience, will afford ample evidence of the occurrence of such mishaps.

When a child has, or is believed to have, a cherry-stone, a bead, a piece of slate-pencil, a stone, or what not, in the ear, the proceeding which is commonly adopted to effect its removal consists in laying the child down on the side opposite the ear to be operated upon, and some sort of forceps or other instrument ingeniously constructed for the purpose is pushed into the meatus with the well-meant intention of seizing the foreign body and withdrawing it. What then often happens is this. The foreign body, not being immediately captured, on the first touch of the instrument slips down the deep curve which the floor of the bony part of the meatus takes in the direction of the tympanic membrane. A little further groping in the dark now readily ruptures the membrane, and this may be, and often is, effected at leisure if the patient is placed under chloroform; for, inasmuch as the process is extremely painful, it is found that he or she will not submit without so much struggling as to be embarrassing to the operator. The oozing of blood from the meatus will show that the membrane has given way, and in the course of a few days this is still further evinced by the appearance of a purulent discharge from the ear.

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* The widely different prognosis in various conditions of hypertrophy and dilatation—where the objective symptoms are alike,—according to the accompanying general conditions, was shown in a communication by the writer to The Lancet in May (16th and 30th), and June (6th), 1874.

The frequency of such *accidents* (if such a term is applicable) may be gathered from the fact that during the past session, out of five cases which applied on two successive out-patient days at St. George's Hospital, three on one day and two on the other, the course of events had taken place in the manner described in four. In the first, a small stone had been pushed through the membrane into the tympanum during the course of four attempts which had been made to remove it, two without chloroform and two with. In the second case, a bead had been pushed through the tympanic membrane. In both instances the meatus was very much swollen, there was a purulent discharge from the ear, and in the course of three weeks, when the swelling had subsided, and the ears had been daily syringed by the children's mothers, the stone and bead respectively came out, leaving of course considerable deafness. In the third case, where no attempt had been made to remove it, whilst light was reflected through the speculum, a stone was seen and readily removed with a small pair of ring polypus forceps. In the fourth and fifth cases there was no foreign body in the ear, but the account given by the children and their parents had been thought sufficient to justify interference, which was followed, of course, by a result similar to that which had occurred in the first and second cases. Numbers of such examples might be brought forward, but these will suffice to show how exceptional it must have been for the past generation of students to be taught a simple and ready mode of examination of the external auditory canal. Such an explanation of the *accidents* here mentioned can be the only one admissible, for it is otherwise inconceivable that such surgery could be possible in the present day.

In connexion with this subject, it cannot be too forcibly impressed on the minds of students that by the help of an ordinary ear speculum and an eight-inch focus reflector, the entire meatus and tympanic membrane can be so illuminated that the presence or not of a foreign body may be demonstrated beyond doubt, and that no attempt whatever to remove it should be made unless the canal is at the time thoroughly exposed to the sight of the operator by means of a similar reflector fastened to his forehead by a band round the head—in fact, a laryngoscopic mirror. With this precaution, and ordinary care in the handling of any instrument, the rupture of the tympanic membrane or other injury should be impossible; and, inasmuch as all manipulations should be painless, an anæsthetic becomes necessary only in the case of very young children in order to ensure perfect stillness.

Occasionally, however, even with these precautions, the removal of a foreign body from the ear is extremely difficult. This is especially so when it has passed beyond the part where the floor of the bony canal dips downwards, as then it at once slips to the further end of the meatus and is not easily laid hold of. If the object is small, and lying loose in this situation, it will often come out by simply syringing. If it has rugged edges, some point of it may be seized with small rectangular forceps; sometimes a loop of wire can be passed beyond it, and so it may be withdrawn. I have removed cherry-stones, pieces of slate-pencil, and other objects, that will roll, but are grasped with difficulty, by the help of a small steel hook; and when a foreign body has been lying in close contact with the membrane, have resorted to a plan some time since suggested by M. Löwenberg, of Paris, and to which reference was made in a former communication to THE LANCET in 1872. "The end of a rod is dipped into melted glue; the point thus armed is held in contact with the foreign body until the glue has hardened (about twenty minutes suffices for this); the rod is then withdrawn, bringing away with it the foreign body." In short, after a good view has been taken of the object to be removed, some one of many modes of procedure will usually suggest itself as the most appropriate in the case under notice; and if one fails, another must be tried. It should also be remembered that no harm will happen by waiting, for, often enough as the ear has been injured by attempts at help, if not interfered with, most things that find their way into the auditory canal (lined throughout as it is with skin) are of themselves as harmless as if held in the hand. Exceptions to this are very rare. Amongst them I may here refer to a case which I reported in the "Transactions of the Clinical Society," in which some plaster of Paris in a semi-fluid state was accidentally poured into an ear, and, rapidly becoming hardened, was only removed after a great deal of anxious trouble; and to another curious instance of the same class of accident, in which, during the past year, I removed, on three different occasions, a piece of a needle. Each piece was deeply imbedded beneath the skin of the meatus, rather more than half way down the passage, and when taken away the three pieces made up the entire needle. The patient, a young lady, had complained for a long time of great pain in the ear, and on examination a very small piece of the needle could just be detected appearing through the skin; this was seized with forceps and withdrawn. The other two pieces were taken out in like manner some days later. No history whatever to account for the presence of the needle could be obtained. From the position of the pieces they could not have been put in by the patient, and indeed there were no grounds for suspecting this.

The mental distress which persons often exhibit from the idea of having something in the ear is familiar enough to us all; and, especially with women, it is not always easy to convince them of their mistake after an examination of the meatus has shown their fears to be groundless. Sometimes whilst picking the ear with a pin they prick themselves, and, dropping the pin, believe it to have been left in the ear. No doubt the energetic endeavours which are made to extract the pin are not unfrequently urged upon the operator, whose ignorance of the whereabouts of the pin is no bar to his enterprise. Within two weeks of writing this I had occasion to examine the ear of a young woman supposed to have a pin in her ear, whose tympanic membrane had been lacerated in the course of a prolonged attempt (which it was proposed to repeat that day) to extract it. As might be expected, there was no pin in the ear. When a foreign body is found impacted in the meatus, it has become so in consequence of considerable violence being used, either at the time it was placed in the ear or subsequently, and no attempt should be made to remove it until all the irritation thereby caused shall have subsided. When it is added, that so lately as during last year a case was recorded in which a child died from meningitis induced by violent measures which were used to extract a stone from the ear, enough will have been said to show the urgent necessity of warning students of the injury they may do, in regard to these cases, unless they proceed with such caution as common sense would seem to dictate, but which does not appear to have received such general attention as is desirable.

Savile-row.

CASE OF

ACUTE CONGESTION AND INFLAMMATION OF THE LIVER;

RAPID INCREASE OF SIZE; EMPLOYMENT OF ASPIRATOR, FOLLOWED BY CONSIDERABLE AND PROMPT RETRACTION OF THE LIVER.

BY HENRY BLANC, M.D., M.R.C.P.,
SURGEON-MAJOR H.M. INDIAN ARMY, SUPERINTENDENT OF THE YERROWDA CENTRAL GAOL.

AGA KYENK-KHAY, a Burmese life convict, aged forty-eight, blind, and seven years in gaol, was admitted into hospital on the 19th of June last with intermittent fever. On account of his blindness this man did no work. He was soft and flabby; but, apart from previous slight attacks of intermittent fever, he had generally enjoyed good health. His present attack was a mild one. On the 22nd of June he complained of pain in the right hypochondrium. A perceptible hard swelling was found to exist in this region, extending laterally and upwards towards the epigastrium and downwards towards the umbilicus. On percussion, dulness was found to begin *anteriorly* a little to the right of the ensiform cartilage, extending downwards in a straight line for about four inches; *laterally* the dulness could be followed some seven inches along the margin of the false ribs, and extending *vertically* from the upper margin of the tenth rib to four inches below it. The swelling occupied the space included between these lines. Deep pressure provoked considerable pain; and percussion, however gently made, was very painful. Measurement across the base of the thorax, keeping over the tenth rib, gave thirty-one inches; and two inches and a half below the false rib and over the most prominent part of the swelling it gave thirty-two inches. Skin cool; temperature under the tongue 96 2°. Pulse small, without resistance, and infrequent. Heart's action very weak; beat of apex not visible nor felt. No cough. No abnormal sound in chest. Breathing weak; respiration 22. He does not sleep at night on account of the pain in the side. Bowels costive; tongue dryish; appetite bad. Urine scanty, light-brown, and slightly acid; density 1025; slight cloudy deposit by heat and nitric acid; no bile pigment. Ordered a mild saline and carminative aperient; an ounce of brandy, the yelk of two eggs, and half an ounce of white sugar, in a pint of milk—half to be taken morning and evening; a diet of rice and mutton broth; also fomentations to the side, followed by the application of collodion.

24th.—Improvement in general condition. The pulse is better, more resistant; bowels freely open; appetite improved; tongue moist. Pulse 90; respiration 34; temperature in armpit 97·2°, in rectum 10°. The breathing is somewhat frequent; no cough; no dulness on percussion; no abnormal sound. He complains of considerable pain in the hepatic region; the swelling has increased and is more globular; no fluctuation. Measurement: Along tenth rib, 34 inches; two inches and a half below false ribs, 34 inches.

Dr. Cruickshank and Dr. Simpson, who kindly saw the patient in consultation, were with me of opinion that the swelling was due either to the presence of a deep abscess or to considerable congestion proceeding to inflammatory action. The man's general condition was not favourable. His habit of body, caused by his forced sedentary life, would alone have made the prognosis doubtful; the heart was evidently very seriously affected, and had almost lost its propulsive power. Relying on the favourable report given by Professor Maclean, of Netley, on aspiratory punctures of the liver, we agreed to operate, believing that, even should we fail to give relief, still we possibly could do our patient no harm. With No. 2 trocar of Dr. Potain's aspirator, a puncture was accordingly made in the most prominent part of the swelling—i. e., three finger-breadths and a half below the right false ribs, and four finger-breadths from the mesial line. About an ounce of black blood was withdrawn, and, under the microscope, we observed mixed with it a few pus-globules.

25th.—Morning: Passed a good night; pulse fair; less pain on percussion. Temperature in rectum 102°; pulse 92; respiration 26; urine slightly albuminous.

26th. — Evening: Temperature, rectal, 100; pulse 90; respiration 26. Continue stimulant draught. He had passed a good day.

29th.—Did not sleep last night; complains of much pain in hepatic region. Pulse firm, more resistant, 90; rectal temperature 100°, in axilla 98 . Treatment: Application of eight small caustic issues to the side; mild saline aperient, with carminative in the morning; continue brandy-and-eggs; two grains of opium at night.

July 1st.—For the last two days he has felt less pain and sleeps well; the appetite is pretty fair; œdema is making its appearance in different parts of the body, specially in the left leg and arm. Continue brandy, eggs, and same diet.

2nd. — Liver decreasing rapidly in size; measurement along tenth rib 29 in.; two inches and a half below, 30 in.; general anasarca more marked. Pulse very small, infrequent, regular; urine scanty, high-coloured, albuminous; temperature in rectum 100°, in axilla 97°. Continue eggs, brandy, and a stimulant draught to be given in small doses frequently. Diet: sago, conjee, and milk.

11th. — Passed a restless night; anasarca increasing; serous effusion in pleural and abdominal cavities. Pulse filiform; temperature in axilla 97°, in rectum 100°. Intellect clear. Gradually sank, and died at 3.30 P.M.

Autopsy, fifteen hours after death (assisted by Dr. Simpson, civil surgeon, Poona).—Head not opened.—Chest: The walls of the thorax œdematous. On opening the cavity of the chest the lungs were found small, somewhat retracted, healthy, with but slight congestion of inferior margin; about half a pint of fluid serum, with fat-globules swimming over it, existed on both sides; old adhesions were found existing between the lungs and the walls of the chest, some so very strong and resistant that they had to be divided with the knife; weight of lungs, two pounds and a half. The pericardium was adhering to the heart intimately, and in some parts was dense, hard, almost cartilaginous. The muscles of the heart had in many places entirely disappeared through fatty degeneration; they were pale everywhere, and presented the appearance of a pathological specimen that had remained for years immersed in spirit. Valve dotted with fat. Weight of heart, with pericardium, seven ounces.—Abdomen: The stomach and bowels were much inflated; the peritoneum was slightly injected in places, more so along the greater curve of the stomach; no effused lymph, but a certain quantity of serous transparent fluid escaped when the abdominal walls were open. The liver was almost entirely hidden under the false rib; the left lobe was small and flat, the right was flattened, presenting a thin border extending irregularly below the false ribs for about an inch. The liver was of bright-yellow colour, hard, and leaving a fatty layer on the knife; it seemed *ex sangue;* the external covering was in places thickened, and here and there it had contracted intimate adhesions with the diaphragm. Through the cellular and intervening tissues the puncture could not be traced; on the liver itself a small punctured cicatrix was found, corresponding in a perpendicular line with the external cicatrix, but several inches higher up, and just on the margin of the false rib. Neither here nor anywhere else could any traces of recent inflammation be found. Weight of liver three pounds and a half. The gall-bladder was elongated, hard, and contained about an ounce of very thick, dark bile, looking very much like pitch in colour and consistency. The kidneys weighed four ounces; there existed some slight injection of the pyramids; the cortical substance was healthy, except towards the inferior extremity, where hard patches were found surrounded by a fatty unvascular tissue. The muscles of the abdomen were pale, flabby, streaked with fat, and in some places the muscular tissue itself had undergone fatty degeneration.

Remarks.—The case is interesting, as showing how very harmless puncture of the liver really is, and it exhibits in a remarkable manner the influence of local bleeding on a liver gorged with blood. Although the symptoms indicated in some degree the existence of an abscess, none was found, but, from the presence of pus-globules in the blood withdrawn, it is evident that before long such a result would have occurred. *The liver was punctured three and a half fingers' breadth—say two inches—below the false ribs,* and at the post-mortem examination the liver was found so much reduced in size that its flattened edge hardly extended half an inch below the ribs; *the cicatrix of the puncture was seen hidden by the walls of the thorax,* whilst the symptoms observed during life, as well as what the autopsy revealed, proves clearly how rapidly the congested and inflamed liver recovered its normal condition after the puncture was made. The amount of blood abstracted was small—not more than an ounce. It seems as if the withdrawal of this small quantity of blood were sufficient to assist the overloaded hepatic vessels, and gave the required impetus to the languid circulation of that organ. Death was due to anasarca, the result of extensive fatty degeneration of the heart and muscular tissues generally, and it was in no respect hastened by the operation, which may have had, even in this fatal case, rather a beneficial effect than otherwise.

REPORT OF A SUCCESSFUL CASE OF THE

APPLICATION OF ESMARCH'S BLOODLESS SYSTEM TO THE TREATMENT OF ANEURISM.

By Staff-Surgeon WALTER REID, M.D., R.N.,
ROYAL NAVAL HOSPITAL, PLYMOUTH.

(*Communicated by the* Director-General of the Medical Department of the Navy.)

J. F——, aged thirty-seven, chief boatswain's mate, was received from H.M.S. *Arab* on August 10th, with a left popliteal aneurism, of the sacculated variety. The tumour had attained a considerable size with strong pulsation. It was caused by a strain incurred three weeks previously while lifting sails.

Strict rest, with farinaceous diet, were first enjoined, and on the 19th treatment by genuflexion was commenced. On the 23rd this was abandoned, owing to the severe pain and œdema of the leg which it caused. On the 26th two Carte's compressors were applied, one to the main trunk at the pelvic brim, the other at the apex of Scarpa's space. After four hours' continuous compression, pulsation in the aneurism ceased, but shortly afterwards returned. Numerous attempts have since been made by various forms of compression to arrive at a cure, but without success. Pulsation continued, and the swelling did not sensibly diminish. The aneurism was apparently being supplied to a certain extent by the collateral circulation.

On the 10th of September, having performed a protracted operation for necrosis of the femur in another patient, during which the limb was kept bloodless for an hour and ten minutes without producing any subsequent injury or inconvenience to the circulation, it occurred to me that Esmarch's system was well worthy of trial in the case of aneurism, as more likely than any other plan, to produce complete stagnation of the contents of the sac, and so lead to their coagulation.

Accordingly I removed the compressing apparatus which was in use that day, and left the patient alone till the morrow, when, at 10.20 A.M., I bandaged the limb with the elastic roller, from the toes upwards to the junction of the middle with the lower third of the thigh. It was applied lightly over the aneurism, so as not to compress it. The elastic tubing was then wound round the limb over the highest turn of the bandage, which was now removed. The entire circulation below the tubing was found to be arrested. The limb had assumed a death-like pallor, and gradually lost temperature. The aneurism was of its usual size, and pulseless.

After fifty minutes, the patient complaining of severe pain above the seat of constriction, a Carte's compressor was adjusted to the main trunk at the pelvic brim, and the elastic tubing removed. On raising this compressor a few minutes afterwards, I could detect no pulsation in the aneurism; several small vessels were beating strongly round the joint, and the collateral circulation appeared to be established. The compressor was readjusted and left in charge of the patient, who had already been well accustomed to its use. He was ordered to apply the compression lightly and in an intermittent manner, so as not to distress himself. He continued doing this more or less until the evening of the following day, when the apparatus was removed. The tumour had been frequently examined by myself and others, and was always found to be pulseless and sensibly diminishing in bulk.

Sept. 15th.—There has been no pulsation, and the swelling is still getting smaller, so that I regard the aneurism as practically cured. There has been no constitutional disturbance, and the only complaint which I have been able to extract from the patient is a feeling of numbness in the three outer toes, with occasional darting pains up the outer side of the leg. The femoral artery can be felt beating as far as the seat of constriction (where the tubing had been placed), but not beyond. There are several small arteries pulsating round the joint, one particularly to the inner side of the patella. The numbness and pains complained of are to-day nearly gone.

Remarks.—The simplicity and apparent safety of this mode of treating aneurisms, as well as the rapid success which followed its application in the case which I have recorded, will doubtless commend it to many as at least worthy of trial.

I have been particular in giving the details of treatment, as any one of them may have been essential to success. The explanation appears to be—the coagulation of blood in the sac, consequent upon its complete stagnation. The aneurism itself probably remained full, but the entire circulation in the parts was arrested, and it is possible that the loss of temperature and that particular condition of the tissues closely allied to death, may have had some effect in the formation of the coagulum. How long it may be necessary to keep the limb bloodless in order to produce this result is a question which must be decided by future practice.

My reason for compressing the main trunk for some time afterwards was that the force of the blood-current might have broken down and washed away the newly-formed clot before it had time to become tough and solid, and the sac to contract over it.

The experience of surgeons will no doubt suggest improvements in this plan of treating this disease. It may be even necessary in certain cases to inject fluids into the sac to promote coagulation while the limb is kept bloodless. This, however, is a mere suggestion, and I must content myself for the present with indicating and illustrating by a practical example what, so far as I know, is a new treatment of aneurism, as well as an instance of the great service which Esmarch's system seems destined to render to surgery.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

MIDDLESEX HOSPITAL.

MELANOTIC SARCOMA OF FEMORAL GLANDS, SECONDARY TO TUMOUR OVER THE HEEL; SARCOMATA IN SPLEEN AND ILIAC GLANDS.

(Under the care of Mr. DE MORGAN.)

THE most remarkable circumstance in the following case was the presence of all the symptoms of brain tumour—headache, vomiting, and double neuro-retinitis, exceedingly well marked and persisting to the end. In no case could the presence of a brain tumour have been diagnosed with more confidence than in this one, and yet at the autopsy no sign whatever of any coarse brain disease was found.

The clinical notes are from the pen of Dr. Lyell, surgical registrar.

E. W——, aged thirty-six, admitted on Jan. 30th, 1875, with a swelling in the right groin, preventing locomotion. Her statement was to the effect that, for eighteen months before admission, she had noticed the steady growth of an almost painless tumour below the right groin, which gave her a minimum of discomfort, till, by pressure on the veins of the limb, causing œdema, and by its size, it prevented her getting about; that, during Easter of 1874, at a metropolitan hospital, a "lump," like a black wart, of the size of a half-crown, was excised from the calf of the right leg; and that this existed some months before that in the groin, although the latter was evident at the date of the operation. Her former health had been fairly good, and there was no hereditary history of any import.

Visual examination reveals a large protuberant mass situated immediately below the fold of the right groin (which is deepened in contrast), occupying the entire anterior aspect of the upper fourth of the right thigh, extending inwards to the edge of the adductors and outwards to the anterior superior iliac spine. It is hard, nodulated, and of equal consistence. She can bear free manipulation of the tumour, but complains of shooting pains in the tumour itself and down the same leg. The tumour is freely movable on the tissues beneath, and the skin surmounting it is natural in appearance, non-adherent, and slightly œdematous. The rest of the limb is markedly œdematous. Above Poupart's ligament, and apparently detached from the mass below, dipping deeply into the brim of the pelvis, is a similar hard enlargement, the upper border of which is circumscribed and rounded, whilst the lower and deeper cannot be localised. Just below the swelling of the right calf is the cicatrix of the operation, and below its site a pea-like melanotic cutaneous nodule.

Feb. 16th.—Since admission, the prevailing and most prominent symptoms have been obstinate vomiting and headache, defying the remedies applied. With the exception of occasional remissions of varying intervals, she has been persistently sick after her food. The remission may last for twenty-four to forty-eight hours. Describes the headache as a "dizziness" and "numbness" creeping up the right side of the head. Tumour remains unchanged. Pulse very feeble and quick. Is evidently losing flesh, and facial expression is more pinched and careworn.

26th.—Constant headache, generally aching throughout, and very sick; her food creates nausea, but occasionally the food is regurgitated without nausea; aching and heaviness in the eyes; reading causes pain and a mist before them; pupils dilated, sluggish, equal. Pulse 78, feeble; bowels rather constipated; urine 1022, acid, no albumen.—Examination of fundus oculi: Well-marked neuro-retinitis in and around both optic discs, which are obscured and veiled by exudation; veins swollen and tortuous, and the vessels near the discs obscured and lost to view in parts of their course; a few recent hæmorrhages in retina.

March 12th.—Passed a bad night; a good deal of sickness in the night; complains of shooting pain along the spinal region; thirst; pulse 90, weak, full and variable; bowels confined; temperature 98°; pupils dilated; mouth drawn to left; left lid closes more firmly than the right; when lids are compressed, the wrinkles on the left side are more marked, but right brow is unfurrowed; pale and anxious.

15th.—Paralysis more marked; complains of pain in head running down the back; pulse 88 and irregular; has singing in the head. Morphia injection twice a day.

19th.—Morphia relieves pain, but not vomiting; her chief complaint is now the pain in back, of an aching and shooting nature, and almost unbearable; the facial palsy, if anything, more pronounced; no palsy elsewhere; neuro-retinitis remains *in statu quo*; has obstinate constipation; bowels opened by croton oil injection.

29th.—Slight internal strabismus of right eye; no vomiting for four days.

April 2nd.—Facial palsy is less marked; can close the right eye firmly, can close the right lid firmly, and the right angle of the mouth moves as freely as the left; the right globe is slightly turned in, and looks a little prominent; for last fortnight has had numbness in both hands, stretching up the arms; this also is less marked.

5th.—Facial palsy has disappeared; hands still benumbed; loss of command over bladder; catheter used; constipation continues.

10th.—Has some command over bladder.

22nd.—Emaciating considerably; very little nourishment retained; tumour in thigh much increased, elastic and bossy to the touch; skin stretched, marbled with dilated veins, and of a purplish colour; gives her no pain.

May 6th.—Continues to lose ground; still no command over bladder; vomiting continues, and headache not ameliorated; very rapid increase of growth.

21st.—Hæmorrhage from tumour stopped by styptics.

23rd.—Again hæmorrhage, about four ounces. The measurements of the tumour are now twelve inches and a half by thirteen inches and a half. Perchloride of iron and ice to tumour.

28th.—Gradually sank after a fresh hæmorrhage.

Abstract of post-mortem examination made thirty-one hours after death. (By Dr. Coupland.)—The upper part of right thigh, from Poupart's ligament to about junction of upper and middle thirds, is occupied by a large dark-coloured tumour, which is in great part broken down to a softened pulp, the removal of which leaves a large excavation with ragged sloughing walls. The depth of the tumour does not extend beyond the fascia lata of the thigh. At the back of the lower part of the leg, about two inches above os calcis, is a linear cicatrix, close to which is seated in the skin a small, low, black nodule, of the size of a pea, and of the consistence of horn. A vertical section shows the nodule to arise from the papillary layer of the corium. Heart and lungs fairly healthy. Liver soft and flabby. Spleen large, pale, soft, almost diffluent; the lower extremity of the organ occupied by two white rounded masses; one of them softened in the centre into a small cavity containing blood; no melanosis. In the omentum were several nodules the size of haricot beans, of soft consistency, and yielding an abundant milky juice. In the right iliac fossa was a tumour the size of two fists, surrounded by large masses or altered glands. The tumour apparently arose from the inguinal and iliac glands. It was of whitish-grey colour, and excessively soft, while many of the enlarged glands, which showed similar appearances, were riddled with little cavities due to post-mortem emphysema. Kidneys soft and flabby. Brain was carefully examined, and no tumour could be found of any sort.

GUY'S HOSPITAL.

CANCER OF RECTUM; COLOTOMY; DEATH NINE MONTHS SUBSEQUENTLY.

(Under the care of Mr. Bryant.)

The following notes were taken by Mr. W. Brown.

G. S——, a paper packer, aged fifty-six, was admitted into Job ward on April 14th, 1873. He had in October, 1872, been admitted a patient, having a large indurated and ear-shaped growth, about two inches long, one inch deep, and about half an inch thick, on the left side of his anus, almost closing the anal orifice; there was also a large fistulous opening at the base of growth communicating with the bowel. Chloroform was given, and on Oct. 25th the growth was removed by galvanic cautery. No bleeding occurred, and the patient left the hospital on Nov. 13th, as nothing more just then was done.

After leaving he remained at home for a week, and then went to work. His motions gradually became smaller, and at last he was obliged to take aperient medicine. He then began to get weak, and was unable to sit down.

When admitted it was with difficulty that the finger could be introduced, so blocked up was the rectum with cancer substance, which bled as soon as it was touched. It was then decided to perform colotomy.

April 16th.—The man was put under the influence of chloroform, and a slightly oblique incision was made between the last rib and the crest of the ilium from above, and in front downwards and backwards. Some difficulty was experienced in getting the bowel up into the wound. The wound was slightly enlarged forwards, then the gut was secured, a needle was passed through the skin and gut in two places, and the bowel cut between them, and the sutures pulled out of incision, divided and ligatured on each side. Another suture was then put in the bowel and skin at the posterior part, and the incision brought together by superficial stitches. The finger was passed down the bowel, and no carcinoma was found as far as the finger could reach. He complained of great pain when he coughed, but he felt better the following morning. Temperature 102·1°; pulse 102; respiration 25.

17th.—The pain still continued, and his abdomen was distended and tympanitic.

18th.—He was a little better, and the following day passed a small motion through the artificial anus.

21st.—The artificial anus did not look quite so well; there was more discharge, but not more pain. Temperature 98·5°.

22nd.—The ligatures came away to-day, the discharge still being great. Temperature normal.

28th.—The bowels had been opened, good-shaped solid motions being passed. He complained of pain in the rectum, but opium lotion was applied, and he found great relief.

He was able to get up a little on May 12th, but felt very much fatigued, and the following morning there was a good deal of hæmorrhage from the rectum, which was subsequently plugged, but the patient looked very blanched and felt weak.

May 19th.—The plug was removed, but bleeding recommenced, so that wool saturated with perchloride of iron was again applied.

23rd.—There was a large ulcerated surface round anus, extending forward to perineum and backwards to coccyx.

June 26th.—The patient had since last report felt very weak and low. His appetite was very small, and he slept but lightly.

July 17th.—The man continued very weak. He was passing urine in great quantities through the wound in his anus.

22nd.—Yellow clay was applied to the sore in the anus. He passed his fæces generally twice a day. The clay was continued till the 31st, when it was removed, as it appeared to cause irritation.

August 11th.—The man stated that he was always very wet. It was not known if any urine came by the bowel. He passed some by the urethra, clear in colour.

September 2nd.—He passed urine both by the rectum and urethra, and by the former blood, when he attempted to sit up.

13th.—The cancer was increasing fast. It occupied all the space between the nates. Pulse 90; temperature 97·8°; respiration 24.

October 6th.—He felt no weaker, but when he got up he could hardly stand.

9th.—The cancer had reached the bladder, so that all his water, except about a pint in the day which passes through the penis, is voided per rectum, through the cancerous growth. On passing the finger into the artificial anus, some thickening was felt outside the bowel.

November 3rd.—There was some diarrhœa in the night, which lowered him very much, making the artificial anus tender, and this was treated with zinc ointment. He took compound ipecacuanha powder, and the diarrhœa lessened.

December 3rd.—He complained of his tongue and throat feeling sore.

9th.—He did not feel so well, his bowels being very relaxed; his throat and tongue troubled him also. He continued in this state till February 16th, when he seemed very much weaker and emaciated, and died on the 20th.

The post-mortem examination showed that the lungs were very shrunken and dry; much emphysema of the anterior parts, especially the extreme edges towards the lower parts. The tubes all contained pus, which welled out of them on the cut surfaces of the lung. The tubes also appeared to be distinctly dilated. The peritoneum was healthy; the artificial anus in the left loin was quite firm and healthy. No excessive adhesions or marks of inflammatory action about the serous covering of the bowel in this position; the bowel here was quite healthy. Round the anus there protruded a large lobulated mass of the growth. When the parts had been removed, it was found that this occupied the whole of the lowest six inches of the rectum. It adhered to the adjacent parts, especially posteriorly, so that when it was cut away from the rectum a considerable part of the wall of the bowel was left behind. It formed a most irregular surface, covered with large irregular masses of the growth, which was white on section, but not cerebriform. There was a little pus about the growth near the rami of the pubis, but no abscess of any size. The liver weighed 52 oz. The right lobe was rather coarse and flattened, with some congestion of the hepatic radicles, and perhaps some excess of fat; the left lobe was remarkably atrophied, flaccid, and, on section, dry, and its lobules much smaller than those of the right lobe. This state seemed to extend right up to the falciform ligament. The kidney weighed 8½ oz., was pale, but not apparently diseased. The ureters were healthy, and not involved in the growth. The bladder was quite healthy, its mucous membrane pale; it had no communication with the rectum, nor had the urethra; it contained a thickish bright-yellow fluid, looking exactly like fæcal matter from the small intestine, but without odour; it also gave no reaction of bile-pigment with nitric acid. Examined microscopically, it turned out to be urine full of crystals of uric acid. It must be supposed that the urine believed to have been passed from the rectum was really discharge from the surface of the growth within the bowel. Microscopically, the growth in the rectum was found to be true cancer—large epithelial cells, with great oval nuclei, and bright nucleoli.

BRISTOL ROYAL INFIRMARY.

NEARLY FATAL CASE OF POISONING BY A KNOWN DOSE OF CARBOLIC ACID; VENOUS INJECTION OF AMMONIA; RECOVERY.

For the notes of the following interesting case we are indebted to J. E. Shaw, M.B., house-surgeon, under whose care the patient really was.

Charlotte C——, aged thirty-seven, a debilitated anæmic woman, confined six weeks previously, was admitted on the 5th June, 1875, for abscess superficial to the right hip-joint, which came on a fortnight after parturition.

It being intended to open the abscess under an antiseptic veil, a solution of carbolic acid in linseed oil (1 to 10) was ordered for that purpose; and of this mixture, on June 7th, the woman, on her own responsibility and unknown to the nurse in charge of the ward, took a measured fluid ounce, not having partaken of any solid food for several hours. Twelve minutes or more elapsed before the woman's condition arrested the attention of the nurse, who, finding upon inquiry what had occurred, hastily summoned the house-surgeon to the patient. When first seen the woman was sufficiently conscious to reply when spoken to sharply; the skin was moist, the face dusky, the pulse weak, and the pupils slightly dilated. The rapidity with which the toxic effects of the carbolic acid were being developed clearly showing that it was useless to temporise with emetics, the stomach-pump was immediately obtained and applied, the stomach being continuously washed out with tepid water for about twenty minutes, until the ejected matter was perfectly free from oily particles floating on the surface and possessed odour neither of oil nor acid. During this time the state of the patient was becoming every moment more alarming. Unconsciousness was rapidly becoming absolute, the dusky tint of the face deepened, the moisture of the skin increased, and the pupils more dilated, while the pulse was rapid, irregular, and scarcely perceptible; the breathing remained regular, although the relaxation of the soft palate rendered it noisy.

In about three-quarters of an hour from the time when first seen, the condition she presented was most singular. Coma was complete, the face perfectly livid, the pupils dilated, the skin secreting perspiration in the most extraordinarily profuse manner, the surface of the body warm, as also were the extremities, with the exception of the hands, the pulse at the wrist imperceptible, and the muscles of the soft palate and tongue so entirely relaxed that it was necessary to keep the latter organ extended with catch-forceps to prevent it from falling back upon the glottis; yet with these precautions the breathing continued regular, though slow, and the reflex sensibility of the conjunctiva was never altogether abolished.

As dissolution now seemed imminent, it was determined to inject ammonia into the veins, and with all possible despatch. Two drops of the strong solution of ammonia diluted with water were gradually injected into a vein of the forearm. In a few seconds the radial pulse became perceptible, and there was slight general improvement, which was, however, but transient, for in a quarter of an hour it was necessary to repeat the injection the same as before, and again with marked benefit. After waiting another fifteen minutes, the injection of ammonia was again administered, after which the pulse remained perceptible, and the patient's condition improved in every respect. Within another half-hour consciousness had returned, and in less than two hours from the time when first seen, she had sufficiently recovered to be left in charge of two students, who had rendered most valuable assistance throughout.

On recovery she was completely ignorant of what had occurred, and did not know that any mistake had been made. She complained of no pain except in the tongue, and experienced no relapse, but remained in partial prostration for some days, and suffered from an attack of gastric catarrh, which subsided under appropriate treatment.

The urine was not examined.

The case is one of interest, inasmuch as the dose taken (as nearly as possible fifty grains) was accurately known, and the symptoms throughout closely watched. This quantity of carbolic acid would appear to be about the limit which can be taken without a fatal result following; indeed, had the acid been in watery solution, and therefore capable of more rapid absorption, or had the woman been left without treatment, recovery would in all probability not have taken place. The experience of this case demonstrates, moreover, the value of injection of ammonia into the circulation in such cases, where we have no direct antidote, and shows that if life can be maintained for about a couple of hours, one may hope to have obviated the tendency to death.

Mr. H. A. Cæsar, public vaccinator, Western district, Mile-end, has received a grant of £36 19s. from the Local Government Board for efficient vaccination.

THE MEDICAL HISTORY OF THE DUTCH WAR AGAINST ATCHEEN IN 1873.*

In 1870 Holland exchanged with England her West Coast possessions for the North-West point of the island of Sumatra-Atcheen. Both powers were soon involved in war by their new dependencies, the English with the Ashantis, and the Dutch against the Atchinese.

On March 22nd, 1873, the Dutch expedition left Batavia, and sailed into the Atcheen Roads on April 5th. It disembarked on the 8th, and found itself, after several severe engagements, before the town of Atcheen on the 14th; but, being unsuccessful in its efforts to reduce the outlying Craton Fort, was compelled to return to the Coast, and re-embarked on April 28th. Of the sanitary arrangements, surgical performances, and medical occurrences of this "three weeks' campaign," an account follows.

The projected strength of the expedition was:—*Military:* Three European battalions (600 each), 1800; Barrissans (native soldiers), 800; cavalry and artillery, 50; convict labourers, 1000; total, 3650.—*Medical:* Medical officers, 12; apothecaries, 2; army hospital corps, 100.—*Material:* Medicine chests, 8; field bandage boxes, 8; stretchers, 12. Accompanied by soldiers' wives to the number of 8 per company, the total reached 5000. Estimating at the rate of 20 per cent., arrangements were made for 1000 sick, and the sailing ship *Kosmopoliat* was fitted out as a hospital-ship. The materials were stored as far as possible so as to form a succession of ambulances, in order that they might be served out more quickly as such on arrival. Besides the regulation stretchers, a number were prepared after the fashion of the Chinese tandus (dandies); each consisted of a piece of sail-cloth 6 ft. 6 in. long, and nearly square, attached to a thin stick at the head and foot, and slung from a thick bamboo about 15 ft. in length by strings from either end, which were prevented from slipping towards the centre. At each extremity of the main pole was hung a joint of hollow bamboo as a water-bottle, and a mat 4 ft. 6 in. long was provided as a cover against sun and rain. To support the dandy while the bearers rested, sticks, hollowed at one end, and shod with spikes at the other, were furnished.

To fit the *Kosmopoliat* for hospital purposes, the following alterations were made:—Port holes were formed, large openings were cut in the deck for the introduction of wind-sails, and existing partitions between decks were removed, only such divisions being allowed as were required for definite purposes; the middle plank was taken out of the roof of the middle deck and trellis-work substituted. A surgery and operation-room were erected on deck. Latrines for the natives were built overboard, those already existing on the deck sufficed for the Europeans, and close stools were carried for the sick. Iron bedsteads were clamped to the floor, and were placed at such distances that a close stool could be introduced between them; beds and seats were also secured on the deck.

A code of instructions was drawn up by the surgeon-in-chief for the guidance of those under him, in which all due importance is given to the necessity for hygienic care; the disinfection and ventilation of rooms used for hospital purposes are insisted on, with a warning against overcrowding, and advice that the men's stretchers should, whenever possible, be raised one foot above the ground, unless where the house is built on piles. A caution is added against placing hospital huts to leeward of a swamp. All slaughter-house offal is directed to be thrown into running water below the encampments, or to be buried. The greatest stress is laid upon attention to the drinking-water, the examination of which is never to be omitted, and where percolation through the regulation filter-stones is not deemed sufficient, a layer of powdered charcoal is to be added, and the water, if especially cloudy, to be previously treated with solution of sesquichloride of iron and soda. Carbolic acid is to be invariably mixed with the water for washing wounds, and this is to be applied with charpie only, as sponges are considered dangerous. Charpie once used to be buried or burned.

On the subject of operations the following opinion is offered:—According to the experience of the last war, conservative treatment in wounds and fractures of the upper extremity affords every prospect of success; so are primary amputations and disarticulations only in the most pressing cases to be undertaken. This rule holds good also for the lower extremity, since removal of it above the knee, whether primary or secondary, for the most part results in death. The application of permanent bandages should be made as early as possible, and will be an indispensable preparation for later resection. Each medical officer is required to send in a medico-sanitary report of his duties during the campaign, and by this he will be in a great measure judged.

The distribution of medical officers for the voyage from Batavia to Atcheen was as nearly as possible that which would be the allotment on landing. Two medical officers and two apothecaries went in the hospital-ship, the remainder were apportioned to different corps. To each medical officer were assigned two non-commissioned officers and eight men of the Army Hospital Corps, one medicine box, one bandage case, eight "tandus" complete, and a water-flask.

On March 22nd the flotilla left Batavia for Penang, which was 250 miles distant, signals having been arranged so that any case of infectious disease could be at once reported and removed to the hospital-ship. None such, however, occurred, notwithstanding the state of overcrowding which existed.

A sanitary inspection of the fleet was made on arrival at Penang, and showed the condition of the troops to be remarkably healthy; only fifteen sick were transferred to the hospital-ship. Yet it was regarded by the surgeon-in-chief as fortunate that little delay was made here, since at evening with the land-wind an intense swamp-air was carried over the harbour, the influence of which made itself felt on many of the ships during the subsequent voyage in the form of fever with gastric derangement.

On the morning of the 2nd of April the fleet left Penang, and dropped anchor in the harbour of Atcheen at midday on the 5th. Here all sick were at once removed to the hospital-ship, and numbered sixty-two, of whom thirteen were fever cases and three bowel complaints; of these, one fever case and one bowel case subsequently died.

That throughout a voyage of fourteen days' duration in the tropics, notwithstanding an almost reckless condition of overcrowding, only seventy-seven cases of illness should have occurred out of a strength of 4019, exclusive of women and servants, seems a most undeserved piece of good fortune, and was attributed by the surgeon-in-chief "to the good quality of the drinking-water obtained from Batavia *above all things*," and, secondarily, to the fair weather experienced.

The actual composition of the expedition was—officers, 170; Europeans, 1064; natives, 2185; convicts, 600. These were embarked at the rate of 700 per steamer, and, while in the English Abyssinian expedition transport was provided at the rate of 3½ tons per head (2·7 tons being the average laid down in Dr. Parkes's work on Hygiene), the Dutch expedition estimated for only 1½ tons to each individual. Again, whereas in the former every European soldier was allotted a superficial area of 10½ square feet, and every native 9 square feet, yet in the latter the superficial area did not amount in all to 6 square feet a man. Against such a state of things the strongest remonstrances were entered by the sanitary authorities, but remained unheeded, so that, emboldened by this escape, another much stronger force, which left Batavia eight months later, were still more closely penned, but with sadly fatal results.

On arrival at Atcheen one of the ships was told off for the reception of slight cases of illness, and 61 beds were thus vacated in the hospital-ship, which contained but 100 altogether.

On the 6th, the Commander-in-Chief, Major-General Köhler, made a reconnaisance, in which 1 man was killed, and 3 wounded.

On the 7th, medical dispositions were made:—To each battalion were assigned two surgeons, who also provided for the attached cavalry, artillery, and convict labourers. At the disposal of each surgeon were ten men of the Army Hospital Corps, and twenty labourers, for the purpose of forming an ambulance. Each battalion had thus two ambulances. The remaining two surgeons and one apothecary were left on board the hospital-ship, and the second apothecary was detailed to act as analyst to test the various wells for poison and purity.

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* Epitomised from the account by W. Roth, Generalarzt des 12 Armee Corps.

On the 8th the disembarkation was completed, with the exception of some artillery and cavalry; but, notwithstanding a galling fire from the landing troops, covered by a cannonade from the fleet, the Atchinese withstood their assailants breast to breast, crossing sabres with bayonets, so that in the capture of the first fort the Dutch lost 15 killed and 58 wounded.

On the 9th the second fort was taken without resistance after a breach had been made by the guns of the fleet.

On the 10th, an expeditionary column, under the commander-in-chief, was organised for an advance on the town of Atcheen, between three and four miles inland. Those remaining at the sea-shore transferred their camp into one of the forts, in the neighbourhood of which good drinking-water, with scarcely a trace of organic matter, and capable of being used without purification, was found. The excellent quality of this water, discovered on a little strip of land between the sea in front and a large swamp behind, was a subject of great surprise, and could only be explained by supposing that the drainage of the distant hills filtered thither through a stratum of sand beneath the lagune.

The troops of the advancing column had to cross a bridge under an Indian forenoon heat, and attack a mosque standing in front of the Craton fort, which defended Atcheen. The assault was unsuccessful, and resulted in so many wounded that the four surgeons who had accompanied the troops in the engagement were insufficient, so that of the two, the senior medical officer and a surgeon, left in the rear to establish a bandage-place not under fire, the latter had to go forward, leaving only Dr. Theunissen to make the necessary arrangements. He, having discovered a dry, airy house by a small churchyard, and finding good water within easy distance, laid down fresh rice-straw, and prepared as far as possible for the reception of the wounded.

On this and the following day 71 wounded were passed on from this first dressing-place to the base of operations on the coast, and the hospital-ship being incapable of accommodating so many, only the badly wounded were sent on board, while the remainder were treated in two field-hospitals erected on the shore out of bamboos, matting, blankets, and sailcloth. In the meantime, to make room, 39 of the previous sick and wounded were evacuated by steamer to Padang, a Dutch settlement 120 miles lower down on the coast of this island of Sumatra.

On the 12th another reconnaisance was made against the Craton, which resulted in a bloody but unsuccessful fight, in which 5 were killed and 49 wounded. The improvised dressing-place was evacuated as far as possible, all transportable wounded being sent to the field-hospitals on the coast.

On the 13th there was a slight skirmish, in which 1 man was killed and 12 wounded.

On the 14th an unsuccessful attack was again made against the Craton, but the mosque was taken after two assaults. On the capture of the mosque, orders were given for the advance of the reserves and ambulances from the bandage-place by the churchyard, since the means of carrying the wounded thither were becoming less and less, owing to the desertion of the Coolies from fear. By energetic measures the Coolies were again collected, and the wounded were carried to the mosque, where, under cover from fire, they were laid in the open, shaded by palm-leaves from the sun. On this day the commander-in-chief, Major-General Köhler, was killed by a ball, which passed through the left arm and penetrated the chest. Death was instantaneous. The casualties amounted to 9 killed and 107 wounded; of the latter, as many as possible were carried to the sea-shore ambulance.

To convey an idea of the determined bravery with which the Atchinese fought on this occasion, the following description is given:—"By our advance the excitement of the Atchinese was so far heightened that they no longer avoided an engagement in the open, but appeared in dense masses, each with a firelock, a lance, and two sabres. They ran towards us with wild war cries, fired, threw down their pieces, then hurled their spears, and rushed forward with brandishing sabres. The quick fire of the Beaumont rifle occasioned frightful bloodshed among them; the number of victims was countless. When the enemy decided on abandoning the field the ground was so heaped with slain that no empty place could be discovered."

On the 15th of April the 12th Battalion made a reconnaisance, and lost 1 officer and 4 men killed, and 1 officer and 15 men wounded.

On the 16th the attack on the Craton was renewed, but again without success, and with this failure terminated the offensive operations of the expedition. Four surgeons were in action with the troops, and one with the senior medical officer at the bandage-place in the mosque. The loss amounted to 11 killed and 117 wounded. The number of stretchers was insufficient, and others had to be extemporised out of bamboos and covers: 96 wounded were sent back to the sea-shore.

Out of a full strength of 3419 fighting men, the total killed and wounded had now reached 423—a consideration which, combined with the unfavourable state of the weather, made the new commander-in-chief, Van Daalen, hesitate about undertaking further operations, lest he should be ultimately compelled to precipitate the re-embarkation, and leave behind some of his material and the wounded.

On the 17th, the retreat to the shore was carried out in the best order, each ambulance being present with its brigade. The great number of wounded already on board the hospital-ship and in the ambulances made an evacuation indispensable. 89 wounded were accordingly sent by steamer to Padang. Room was thus gained in the hospital-ship, and the most severely injured were brought thither from the shore ambulance, so that the latter could receive fresh sick from the returning troops.

On the arrival of the field column, the little camp required the greatest hygienic care. New wells were dug, and every precaution taken. Of the filter-stones served out little use was made, as, from being new, the water that first came through was unpleasant. In future they should always be cleansed by percolation before being given out.

On April 26th, 70 sick and wounded were evacuated by steamer to Batavia, and on the same day the ambulance on shore was broken up, the 10 remaining sick being transferred to the hospital-ship.

On the 28th the re-embarkation was completed, the hospital-ship then containing 63 sick.

On May 4th the fleet again cast anchor in the harbour of Singapore, and a medical inspection was made, which disclosed a much larger sick list than on the outward voyage, but mostly consisting of slight forms of fever. Twelve were removed to the hospital-ship.

Setting sail on the day following, the fleet arrived at Batavia on the evening of the 9th May.

The number that were found at the time of disembarkation to be unable to march with their battalions, and who were left for transport with the patients from the hospital-ship amounted to 147, composed of 53 wounded and 94 fever cases. Eight of these suffered also from beri-beri.

(To be concluded.)

THE BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.

An extraordinary general meeting of the share and policy holders in this company was held on Tuesday at 429, Strand, Mr. Francis Webb in the chair, for the purpose of receiving the directors' special report and valuation of the position of the Association since 31st December last, and to determine the course to be adopted on the directors' recommendation that a "new series" of members should be established in the form of a new company. The directors' report stated that the valuation to December last, which had been conducted on the same principles as those adopted in the valuation of the affairs of the Association to the end of the year 1872, showed a balance on the valuation of £206,803, making, with £35,420 paid up capital, a balance on the account of £241,503. After considering everything in connexion with the Company's affairs, they had determined to recommend the establishment of a new series of members, as a new company, with separate funds and special capital on which all new policies on the profit scale should be issued, and that the entire existing funds and capital should be specially reserved for the benefit of the present policy holders. They also recommend as a part of the scheme that the expenses of the old company should be comparatively small—for the first two years not more than 8 per cent. on the premiums, for the next five years not more than 6 per cent., and afterwards not more than 5 per cent., including commission to agents. Out of the above-mentioned £241,503, the directors had caused to be reserved £164,424, being the present value of such rate of expenditure. On this scheme they had taken the opinion of four eminent actuaries, Messrs. Bunyon, Adler, Bailey, and Pearson, and on this opinion they felt justified in recommending the adoption of the scheme to the policy and share holders. By this scheme the expenses of the old association would be limited to the smallest possible amount, whilst the new association, forming in itself a large body of recently selected lives, got together at comparatively small expenditure, would have unusual prospects of success. The directors also proposed to strengthen the executive, some of the present directors to devote their attention specially to the management of the funds and the transactions of the old series, and a larger board to be formed for the new series on which the interests of the policy-holders would be fully represented. The special actuarial opinion of Messrs. Bunyon, Adler, Bailey, and Pearson, above referred to, after stating that these gentlemen had examined the accounts and statements for the five years ending 31st December, 1872, deposited with the Board of Trade, and the valuation then made, and that they had tested that valuation, proceeded to say that the accounts for 1873 and 1874, and the results of a valuation to the end of 1874 on the same basis as the former valuation, had also been submitted to them, and they were of opinion therefrom that the events of the last two years had not appreciably affected the Society's financial position, the resulting balance at the end of last year being £206,083 as against £190,688 in 1872. After stating the principle of the new scheme, the opinion of the four actuaries above-named proceeded to say that, "assuming this plan to be carried into effect, the existing business to be preserved, and taking the balance of assets over and above the accrued liabilities to be £659,305, according to the balance-sheet last published, and bearing in mind that the society possesses a large unpaid capital (£142,000) as a further guarantee for the integrity of its assurance contracts, we are of opinion that it will be in a position, with careful and judicious management, to discharge all existing liabilities as they mature. The new company will start with a valuable connexion in complete working order, which has been acquired at an expenditure of much time, labour, and money, and will be free from all existing engagements. Thus circumstanced, and guided by the experience of the past, we think it has good prospects of success." The Chairman detailed at considerable length the advantages of the new scheme, and alluded to the attacks that had been made upon the company by a portion of the press. He, however, insisted that the company was in a sound position. He asked the meeting to pass a resolution authorising the old company to employ the new in the collection of their income from the 31st December, 1875, at the rates stated in the report, including all expenses of offices, clerks, stamps, &c., and that they should relieve the old series from their current business expenses, with the premises and any existing agreements. He then moved, "That the report just read be received and adopted, and circulated." Dr. Richards seconded the motion, which, after having been strongly supported by Mr. Oliver, Dr. Owen (Lord Mayor elect of Dublin), Mr. Chapman (an old shareholder), and Mr. Fox (Dublin), was put to the meeting, and carried unanimously amidst cheers.

THE HUNTERIAN SOCIETY.

THE Council of the Hunterian Society feels that the Society's usefulness would be much increased by the operations being more widely known amongst the members of the profession.

1. The London Institution, Finsbury-circus, in which its meetings are held, now forms the central point on which no less than nine suburban railways converge at only three minutes' walking distance from each.

2. It possesses the most complete accommodation for small as well as very large meetings.

3. Its permanent medical library consists of nearly 4000 volumes, and it has established a circulating one by subscription to Lewis, by which each member can obtain all the latest works on application to the librarian between the hours of 10 A.M. and 4 P.M.

4. It is a Society originally established (fifty-seven years ago) for the purpose of encouraging kindly feeling, friendly discussion, and integrity of purpose amongst its members. These objects it has steadily fulfilled during its course, and has always maintained a sound financial position.

One reason for its being less known than other medical societies is a rule made *in limine* that publication should be avoided lest it should restrict freedom of discussion. Another reason is migration to the West of the men who were at one period of its formation the leading members of the profession. A third reason was difficulty of access to its former place of meeting. This now is changed, and the Council desires to bring the fact as prominently as they legitimately can before the profession.

A CASE OF POISONING BY NEURALINE.

To the Editor of THE LANCET.

SIR,—It may be useful to place on record a case of suicidal poisoning by neuraline, which has just occurred in Marylebone, and in which death appears to have resulted quickly and almost, if not altogether, without a struggle, after swallowing a comparatively large quantity of that extensively advertised preparation of aconite. The deceased, who had previously been in sound health, was a gentleman of good position in Holland, aged thirty-six years, who had lately arrived in this country, and who, in addition to other domestic troubles, had been much overcome by the death of a dearly-loved daughter, which had unexpectedly occurred abroad during the previous week. When the body was first viewed—probably about twelve hours after the poison had been swallowed,—it was found lying in a prone position, inclining towards the left side, with the arms folded and the legs close together and straight. There was extensive and well-marked cadaveric lividity, and the rigor mortis was fully established. On the dressing-table in his room were two small and octagon-shaped bottles, marked "Neuraline," the corks of which had been pushed in, and their fluid contents had apparently been emptied into a tumbler which was found on a chair near the bedside. This tumbler, which smelt strongly of neuraline, had been drained of its contents as soon, probably, as the deceased had undressed and gone to bed. There was a slight smell of neuraline perceptible near the mouth of the deceased, and from a letter, which was found beside the two empty neuraline bottles, it was evident that he had intended to commit suicide.

As no post-mortem examination was allowed by the coroner (Dr. Hardwicke), there was no opportunity of ascertaining the effects of aconite in a concentrated form on the internal organs; nor of verifying previous observations respecting the state of the mucous membrane of the stomach and duodenum in cases of death from this poison. The jury, after some remarks on the absence of a post-mortem examination, returned a verdict of "Death from Suicidal Poisoning by Neuraline whilst in a state of unsound mind."

Neuraline, according to Dr. Harley, is a preparation of tincture of aconite, mixed with chloroform and rose-water; and the death of the Hon. G. R. Vernon, in 1871, was ascribed to the too frequent use of this preparation externally. (*Pharmaceutical Journal*, Jan. 1872, p. 618; cited by Taylor, "Principles and Practice of Medical Jurisprudence," second edition, 1873, vol. i., p. 427.)

I am, Sir, your obedient servant,

WILLIAM SEDGWICK, M.R.C.S.

Park-place, Upper Baker-street, Sept. 22nd, 1875.

⁎⁎⁎ We think that a post-mortem was necessary in this case. Juries in such cases should refuse to return verdicts unless post-mortem examinations are made.—ED. L.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 25, 1875.

AFTER perusing the description and criticism of a huge Act of Parliament, it is somewhat of a relief, if not of a refreshment, to take up a Report (Blue-book though it be) which forms the fourth of a new series submitted by Mr. SIMON to the Local Government Board. The first of these Reports was comparatively brief, and referred chiefly to the circumstances under which these official records had been for a time in abeyance. The second was occupied almost exclusively with filth diseases and their prevention, and contained valuable reports on certain outbreaks of enteric fever by Drs. BUCHANAN, BLAXALL, and BALLARD, and on excrement nuisances by Mr. NETTEN RADCLIFFE. The third Report was devoted to scientific investigations by Drs. BURDON-SANDERSON, KLEIN, CREIGHTON, and THUDICHUM, made with a view to aid the study of pathology and medicine; and was submitted by Mr. SIMON, in his capacity as Medical Officer to the Privy Council. The fourth Report, now before us, contains a valuable digest, by Dr. SEATON (assistant medical officer to the Board), of the vaccination officers' returns; and includes, in fact, a skilled *résumé* of all that has been done officially in this important subject to the end of January in last year. There is also an official communication by Dr. BUCHANAN on infectious diseases in Birmingham and Aston, and on the hospital accommodation of these places; and another by Dr. BALLARD on the sanitary condition of the Upper Sedgeley sanitary district. The Report comprises, moreover, an abstract of the medical inspections made in 1874, with regard to matters of local sanitary administration. We shall hope to notice these communications *seriatim;* for that relating to vaccination directly and practically concerns a vast number of our profession in all quarters of the kingdom, and the various aspects of the hospital accommodation question are no less important to all officers of health. But we desire at the present time to direct attention to the "manner" rather than the "matter" of this Report. In a brief chapter of ten pages, Mr. SIMON describes, in his superlatively terse but exhaustive style, the special objects of the Report, and then proceeds to look ahead, and to indicate to the President of the Local Government Board the best course to steer over an awkward and tortuous route.

In summarising the non-administrative business of the department performed during the past year, special mention is made of Mr. NETTEN RADCLIFFE's unsavoury work (discussed at length in Report No. 2), as to which Mr. SIMON expresses his "grateful sense of the service which Mr. RADCLIFFE rendered in devoting himself for many months with indefatigable patience to details which only the hope of real public usefulness could make attractive." The same inspector now notes for the department all information received as to foreign epidemics from the Foreign, India, and Colonial Offices, and is also compiling a paper on the movements of cholera, which will be shortly forthcoming as a supplementary report, being a continuation of that submitted in 1866 to the Privy Council. Levantine plague is briefly adverted to; and special mention, of course, is made of the International Sanitary Conference held in 1874 at Vienna, at which the department was represented by Dr. SEATON, and of the results of which full particulars were given in THE LANCET of August 22nd of last year.

The ordinary administrative work, as above-named, is set forth in the appendices. "With regard to the prevention of diseases other than small-pox, the Board during 1874 communicated through this department with 56 local authorities, representing 17 rural and 39 urban districts." The context shows that there are, at the present time, 1558 areas of separate sanitary jurisdiction in England and Wales—i. e., 39 metropolitan, 930 urban, and 589 rural districts. Mr. SIMON simply puts these two sets of facts in close juxtaposition (as we have done here), and then says (speaking of the 56 inspections),—"The above communications neither enable me to submit to you any adequate materials for discriminating as to the progress of disease-prevention in the districts of England, nor, I apprehend, can have represented an exertion of the Board influence in favour of sanitary progress in more than a small fraction of the cases where such progress is urgently wanted." This last paragraph, taken with the preceding statistical particulars, needs no comment.

The Medical Officer, in detailing evident signs of sanitary progress, notes the fact that loans contracted under the Sanitary Acts averaged between 1858 and 1864 somewhat less than £330,000 annually; that they more than doubled that amount in the six years from 1864 to 1870; that thence to the end of 1872 (twenty-nine months) the annual average exceeded £884,000; and that in the last two years the respective amounts have been nearly a million and nearly a million and a half of money. As many as ten rural districts in 1873 and forty-four in 1874 applied for and obtained urban powers, and "in many individual cases the reports of the local officers of health give every assurance which could be desired that good sanitary work is advancing." But the unfavourable side of the picture, though indicated only by the Quarterly Returns of the Registrar-General, shows that "preventable death in vast quantities goes on unprevented," and is "conclusive as to the insufficiency of sanitary endeavours in a very large proportion of our local jurisdictions." Two influences commonly predominate in needlessly wasting human life in this country, and these are (1) local conditions of filth and nuisances, and (2) reckless disseminations of contagion. Both show the utter neglect of local authorities to fulfil the definite obligations which the Sanitary Acts impose on them, and their failure to use with adequate skill and vigour the resources which are in their option to employ against the evil.

In emphasising the proportionate unimportance of the proceedings taken by the Board through the Medical Department as to these evils (because of the infinitesimally small number of inspections conducted), Mr. SIMON appeals to the functions of statesmanship rather than of medicine and very properly assumes that "among the many administrative purposes for which central government in this country claims to criticise and influence, and in certain cases control, the action of local authorities, none can be of more national importance than those which relate to the prevention of disease." And (adverting to the statistics above quoted) "how slight, except in regard of small-pox, is the cognisance which the Board hitherto takes, and how far apart are its exertions of skilled influence in regard of those local defaults of disease-prevention which annually cost many thousands of lives."

Mr. SIMON then (assuming that local government should always as far as possible be exempt from central interference) submits that the intervention of the Local Government Board should proceed methodically upon the basis of local death-accounts—i. e., the evidence afforded in such accounts as to the degree in which preventable disease has not been prevented. This intervention might in some cases be attained by correspondence, but (as has been before recorded by the Medical Officer) would be best compassed by skilled inspections on such a scale as practically to represent a central audit of local death-accounts. Such examination of local proceedings as have been hitherto undertaken are made on the basis above suggested. But the quantity of medical inspecting force available to the department for this branch of the service is only about equal to the employment of three inspectors; and this, with 1558 sanitary jurisdictions, and a mortality (excluding small-pox) from preventable causes of at least 120,000 persons annually!

Attention is drawn to the following facts: (1) that the Board are only entitled to receive copies of the reports of their local officers of health a moiety of whose salaries is paid out of the imperial exchequer; (2) that in certain cases local authorities, though provided with admirable officers of health, may, and often do, entirely disregard their advice; (3) that the reports of local officers which come to hand are sometimes so compiled and arranged as to give little or no information to the Central Board. These manifest defects suggest to all familiar with the subject an equally manifest remedy.

Mr. SIMON concludes with a graceful compliment to those local medical officers of health who in many places have filled their posts with credit, and "in a notable number of cases with really eminent ability and success." But this circumstance, as he remarks (having regard to the novel nature of the work), must not obscure the fact that, before such standards can be general in the country, very much work will have to be done and very many difficulties surmounted.

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A STRONG argument has been advanced by some members of our profession, whose opinion is entitled to every consideration, in favour of the punishment, in certain cases, of lunatic criminals, and in support—partial, at any rate—of the attitude which our criminal law maintains towards the insane. What that attitude is we need hardly remind our readers. It absolves from punishment those, and only those, who at the time of the commission of their crime were unable to appreciate the wrong character of their action. It includes all others, however distinctly insane, in one condemnation with criminals of sound mind. It ignores the pathological facts of insanity, which show how essentially diseased are all the actions of a mind in any point conspicuously unsound. It ignores the untraceable character of the mental processes in the insane and the obscurity of their delusions; and it applies to their crimes a hard and fast rule which, it is not too much to say, would apply to nine-tenths of the distinctly insane acts of the inmates of our lunatic asylums. To this we need not say the strongest protest has been raised by members of our profession, and to it also a pointed protest has over and over again been given by popular common sense, as expressed by the verdicts of juries and the tone of the lay press.

It has been urged, however, especially in the letters of Dr. KIRKMAN and Dr. MANLEY, that such absolution of the insane from all the consequences of their actions is unjust, and is likely to be attended with grave consequences to society. Many of our criminal lunatics have, it is said, the power of restraining themselves from the commission of their crimes. The distinction between many of their offences and those of the sane is one of degree, not of kind. They may be, and often are, actuated by the same motives, unconnected with delusion, and of no uncontrollable character. It is further urged that one reason why they do not exercise the needful self restraint is the known impunity with which their crimes may be committed. Dr. KIRKMAN, for instance, asserts that "many lunatics are capable of appreciating right from wrong, have a thorough and sound knowledge of the quality of sinful acts, and are morally and physically able to resist their impulses to commit them." He further mentions that BLAMPIED, whose brutal crime will be fresh in the recollection of our readers, on one occasion threatened to murder him (Dr. KIRKMAN), and said, "If I do commit murder, you cannot punish me for it, because it is contrary to the law to punish an insane man."

It may be doubted whether the question is materially altered by these facts. That it is possible for an insane man to commit a crime, in the motives to which no diseased mental processes and moral feelings are at work, must be admitted; but that it occurs, except in extremely rare instances, is very improbable. It is true, also, that every case must be judged by its merits. The application of a fixed line, either of inculpation or exoneration, to the varying phases of mental weakness, must entail frequently unjust results. But although motives of the same class may incite the sane and the insane to a crime, the disproportion in the two cases in the magnitude of the motive is often sufficient to establish an essential distinction. It was so in the case of BLAMPIED, as at the time we pointed out; and we think that the fact mentioned by Dr. KIRKMAN substantiates the truth of our remarks. "Method in madness" is not to be taken as the same phenomenon as "sanity in insanity." And even if unsound minds do sometimes act in their crimes under motives of ordinary character and degree, the extreme rarity of such a circumstance, the impossibility of proving its nature when it does occur, and the liability to a mistake of cruelly unjust results, are sufficient justification for its practical neglect. The mental processes of the insane are beyond all ken. Dr. MAUDSLEY remarks that it would need an insane mind to follow the windings of another. The first principle of social laws and rules is that injustice to the individual shall be as far as possible avoided; and public opinion would at once repudiate the purchase, at the cost of such injustice, of any addition to our social safety and well-being which the frequent punishment of lunatic criminals might possibly secure.

Nor can any greater weight be attached to the argument that justice demands the punishment of the insane offender. Its logical result would be that the punishment would have to be graduated according to the apparent criminality of the offender, to the extent to which his action was the result of motives similar to those which would actuate a healthy mind, and to the extent to which they were capable of self-control. In favour of a sliding scale of such a character some abstract arguments might be urged. But the practical difficulty of its application would probably be an insuperable obstacle to its employment; and it would, moreover, be difficult to justify it on the only sound basis for the punishment of crime. It would probably be found to be of little use in furthering either of the chief ends for which penalties are inflicted—the reformation of the criminal or the preservation of society by deterrent influence. It could be justified only on the principle of retaliation, of punishment as a vindictive measure—a principle which, however deeply it may underlie the practice of jurisprudence and the popular theory of law, must always fail to satisfy a thoughtful sociologist.

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THE average Briton is not easily impressed by precept, convinced by argument, or turned by the force of persuasion. He is not even prone to be scared into the discharge of his duty by the parade of dangers attending its neglect. He is obstinate, and he is obtuse. These are the two prominent elements in the English character; and it is scarcely too much to say that, although they are ungainly virtues, to them the nation owes its stability and the State its strength. Obstinate perseverance in the face of difficulties, obtuseness in the apprehension of critical danger or defeat, have been the efficient causes of English success and safety in many an hour of peril. It was these qualities Captain WEBB especially exemplified in his unprecedented achievement.

The extraordinary courage, endurance, and self-control of the great swimmer have been recognised by all classes of thinkers, and no more need be said on this topic, except to point out that the mental effort put forth during the later hours of the performance—sustaining the swimmer through the critical period of exhaustion which supervened after two-thirds of the distance had been traversed and the shore-currents off the coast of France were encountered, and enabling him to put on that gallant spurt which landed him faint but triumphant on the sands of Calais—was probably unique. The retention of animal heat during so long a period of immersion, the muscular energy displayed, and the tact and skill evinced in the maintenance of automatic movements after they had ceased to be automatically performed, are the points of interest with which we are most intimately concerned. It must not be forgotten that it was in an unfavourable climate the task was accomplished. The natives of islands in tropical climes are not unfrequently expert swimmers, and accustomed from their infancy to remain many consecutive hours in the water; but the depression of temperature to which their bodies are exposed by immersion is not nearly so great as that undergone by Captain WEBB. Besides which, the exploits of these islanders are generally performed under the rays of a burning sun, and the heat they lose is quickly replaced by floating a few minutes now and again passively on the surface. In the present instance it must be assumed that the swimmer was entirely dependent on the heat generated within his body by the ordinary process of oxidation, accelerated by the muscular exertion; and, considering the continuous loss entailed by contact with new masses of cold water at each stroke, the maintenance of a vital temperature is most extraordinary. The porpoise-grease with which the surface of the body was lubricated no doubt did much to conserve the caloric, but that was not an unqualified advantage, because, cutaneous exhalation being almost entirely suspended for twenty-two hours, the aerial surface of the lungs must have been surcharged with moisture and the process of oxidation somewhat impaired. It is to be regretted that the conditions did not admit of accurate scientific observation. It would have been most interesting to ascertain precisely the physiological phenomena towards the close of the experiment. As it is, we can only conjecture that an exceptional development of muscular force in the heart and larger bloodvessels, probably extending throughout the arterial system, and giving unusual contractile and propulsive power, may have facilitated the achievement. This consideration should act as a deterrent to adventurers who, with equal courage, may not be so well provided by natural conformation for a similar feat.

The muscular exertion involved in the exploit calls for close attention. Almost all the voluntary muscles are brought into play in the act of swimming; and by the continuance of the act for so long a period, with scarcely any interval of rest, the reserve of strength must have been severely tested. It is no uncommon occurrence to see the muscular powers severely tested. In cases of delirium patients will continue restless and sleepless until wholly exhausted, but it is seldom that precisely the same muscles are in action monotonously during so long a period, and the exertion is generally accompanied by profuse cutaneous perspiration, which in this instance must have been almost absent or greatly retarded. The movements necessary to maintain a body afloat and to propel it through the water are of course performed automatically; but after a period in the performance they must in this case have fallen out of the rhythmical series and called for voluntary control and direct superintendence, just as an overtaxed pedestrian finds it necessary, in common phrase, "to drag his legs after him"; that is, the movements of the lower limbs are no longer performed automatically, in the largest sense of the word: they need to be specifically directed. To some extent this necessity may have been an advantage, in so far as it helped to keep the swimmer on the alert, and did some service in keeping off the tendency to sleep.

Practically, we may learn from Captain WEBB's performance,—(1) That the best training for extreme muscular exertion consists in the establishment and maintenance of a state of sound general health. It does not appear that he subjected himself to any of those artificial and really exhausting processes upon which athletes are apt to lay too great stress, and to which they attach a mistaken value and importance. Any considerable reduction of fat, in the production of what is known as "fineness," would have been an evil not improbably fatal to success, since it would have rendered the deprivation of heat more rapid and extensive. (2) That by judicious management and fortitude it is possible, in an emergency, to perform a prodigy of strength and endurance so that apparently desperate circumstances should not readily inspire the human heart with hopelessness or paralyse exertion. (3—and perhaps this is the most thoroughly practical lesson to be deduced from the extraordinary feat) The most useful and compensative kind of skill is that which enables a man to perform a common act continuously, and under pressure of stern necessity to push the performance to the extreme point of endurance, which, as is proved by this case, lies far beyond the limits of *ordinary* exhaustion. The circumstance that Captain Webb is what may be called a straightforward swimmer was, so far as the mechanical part of his exploit is concerned, the secret of his success. The waste of energy in "fancy swimming" is wanton, and it reacts most injuriously on the art. Plain, straight-ahead swimming with the breast-stroke is the one worthy enterprise. One word in conclusion to the members of our own profession, who enjoy so large a share of personal confidence. It will be doing good service if they miss no opportunity of inculcating the need of expertness in an art too much neglected. The preservation of sound health and the development of the highest physical and mental power are objects worthy of the most constant endeavours, and success will bring the best and most practical recompense as its reward.

Annotations.

"Ne quid nimis."

SPECIAL HOSPITALS.

It has been somewhere remarked that one of the best illustrations of the philanthropical spirit of the age is the number of the medical charitable institutions to be found in every large town, and especially in the metropolis. Although this observation is truthful to some extent, it is not altogether free from a fallacy that usually lies concealed behind the plausible appeals placarded on the walls and hoardings in the public thoroughfares, or published from time to time in the columns of the daily newspapers. We speak only of special hospitals. On every hand there are hospitals for this and hospitals for that, hospitals everywhere, all professing to have for their single aim the alleviation of human suffering and distress gratis. It is only a few weeks since we first heard of an institution called the Central London Throat and Ear Hospital, which it appears for more than a year had been hiding its light under a bushel "in unpretentious hired premises in Manchester-street, Gray's-inn-road." But this notwithstanding, so successful had been its operations that the committee determined to try a more ambitious flight, and have accordingly obtained a site in Gray's-inn-road whereon to build a real hospital, the first stone of which was laid last week by Madame Adelina Patti, assisted by many members of the musical world. Of course we have not a word to say against the eminent artiste whose great reputation and influence have been made use of to lift into prominence this obscure institution. If it were not for the clue given in the report in *The Times* of the ceremony of laying the foundation-stone, we should be at a loss to understand how she and her friends were ever induced to countenance the undertaking. We learn, however, that one of the surgeons—the chief surgeon, in fact—of the hospital is also surgeon to the Royal Society of Musicians, and it is therefore within the range of possibility that this gentleman may, through his connexions with the Society of Musicians, have enlisted the sympathies of the members of the Society in this little scheme. Be this as it may, we again strongly protest against the spread of these special hospitals. Specialism is becoming a plague-spot in the profession. But so strong is the current in favour of specialism and its self-elected professors, that even respectable newspapers are carried away with it. *The Times*, in the report already referred to, actually goes out of its way to discuss the question of special hospitals, and attempts to draw a lively picture of the great benefits likely to be conferred on humanity by the use of the laryngoscope and the ophthalmoscope, provided only that these instruments be placed in the hands of none but specialists. In *The Times*, we are told that "The stethoscope is an instrument of different character, which is used by the profession generally." The writer should have known that of all the apparatus employed in the physical examination of diseased persons, there is none more simple in its employment than the laryngoscope. Next to the laryngoscope comes the ophthalmoscope, whereas by universal consent, at least by the consent of those competent to form an opinion, the most difficult to use of all such apparatus is the stethoscope. By this we do not mean the mere placing of one end of the stethoscope to a patient's chest and the other end to the physician's ear, but we mean the interpretation of the multitudinous and complex sounds of morbid and even healthy respiration. We do not hesitate to affirm that where there are twenty students who will make an accurate diagnosis with the laryngoscope or ophthalmoscope, there are not three whose opinions on the physical signs of a chest are trustworthy. And yet a special throat hospital can succeed in securing the sympathy of the distinguished persons who took part in laying the foundation stone of the Central London Throat and Ear Hospital. If the Society of Musicians can be brought to take such an interest in affections of the throat, we may expect soon to see some of the more ambitious of its members establishing a "Hospital for Asthmatic Pipers," or a "Home for Distressed Fiddlers."

Seriously, it is time that the profession generally should take up the grave and pressing question of the multiplication of special hospitals, and the *raison d'être* of every hospital that it is proposed to establish.

LEPROSY IN INDIA.

We are very sorry to discover the attitude which the Government of India has assumed towards the question of the etiology of leprosy, and the general management of lepers in India. We had hoped that Dr. Vandyke Carter would have been permitted to continue his researches in reference to the disease, and by the aid of special official facilities accorded to him. The Indian Government, however, has not merely declined to act upon the suggestions that Dr. Carter should be appointed a Special Leprosy Commissioner—a refusal we can well understand from a red-tape point of view—but has decided that Drs. Cunningham and Lewis are to be available to take up the microscopic and scientific portion of the inquiry, whilst general facts are to be collected and dealt with by the sanitary commissioners of the country, aided by the civil surgeons in their capacity of health officers; thus, it seems to us, elbowing Dr. Carter out of any participation in a matter upon which he has thrown great light by honest and admirable work. We have persistently objected for years past in reference to leprosy to this piecemeal mode of investigation by a multitude of different workers, of varying ideas and degrees of competence, operating through the cumbrous machinery of an already well-occupied department sanctioned afresh by the Government. Our contention has been that one or two competent investigators, working steadily at the subject over a wide area, would be much more likely to succeed in gathering together reliable facts. Probably, as Dr. Carter's views in reference to the general treatment of lepers turn out to be not in accord with those of the Government, it may be convenient to deny Dr. Carter any facilities for prosecuting his inquiries any further. The Government of India expresses itself as disbelieving in the power of segregation, which Dr. Carter advocates, to diminish the amount of leprosy in a country. It remarks that there are 100,000 lepers in India, and the Government "could not undertake to build hospitals for all these people, and to keep up establishments for them, to clothe and feed them, and practically to turn them into sick paupers. To say nothing of the enormous cost which these measures would entail, the difficulties of attempting anything of the kind are insuperable." The Government does not show that segregation would not be effectual if properly carried out; it presents the matter solely in the light of a financial difficulty, though we altogether doubt if the difficulties of adopting segregation would be so great as the Government imagines. Whether it would do all that its advocates affirm of it is another matter.

We further notice that the Government of India, in the memorandum which it has printed on this subject, states that "segregation commends itself to those who believe that leprosy is in some way or other contagious." But segregation is advocated by many modern authorities who disbelieve the contagiousness of leprosy, on account of the hereditary character of the disease, and with the view of preventing its propagation from parent to offspring.

EFFLUVIA AND INFECTION.

EVER since an unfortunate return made by the Registrar-General or some officer of health, a few years ago, informed the public that the London "nightmen" were exceptionally free from disease, there has been a growing contempt for bad smells. It was forgotten that robust constitutions alone could resist constant exposure to the noxious exhalations from sewage in process of emptying the old-fashioned cesspools; and therefore if there were "nightmen," they must needs be peculiarly strong men. This tolerance of nasty effluvia may be a convenient acquisition, especially for those who regard it as a duty to pass some weeks annually in continental towns and watering-places, whither our own sanitary authorities have just sent a commission to pick up suggestions for improved management at home. But it must not be wholly lost to memory that bad smells are the warning signals nature holds out in token of danger. They may not be identical with the causes of disease. The morbific germ may be, and no doubt often is, present where there is no warning odour; and an abominable stench may be comparatively harmless. It is nevertheless a general truth which cannot be safely disregarded, that an offensive smell is an indication of impurity likely to be poisonous. No one would suppose this truth was even formally recognised amongst us, judging by the disgracefully neglected state of our public "conveniences." Those in the streets are unaccountably horrible. In some cases the ammoniacal and other emanations are overpowering. The condition of matters at the theatres is even less endurable. In more than one instance passing to a box or stall in the neighbourhood is a feat scarcely less disturbing than a troubled sea-passage across the Channel. It would seem that nothing more could be necessary than to call the attention of the vestries and managers of theatres to these evils in order to ensure a remedy. Unhappily that is not the case. Local authorities are imperturbable; inspectors of nuisances appear to lack the sense of smell; while everybody connected with theatres and places of public entertainment, from the architect who plans and builds them, to the functionary who performs infinitesimal services for large fees, appears to be imbued with the belief that to pass three or four hours in an atmosphere heated so as to be barely respirable, and surcharged with carbon, sulphur, and ammonia in all their combination, together with the nastiest and most noxious organic vapours, is an integral part of the price they are entitled to exact from the public in return for their amusement. It is not the slightest use to reason with these people, and vain to entreat them. But it becomes a duty just now to warn persons, and particularly the heads of families, returning from the seaside and the country, and therefore highly susceptible to noxious exhalations of all kinds, that it will be only prudent to take special precautions.

LUNACY REPORTS.

IT is a moot question just now—perhaps rather curious than practical—whether the apparent increase of mental disease in certain districts may not be due to the undoubted fact that a larger proportion of cases are brought under official notice and sent to asylums than in times past. It seems probable that this reassuring view of the situation is in part justified. More intelligent attention is happily bestowed on the subject of insanity than it formerly received. Science has begun to dispel some of the clouds which have so long obscured the province of psychology. Disease of the mind is beginning to be recognised as an affliction to be relieved, and perhaps cured, by medical treatment. As this salutary change progresses in public opinion it is only natural that the friends of persons mentally unsound should place them under a curative *régime*, and what was hid away in dark corners as an indelible family disgrace should be more promptly and hopefully disclosed with a view to remedy. It is also gratifying to find, as we pointed out last week, that the study of this neglected but promising subject is about to receive express encouragement at the hands of the great examining bodies. Meanwhile what the profession and the public are most deeply interested to secure are fuller information and a better classification of cases, based upon their nature and origin. It is, of course, the acute forms of mental disease that attract most urgent attention, and these are the varieties of the malady that appear on the increase. In the busy centres of life—the great cities—acute cases abound, while the chronic forms are most common in rural districts. In part probably this may be accounted for by the circumstance that persons afflicted with the less violent varieties of insanity are generally withdrawn from the scenes of hurry and excitement, either laid aside as useless, or sent away in the hope—too often disappointed—of benefit from temporary retirement. It is most desirable this erroneous and alarming view as to the increase of mental disease should be rectified. Nothing is more apt to work mischief than a mistaken fear of evil consequences likely to be brought about by mental activity at a time when such activity is indispensable. It would tend to clear away a fog of error if we could obtain more full and accurate information as to the habits, temperament, and the immediately antecedent circumstances of persons newly attacked. Speaking generally, we believe it would be found that the dismal ranks of the incurably insane are recruited from the multitude of purposeless loiterers or spasmodic enthusiasts in life, rather than the steady earnest workers. Again, a great deal more stress than appears either requisite or desirable is laid on the influence of what is called "an hereditary tendency." A process of following out the history of families from parent to child, in place of tracing it backwards with a foregone conclusion, might yield more satisfactory results. The number of persons who enjoy and preserve perfect mental health, in spite of a "tendency," is probably incomparably greater than that of those who are supposed to fall victims to this misfortune. Such matters, together with a more precise knowledge of the class of cases most easily or frequently cured, can only be elucidated by efficient and thoroughly impartial returns. These, we regret to find, are not forthcoming. Time is, no doubt, needed to develop an exhaustive and definitive method of reporting mental disease, but we fail to see the gradual improvement which ought from year to year to be noticeable in the returns edited by the Lunacy Commissioners. The subject is one of extreme urgency and widespread importance. Figures are all very well, but we want *facts*. To be really serviceable these must be laboriously collected, and classed and compared with a degree of scientific accuracy unfortunately conspicuous by its absence in the returns and reports at present available.

EXPERIMENTAL RESEARCH ON THE TOXIC PRINCIPLE OF PUTREFYING BLOOD.

V. Feltz employed in his investigations on this point blood which had been exposed to the air for several months. Microscopic examination, undertaken from time to time, demonstrated that the mobility of the spirilla and vibriones progressively diminished, and they ultimately disappeared entirely. The bacteria and the zooglœa membranes resisted putrefaction for a longer period, but likewise lost their mobility, and finally nothing could be seen in the fluid but a confused and motionless mass of rods and granules. Coincidently the smell of the blood became less pungent, and the production of ammoniacal compounds diminished. An injection being made of such putrescent blood (in quantity amounting to two cubic centimetres) into the veins of a dog, the phenomena of infection appeared, as evinced by elevation of temperature, loss of appetite, vomiting, bilious and even bloody evacuations. Four of the animals died in the course of ten or twelve days, but two others recovered completely. Old putrefied blood, in which no trace of life could be discovered, exhibited the same toxic action as that in which germs and fungus seemed to be in full activity, and it would appear that the septic action must be referred to some chemical agent which results from the presence and perhaps from the decomposition of the organisms, but is not due to the organisms themselves. On the other hand, the blood of the animals thus poisoned by decomposing blood exhibits numerous bacteria and cocco-bacteria, notwithstanding the fact that no living germ is present in the blood injected. Putrid blood which had stood for five months in the sun, and which had acquired a doughy consistence from evaporation, was perfectly dried in the air-bath and rubbed down to a fine powder. The impalpable powder was mixed in small quantity (one-half c.c.) with two to three c.c. of water, and this was injected into the crural veins of three powerful dogs. The animals immediately exhibited marked depression. After four or five days febrile symptoms were established, with bilious and bloody diarrhœa, vomiting, and biliary urine. Two of the three dogs died after ten days. The blood contained bacteria, and the red blood-corpuscles showed the well-known changes in form and disposition to break up exhibited by those of animals infected with septic blood. Nevertheless, the most minute investigation failed to reveal the existence either of living bacteria or vibrios in the dried powder either before or after its mixture with water. Now, since blood at all stages of putrefaction, till it has even undergone complete desiccation, after a certain period of incubation, induces septic phenomena, we must admit, according to Feltz, that motionless and apparently dead germs are present in the injected fluid, which, when thrown into the healthy blood, return to life, and are capable of reproducing the septic condition.

YELLOW FEVER.

The Annual Report of the Marine Hospital Service of the United States for the past year, compiled and presented by Dr. John M. Wordworth, Supervising Surgeon, contains some useful particulars as to this disease collected during the epidemics of 1873 and 1874 at New York, Pensacola, and elsewhere. The latter epidemic, which appears to have been comparatively circumscribed, was, as on previous occasions, the result of importation. The disease was brought to the quarantine station by a Spanish vessel, the first victim being a man who was engaged in the hold removing ballast, at a time when, for several days, the thermometer had averaged 78° Fahr. This vessel propagated the disease to another ship that was placed next to her in quarantine, having arrived with a perfectly healthy crew. (So much for quarantine!) Three men working at the quarantine station were next attacked, and afterwards the crew of a lighter, detained in quarantine five days, but also healthy on arrival. These men took the disease ashore. It lapsed for a time, but another case was admitted from without, supposed to be suffering with Chagres fever, and from that time (13th of August) to the middle of December, the disease was epidemic at Pensacola. The total number of cases that occurred was 225, with 55 deaths—i. e., a mortality of nearly 25 per cent. Among the 43 cases admitted to hospital within the first forty-eight hours of attack, 2 deaths occurred. Both of these men had been drinking hard immediately before the seizure; one also had scurvy, and the other pulmonary mischief. Of the 51 hospital entries, there were 42 recoveries and 10 deaths, and Dr. J. S. Herron, surgeon in charge, after an experience of three epidemics (in 1867, 1873, and 1874), records the opinion that, if patients are seen and treated within thirty-six hours after the commencement of the attack, the mortality need not exceed 10 per cent. for hospital, and 5 per cent. for civil practice. There was in this last epidemic a strong typhoid tendency, and less constipation than usual. In addition to the ordinary symptoms, most of the patients were on the third or fourth day covered with an eruption resembling lichen tropicus, and convalescence was followed by desquamation of the cuticle. The disease was introduced from Cuba, and the history of its propagation shows, in a most marked degree, not only the uselessness, but the eminently mischievous effects of quarantine, as carried out at Pensacola.

Dr. Frank W. Reilly, in reviewing the epidemic of yellow fever in the States during 1873–4, discusses elaborately the subject of quarantine, and reports in effect that it might be so carried out as to exclude the disease. But inasmuch as this process means, practically, annihilation of commercial interests, an intelligent and well-managed sanitary supervision, examination, and isolation at the various ports offer the best and most efficient substitute. The portability of the poison is once and again, in this last epidemic, proved most indubitably, and the important fact is stated that exposure to a temperature of 32° F. completely destroys it, though it may remain for an unknown length of time in a quiescent state when not subjected to a freezing temperature, or exposed to conditions necessary to its multiplication. Dr. Reilly says: "I consider the most reliable method of disinfecting a ship is to batten down her hatches and reduce the temperature of her hold to 30° F., and to keep her in that condition for four or five days, so that the bilge-water may remain frozen for that length of time." During the epidemic, 15,410 cases occurred in the States, 3397 of which were fatal.

Port sanitary authorities in this country are not likely to be called upon to deal with this disease, in consequence of the temperature required for its development; but this report is noteworthy, as regards general sanitation afloat, because it shows the spread of an international feeling against a quarantine of exclusion, which is impracticable, and a quarantine of prolonged detention, which is useless.

SAILORS' DWELLINGS AFLOAT.

It would possibly have been *mal apropos*, but it would most assuredly have been useful, if the Artisans' Dwellings Act just passed had included some provisions for sailors' dwellings afloat. The Merchant Shipping Act of 1867 did something to improve the condition of these places, enacting that every seaman shall have appropriated to his own use "not less than seventy-two cubic feet and twelve superficial feet, securely constructed, properly lighted and ventilated, properly protected from weather and sea, and, as far as practicable, properly shut off and protected from effluvium which may be caused by cargo or bilge-water." We are reminded of the unsatisfactory results of this piece of legislation by looking over the last half-yearly report issued by the City Corporation as Sanitary Authority of the Port of London, by which it appears that in forty-three cases the quarters of the crew were found in an ill-ventilated state, and suggestions for their improvement made by the officers of the sanitary authority were adopted. It is, of course, evident enough that the Marine Department of the Board of Trade, as their arrangements are at present constituted, have no means of judging whether the clauses of the Act above quoted are carried out in their integrity. Anyone who cares to take the trouble may visit vessels in the port of London, the accommodation given to the crews of which is not fit for dogs or pigs. Last year three men were killed (i.e., suffocated) by the effluvium arising from a foul cargo shipped at Barking, and it was found that they were lodged in a miserable lower forecastle, on a level with the freight, and barely separated from it by a decidedly fragmentary bulkhead. In these and analogous cases, as the law now stands, the Port Sanitary Authority can only suggest, and cannot enforce, structural alterations. The Merchant Shipping Act provides legislation which, in this particular, as in that relating to medical inspection of seamen, is a dead letter. There is a report now before us, headed "The Hygiene of the Forecastle," contributed by Dr. Heber Smith to the last Annual Marine Hospital Service Report of the United States, which entirely endorses all that we have recorded about homes afloat. It contains two or three very correct sketches of ships' forecastles, which show that they are, as the author says, "the neglected point of sanitary police." And a little book called "Modern Naval Hygiene," by Dr. Leroy de Merecourt, translated from the French by Staff-Surgeon John Buckley, of H.M.S. *Endymion*, speaks most emphatically on the importance of paying special attention to this important subject. All lower forecastles in vessels of less than 300 tons should be abolished. It is impossible to ventilate them sufficiently; there must always be an unhealthy, and sometimes a dangerous, proximity to the cargo, and the hatchway is usually so arranged that in the event of a collision or other accident near the bows a complete blocking up of all means of exit may occur, and indeed has frequently occurred, and the unfortunate sailors below have been drowned simply because they were imprisoned in their berths. In large steamships with lower forecastles, employed on telegraph and other works in equatorial latitudes, it is very desirable, on the score of temperature as well as cleanliness, to substitute hammocks for bunks. The entire space can then be cleared and cleaned without difficulty, as no holes and corners exist for the lodgment of foul material. In ships with large upper or topgallant forecastles it is better to have the bunks ranged amidships than along the sides of the vessel. These suggestions are sufficient to show that more attention should be paid to the condition of sailors' dwellings afloat. Shipowners are, as a rule, glad to adopt suggestions that are found to be practicable and useful, as instanced in the number of changes effected in vessels on the Thames during the past year through the agency of the port sanitary authority. In any future legislative changes the responsibility of the work should be more definitely fixed. As matters now obtain, the Board of Trade legislate, but know nothing about the results, and the local authority are bound by law to visit and inspect, but cannot, except in very gross cases of insufficient accommodation, legally compel structural changes to be carried out.

THE MEDICAL OFFICER OF ST. GEORGE'S, HANOVER-SQUARE.

The Guardians of St. George's Union cannot be congratulated on the way in which they have ended the inquiry into what we suppose we must call the charges against Mr. Fenton. The principal of these had reference to Mr. Fenton's behaviour in regard to an order to attend a man named Callagahan who died before Mr. Fenton's call, though the evidence showed that Mr. Fenton called very soon after the order reached him. The case was investigated by a jury. By the way, it is gratifying to put on record the case of one jury which was noble enough to refuse to censure a medical man because he was absent. But they received some garbled information, which led a contemporary unfortunately to publish a paragraph headed "Charge against a Parish Officer." This paragraph was referred to the guardians by the Local Government Board for inquiry. Another charge had reference to the case of a man named Murphy, and entirely broke down. As Mr. Fenton was able to show that he went almost directly to the man Callaghan, we should have thought that the guardians would be only delighted at the triumphant defence of their medical officer, and straightway have recorded their satisfaction. Viscount Pollington, with several other guardians, seemed anxious to pass a motion approving the conduct of Mr. Fenton. But the guardians were not equal to such a gracious course, and contented themselves with the following resolution:—"That no further steps be taken with regard to the charges against Mr. Fenton unless they are considered necessary by the Local Government Board." This is a virtual admission of the unfoundedness of the charges, and not Mr. Fenton, but the board must suffer in public estimation by the event. We congratulate Mr. Fenton on his defence. We will not justify every word of it, or some terms in which he characterises a medical member of the board, or his letter to a magistrate on the mental condition of a neighbour. But he has triumphantly repelled the chief charges brought against him, and shown that they should never have been brought. The frequency with which such a result follows charges of this kind will surely tend to make them less common.

RECENT METROPOLITAN AND PROVINCIAL URBAN DEATH-RATES.

During recent weeks the death-rate in London has more than once been lower than in any of the seventeen large provincial towns for which weekly returns are published. The Registrar-General, in his last weekly return, especially notices this fact, and states that whereas the annual death-rate in London, with its estimated population of 3,445,160 persons, during the week ending the 18th inst. did not exceed 20 per 1000, it averaged 27·2 in the seventeen other large towns, the aggregate population of which is estimated at 3,286,873, or rather less than that of the huge metropolis. The acceptance of the general death-rate—that is, the proportion of deaths to population—as a test of the health or sanitary condition of a community has, it appears to us on insufficient grounds, been frequently called in question; it may, therefore, be well to notice the recent death-rate in London and in the seventeen provincial towns from epidemic or preventable diseases. During the week ending the 18th inst. the annual death-rate in London from the seven principal zymotic diseases was equal to 4·9 per 1000, of which 2·2 was due to diarrhœa, principally infantile; in the seventeen provincial towns the zymotic death-rate averaged 8·3 per 1000, and the diarrhœa-rate was 5·0. Thus the fatality from zymotic diseases in seventeen of the largest provincial towns exceeded that in London by 70 per cent., and the fatality of diarrhœa was more than twice as great. Infant mortality, too, in the provincial towns compared most unfavourably with that in London. There is no reason, therefore, to believe that the general death-rates quoted above, which point to a recent far lower standard of health in our large provincial towns than in London, are to any considerable extent delusive. It may be mentioned that the health of London just now is not, for the time of year, exceptionally favourable, as the mortality from both scarlet fever and whooping-cough has been for some time above the average. Neither is the health of the seventeen other large towns exceptionally unfavourable, although scarlet fever is fatally prevalent in Bradford and Bristol. It is, indeed, impossible to avoid the conclusion that London has had a good start in the race for sanitary improvement, and that our other large towns have much lost distance to make up.

DUTIES OF JURORS.

The jury empanneled to ascertain the "cause of death" in the case of alleged poisoning by strychnine at Norwood displayed more than common spirit in an extraordinary fashion. The foreman and certain independent members of the judicial twelve took the matter out of the hands of the coroner, and proceeded to examine the witnesses in their own way, and to their hearts' content. They inquired into the existence and credibility of rumours, they expounded their views as to how the alleged crime might have been committed, and generally conducted the investigation in a fashion at once original, and, to the outside public, probably entertaining. It is impossible to give higher praise to their proceedings. We are not sure that the business of the coroner's court is generally transacted in the manner best calculated to assert the majesty of the law, or to maintain the dignity of its local administrators, but this new method of practically deposing a coroner in his own court, and making the jury supreme, is one which certainly strikes us as inconvenient, and likely to produce dire confusion. There can be no question as to the expediency of making the inquiry into a cause of death as inquisitorial as may be consistent with law and justice; and it is, perhaps, necessary that more latitude should be allowed to both judge and jury in such a court than is either requisite or wise in the case of a court of law; but there must be rules of procedure, and to the practice enjoined by custom coroners, jurymen, witnesses, and all concerned should submit themselves. It would be a great evil if these courts were reduced to a lower status in public opinion, and permitted to sink below the point of dignity their present condition implies. We are not sure that they would bear depletion in either respect without consequences so serious as to be fatal to their repute, perhaps to their existence. Indeed, we would go so far as to hint that coroners might with advantage keep a more jealous watch over the conduct of their courts, and emulate the business-like earnestness and dignity of tribunals to which they need not be vastly inferior, although they are tributary.

CUCURBITACEOUS ANTHELMINTICS.

Some investigations have recently been made by M. Heckel into the active part of pumpkin seeds. These seeds have been much used of late for the expulsion of the tapeworm, for which purpose they were employed in the early part of the last century. The mode of their administration has hitherto been to give the bruised seeds in large quantities suspended in water, the outer envelope only having been removed. About two ounces of the seed was the ordinary dose. It is probable that so large a quantity contains much inert matter. Some recent observations apparently indicate that the active principle is contained only in the embryo. To ascertain whether this is the case was the chief object of M. Heckel's observations. He first administered, in two cases of tænia, about six ounces of the perisperm, tegumentum and testa, a purgative of castor oil having first been administered. The tapeworm was not expelled in any case. In two other cases the membrane surrounding the embryo was given—about half an ounce,—preceded and followed by a dose of castor oil. In each case the tapeworm was expelled entire. Subsequent experiments yielded the same result. This membrane was then carefully examined, and found to consist of two membranes separable by maceration in water. The outer membrane contained a resin in small quantities (one in seventeen), which M. Heckel believes to be the active agent. He believes that the castor oil acts not only by its purgative effect, but by dissolving the resin and rendering it active. The second membrane contained more chlorophyll than resin. It must not be forgotten that these seeds contain a fixed oil, to which their qualities have been ascribed, and which may be obtained by cold expression from the seeds in the proportion of half an ounce to a pound. This oil has been used with success, in repeated half-ounce doses, in cases of tænia.

THE HOME OF THE COSTERMONGER.

We hear that there is some prospect of a new stack of Peabody buildings being erected in the very heart of that vile rookery which lies between Lincoln's-inn-fields and Drury-lane. It is one of the very worst of the London slums. The greater number of the houses in it are in an infamously insanitary condition, and are a standing disgrace to our municipal authorities. We have ourselves repeatedly drawn attention to the dismal district, and urged the importance of reform. But it must not be forgotten that reform in such a matter is in some senses a dangerous as well as a difficult operation. The population of such a district as this is often of a most complex character, its members agreeing only in the one peculiarity of the direst poverty. Burglars, pickpockets, and utterly worthless vagrants are huddled cheek-by-jowl with costermongers, porters, labourers, "supers," and a thousand nameless outsiders of London life, a vast proportion of whom are honest and would be decent if they could. Now all these people, even the thieves, must live somewhere, and the Peabody-buildings—excellent in their way—are absolutely unfit for, and inaccessible to nearly all of them. A vast number of them are obliged to live in the neighbourhood, and the only effect of pulling their houses about their ears would be to huddle them more and more closely together, and so increase the moral and physical evils of overcrowding. A correspondent of the *Weekly Dispatch*, writing evidently with unusual practical knowledge, draws particular attention to the case of the "costers." These laborious and generally honest caterers for the London poor require accommodation not only for themselves but also for their donkeys, and small surplus stores, often somewhat unsavoury, of yesterday's fish, fruit, and vegetables. So with the vendors of baked potatoes, coffee, and chesnuts. Peabody-buildings would be useless for such as these, even if they were accepted as tenants, and it seems hard that they should be stamped out in the interest of their far more powerful and prosperous brothers, the skilled artisans. Rebuilding is urgently necessary throughout the whole district, but it is a question of the utmost gravity whether the new buildings to be erected should not be made more suitable for the wants of the eccentric population around than the imposing piles which have arisen in other parts of London.

THE ROYAL BENGAL TIGER.

DR. FAYRER, who will accompany the Prince of Wales to India, has just published a little book entitled "The Royal Tiger of Bengal," which contains a map showing the geographical distribution of that animal, and a very spirited illustration of his appearance. As his Royal Highness's suite is composed largely of sportsmen, the issue of such a work is very opportune. Dr. Fayrer is not only a *savant*, but a mighty hunter, and is therefore enabled to describe the most powerful of the feline tribe from a sportsman's as well as from a field-naturalist's point of view.

Dr. Fayrer has, rifle in hand, met the tiger in his native swamps and jungles times out of number, and occasionally had a narrow escape from the claws of the brute. He describes his experiences in a graphic and interesting manner. "Those who have seen the tiger when stripped of his skin," says the author, "can hardly fail to have been struck with the grotesque resemblance to a gigantic human form which is presented by his sinewy and muscular frame as the arms are stretched out on either side. The vast shoulder, arm, forearm, wrist, and hand have a wonderfully anthropoid appearance." These muscles are modifications of those in the human or other mammalian limbs, and attain their excessive development in obedience to the necessities of the creature's existence. As is generally known, the wounds made by the fangs and claws of a tiger are extremely dangerous, although some wonderful cures have been reported.

THE PILLARS OF THE DIAPHRAGM.

MUCH attention has been given to the function of the vault of the diaphragm, but very little to that of its pillars. The action of the pillars of the rabbit's diaphragm has, however, been recently studied by M. G. Carlet. If the abdomen of a living rabbit is opened, and the liver and intestines turned to one side, the pillars are seen distinctly to contract, but simple observation is insufficient to decide whether this occurs before, during, or after that of the vault of the diaphragm. If the contraction occurs before that of the diaphragm, their function will be to fix the centre of the diaphragm, in order to permit the contraction of the arch. If this contraction succeeds that of the rest, their action will be to depress still more the vault of the diaphragm after it has been lowered by the contraction of its peripheral portion. An experiment to determine this could not be made with advantage in most of the mammalia on account of the interlacement of the muscular fibres of the two portions of the diaphragm. In the rabbit, however, the muscle is distinctly digastric, and its two portions are continuous only by the central connecting aponeurosis. M. Carlet made a longitudinal incision in the axis of this tendon, and thus obtained a button-hole-like slit, of which one edge was in connexion with the muscular fibres of the vault, and the other with those of the pillars. The two lips of the slit were uniformly separated and approximated simultaneously so as to imitate the movement of a mouth which opens and closes, presenting an elliptic opening when the diaphragm is relaxed, and a circular opening when the vault and pillars contract. From this M. Carlet infers, first that the contraction of the pillars and the vault is simultaneous, and, secondly, that the pillars have a direct inspiratory action.

COMBINED SANITARY DISTRICTS.

Two new combined districts are about to be formed for the appointment of medical officers of health. One will include the rural sanitary districts of Peterborough, Whittlesea, Stamford, Arrington, Caxton, and St. Neots, and St. Neots urban district. The salary attached to the appointment is £639. The other district will include the urban districts of Cockermouth and Keswick and the rurul district of Cockermouth Union; and the salary is fixed at £359 per annum. It is to be observed that some of these authorities have seceded from combinations formed shortly after the Public Health Act of 1872 came into operation. We should like to see a map of England and Wales with the boundaries of all these combinations and scrap districts, urban and rural, accurately indicated. We much doubt if a record of this sort exists even at Gwydyr House. Nothing would show so plainly the wonderful geographical muddle made during the last two years by local authorities, under the instruction and sanction of the general inspectors of the Local Government Board. Meanwhile, what with additions to and secessions from old, and the formation of new, combined sanitary districts, medical officers of health must live in a pleasing state of uncertainty both as to position and income.

CHEAP DOCTORS.

SOME medical men seem to think very humbly of the value of their services. Even in London there are medical men who contract to supply advice and medicines for a week for the modest sum of one shilling; or, if the patient is to be visited at home, half-a-crown. Perhaps the most striking instance of this "humbleness" that has come under our notice is that of Mr. Palmer, who, in announcing the discontinuance of all his medical clubs except the Stoke and Melford one, intimates in a handbill that any of the labouring classes wishing to consult him may do so on payment of *threepence*, to include advice and medicine for one person. Those wishing to be visited at home must pay sixpence. We must be permitted to question the right, speaking ethically, of any man to offer medical attendance on terms which must bring the profession into disrespect. The public, even the poor, ought to know that mere medicines cannot be supplied good and sound on any such terms. There is an unfailing connexion in regard to medicine between what is cheap and what is to be avoided. This is not the case of a well-organised club or provident dispensary, encouraging the working classes of a district to make provision, by weekly and systematic payments, for good and respectable medical attendance. Such institutions deserve every encouragement. But the case we condemn is that of offering medical services on terms which can only bring them into contempt. There may be no law against such a system, but there is a great unwritten understanding that a man owes something to the dignity of his calling.

GRUDGING MEDICAL CHARITY.

The dispensers of medical charity among the poor, either in the case of dispensaries or under the Poor Law, have to work under great disadvantages. It is painful to them to know that medical measures are so poorly supported by the general conditions of the patient. But how much harder is it to have any reason to believe that the very medicines which they prescribe are begrudged by those who represent charity. Two instances are before us. One is that of a Poor-law officer, who complains that the Dispensary Committee of his Board had a feeling that the medical officers were extravagant in the use of expensive drugs, and one member of the committee recommended that quassia should be prescribed instead of quinine. It would do this gentleman good to have ague for a week treated with quassia. Another instance is reported in the case of the Tavistock Dispensary, where Dr. Crighton has resigned because—we are sorry to say—one of his colleagues, Mr. Sleman, complained that he gave the patients too much medicine, and a committee seemed to sanction this view. It is only fair to the general body of subscribers to say that they passed the following resolution: "That having understood that Dr. Crighton has resigned, partly because a committee has seemed to sanction some reflections on his mode of prescribing, this meeting most emphatically repudiate any such seeming intention on the part of their committee, and promise to protect the physician against any interference in the future if he will kindly withdraw his resignation."

If we are to give the poor medicines let us give them the best medicines, as a matter of economy as well as of generosity. We entirely sympathise with the high-minded feeling with which both of these gentlemen resented any dictation as to the way in which they should prescribe. Indignation is a proper sentiment towards such interference, not the less so if it comes from a medical quarter. Rich people have comforts and change to restore their lost health; poor people rely on medicine almost entirely. And we would not like to characterise the feeling that would give them scanty supplies or that would substitute quassia for quinine.

CARLO BOTTA.

The medical profession has reason to be proud of the great historian whose ashes were transferred to Santa Croce at Florence on the eve of the recent festival in honour of Michel Angiolo. Born at San Giorgio del Canavese, in Piedmont, on November 6th, 1766, Carlo Botta graduated in Medicine in the University of Turin. After two years' imprisonment for advanced political opinions, he went to Grenoble, where he was appointed surgeon to one of the regiments of the Army of the Alps. He eventually settled in Paris, where he wrote his two great works on the History of America, and of Italy (in continuation of Guicciardini's). His fortunes fell so low at one time that he was constrained to sell as waste paper 600 copies of his American History to buy medical comforts for his wife. He died in Paris on the 10th of August, 1837, in comparative comfort through the bounty of Charles Albert, King of Piedmont. In transferring Botta's remains to the Pantheon, where monuments are raised to Dante and Alfieri, the Italians have done justice to the historian's power. He was a master of his language, an impartial judge, and a prophet of the national regeneration of his fatherland, to which he powerfully contributed.

"DIPSOMANIA."

How much names have to do with the formation of public opinion is well known. Many a cause has been made or ruined by an epithet, happy or unfortunate, which its friends or enemies have bestowed upon it. It is of the utmost importance that accurate and not misleading terms should become current with the public concerning any important social question. Our newspaper columns have been and still are full of illustrations of the inaccurate idea of the practice to which the term "vivisection" has spread abroad. In another column Sir James Alderson points out how inaccurately the term "dipsomania" describes the condition it is intended to designate. Of this there can be no question, but it is, we fear, too late to attempt to uproot it and to substitute for it the more accurate word which Sir James proposes. Happily, the meaning of the word is now fairly understood by the public, so that the consequences of its inexactness will be less than might at first sight appear probable. It would be long before a new expression became as popular.

HOSPITAL SATURDAY.

Captain Mercier must have found that the chair of the Hospital Saturday Fund is like anything but a bed of roses. He will perhaps begin to think it a pity that he ever took so prominent a part in initiating the separation of the Hospital Saturday from the Hospital Sunday movement. They evidently should be regarded as parts of one great attempt to gather the contributions of all classes in support of the institutions by which the sick and dying of the working classes are helped. We shall pass no further judgment on the results of the Hospital Saturday than to say that they display no evidence of the possession on the part of the committee either of the confidence of the working classes or of the knowledge of the way in which to interest these classes in the work of contributing to charities by which they are exclusively benefited. That the working men of London should in a year subscribe some £5000 only to its hospitals and dispensaries is a discredit to them, not to use a stronger word, and can only be palliated by supposing that the Hospital Saturday Committee has not their respect.

MONOBROMIDE OF CAMPHOR.

The physiological properties of monobromide of camphor have been recently investigated further by M. Bourneville, who has communicated his observations to the Académie des Sciences. His observations agree in the main with those of M. Pathault, to which we alluded a few weeks ago. He finds that the compound lessens the number of beats of the heart, and induces a contraction of the auricular vessels. It lessens the frequency of the respirations without interfering with their rhythm. It lowers the temperature regularly, and in the fatal cases this fall of temperature progresses to the end. The fall was very considerable, amounting in the cat to 15° Cent. In the cases which recovered the fall in temperature was succeeded by a rise which continued until the normal or natural point was reached, but a much longer time was occupied in the rise than the fall had taken. The monobromide of camphor was found to possess undoubted sedative properties. It produced no digestive disturbances, but its continued use led, in cats and guinea-pigs, to a rapid loss of flesh. It has been found useful in cardiac affections of nervous origin, in asthma, cystitis, and cases of epilepsy in which the attacks occurred simultaneously with attacks of vertigo.

THE EVILS OF THE COUNTER.

PUBLIC attention has been called by Mr. Fred. Smith of Leeston, near Weston-super-Mare, to the hardship inflicted on young girls in compelling them to stand behind the counter for eight, ten, or twelve hours daily, without opportunity of sitting down in leisure moments. The practice is unquestionably a frequent cause of physical weakness of a serious character. The hours of standing are continued from day to day and week to week, through periods when to many the exertion and the erect posture are sources of great suffering. The need for such rest as opportunity renders possible is, we are glad to believe, recognised in a large number of houses of business. It should be in all, and it is a disgrace to the humanity of employers that a public demand should be necessary before the requisite arrangements are generally conceded.

THE BRITON LIFE OFFICE.

WE publish in another column a report of the Briton Medical and General Life Association, issued at an extraordinary meeting held last Tuesday. As is pretty generally known, the profession is greatly interested in the success of this Office, nearly 3000 medical practitioners being connected with it. It is therefore to us a source of sincere pleasure to read the satisfactory financial statement now made, and which will doubtless remove any prejudice against the Office created by the recent attacks made on its stability. With the new series a large influx of fresh business is anticipated. We are given to understand that the same liberal arrangements as regards fees paid to medical men will be maintained.

COTTON-WOOL FOR SURGICAL DRESSINGS.

AT the last sitting of the Paris Academy of Medicine the question of cotton-wool for surgical dressings was again debated, with the result of showing the beneficial effects of that mode of dressing. Both Professor Gosselin and M. Alphonse Guérin spoke most highly of the good results they had obtained. They were not agreed, however, as to the cause of the excellent properties of wadding applied to wounded surfaces, M. Guérin believing that it was due to the interception of germs by the cotton-wool, and M. Gosselin referring it to the warm, even, comfortable temperature kept up by the cotton-wool.

DEATH OF DUCHENNE DE BOULOGNE.

IN our last issue we mentioned the illness of Duchenne de Boulogne. We now have to record with regret the death of this celebrated physician, whose researches on the nervous system and the medical applications of electricity are universally known. Duchenne had a stroke of apoplexy about three weeks ago, from which he partially recovered, but which has ended in destroying his life. In our next issue we shall notice more at length the career of the indefatigable and talented worker, who laboured to the last, and whose energies neither fortune nor success nor age ever diminished.

THE INTERNATIONAL MEDICAL CONGRESS AT BRUSSELS.

ON Monday last the formal inauguration of the Brussels International Medical Congress took place in the Ducal Palace, and in the presence of the King. Mr. Vleminckx, President of the Brussels Academy of Medicine, took the chair, supported on his right by M. Delcour, Minister of the Interior, and on the left by M. Anspach, Burgomaster of Brussels. Several speeches were made on the occasion; one by M. Vleminckx, another by M. Delcour, and a third by M. Anspach, which terminated the sitting.

IT is seldom we have to record anything in the nature of a "strike" in our long-suffering profession. Symptoms of revolt, however, occasionally appear when the burden has been laid on too heavily, as, for instance, when a man has to administer to the medical wants of a Poor-law district of 50,000 square acres or so for the munificent sum of £20 per annum, or less. Last week the Carmarthen Board of Guardians received a memorial from six medical officers of the union asking for an increase in their salaries, with an intimation that if the request were not granted they would resign. Consideration of the matter was postponed for a fortnight. We hope the most obtuse guardian or vestryman in the kingdom will concede that six members of an honourable profession would never combine in this manner to rectify their wrongs unless they had sufficient grounds of complaint.

WE have to record this week the death of Mr. G. L. Cooper, F.R.C.S., which took place on the 17th inst., at the age of sixty-five. Mr. Cooper was the nephew of Samuel Cooper, F.R.S., the author of the well-known Surgical Dictionary. The subject of our notice, after studying in London and Paris, obtained the M.R.C.S. in 1834, and was admitted a Fellow a few years later. He was surgeon to the Bloomsbury Dispensary, and a teacher of vaccination at University College Hospital. Mr. Cooper had contributed several articles to medical literature.

IN London last week 1338 deaths were registered, including 15 from measles, 82 from scarlet fever, 9 from diphtheria, 50 from whooping-cough, 24 from different forms of fever, and 147 from diarrhœa. Different forms of violence caused 53 deaths. A death from hydrophobia was recorded at St. Thomas's Hospital. The mean temperature during the week showed a marked excess upon the mean for the corresponding period in the last sixty years.

AT the meeting of the University Court of St. Andrews, held on Wednesday, Dr. James Bell Pettigrew, F.R.S., &c., Lecturer on the Institutes of Medicine at the Royal College of Surgeons, Edinburgh, was unanimously appointed to the Chair of Medicine in the University, vacant by the death of the late Dr. Oswald Home Bell. Mr. Adam Wilson, M.A., Classical Master in the Dundee High School, was appointed Classical Examiner.

THE Charing-cross Hospital is now undergoing important alterations and additions, which when completed will nearly double the present accommodation of the institution. A sum of £13,000 will be expended in the work of enlargement, which comprises the erection of an entirely new storey. It is stated that the hospital will be temporarily closed to all save very urgent surgical and medical cases.

IT is reported that cholera has attacked the troops now stationed in Lucknow, and that it was found necessary to send the 65th Regiment some distance away. These periodical outbreaks of the disease among our soldiers seem to be inevitable. As far as we can learn, the civil population has not suffered in any appreciable degree.

A CORRESPONDENT writes to complain of what he terms the "intolerable stench" from the Tottenham Sewage Works and from the river Lea, and wants to know whether the medical officer of health for the district cannot interfere to remedy the evil.

We regret to have to record the death of Dr. William Richardson, of Kilburn, at the age of sixty-four. The deceased gentleman was M.D. of St. Andrews and M.R.C.P. London. He was the author of a book entitled "Remarks on Diabetes and its Treatment."

The *Army and Navy Gazette* states that Brigadier-General Campbell, C.B., has been compelled to run away from the War Office in consequence of the extremely foul condition of the atmosphere in the establishment.

The will and codicil of the late Mr. John Churchill, the well known medical publisher, were proved on the 6th inst., the personal estate being sworn under £60,000.

The *Pall Mall Gazette* states that several ships have recently arrived from the East with cases of scurvy on board.

Correspondence.

"Audi alteram partem."

"DIPSOMANIA."

To the Editor of The Lancet.

Sir,—The greatest of all our evils in the present day, the fundamental cause of all crime and misery, intoxication, is naturally the most frequent subject of discussion. It is to be lamented that the scientific term used in the discussion is neither accurate nor applicable. The word "dipsomania," by which the effects of excessive indulgence in spirituous liquors are meant to be described, is a mere euphuism, unworthy of the grave importance of the subject which it is meant to elucidate. If it is at all desirable to use a Greek word for an evil condition of modern society it should at least be accurate, and not, as now, be unintelligible even to the nation from whom the term is borrowed. Dipsomania, literally construed from the Greek, means "madness induced by thirst."[*] Now it is not thirst which induces the evil habit of drinking. People fall into the terrible condition of drunkenness, not by the desire to assuage thirst, but by compliance with a sensual gratification of tasting spirit, and for the enjoyment of obliviousness and relief from painful or troublesome feelings. In the case of the beer-drinkers there may be some sense of thirst to be alleviated, but it is not this class who suffer from maniacal excitement. The hideous, crying source of crime and misery is, indulgence in spirituous liquors. The Greek word for inebriety is Μέθη. "Methomania" would, in regard to classical derivation, be the correct word, and it would be comprehended by every modern Greek. The Greeks of the present day have a saying, *Μέθη μικρὰ μανία ἔτσι*—"Inebriety is a minor madness."

Your obedient servant,

Berkeley-square, Sept. 18th, 1875. James Alderson.

THE BRITISH MEDICAL ASSOCIATION.

To the Editor of The Lancet.

Sir,—It is surprising that no one has replied to Dr. Kebbell's letter in The Lancet of 28th ult., on the subject of the proposed visit of the Association to this town, since the facts so temperately related by him are most damaging, and should either be met and disposed of, or be acknowledged as ground sufficient for the abandonment of the project. The resident supporters of the invitation are warm on the subject, as is sufficiently proved by the readiness they have shown to do battle for it; their reticence therefore on this particular occasion can only be regarded as evidence of their inability to answer the letter in question.

But members who reside at a distance, and who consequently are unacquainted with the views and opinions of those concerned on the spot, might have been expected to show their interest by making inquiry into a matter that is certainly of importance to the Association. Perhaps, however, it would be fair to assume that in their minds Dr. Kebbell's statements were, after all, but the embodiment of personal views, and as such liable to the suspicion of partiality and incompleteness; and, if so, they might not unnaturally await some explanation or further evidence of their validity. If this supposition be correct, what such persons require they may easily be furnished with; it lies on the surface, and is, in short, no other than the unpopularity of the Association itself amongst us.

I forbear to occupy your space with reasons and facts in proof of this position, and, unless challenged, will content myself with the assertion that we are at once grievously disappointed in the weak and barren policy of the Association, and profoundly distrustful of the *Journal* which seems to be its only outcome.

In the local controversy on the subject, as is, perhaps, natural, a good deal of personal feeling has been evoked. But in reality all such considerations are quite irrelevant, and ought to be dismissed without further thought. It is the Association itself, as at present conducted, that is obnoxious; and that being so, no one can be surprised that we so far refuse to condone its *lâches* as to invite those responsible for them as guests in our midst.

I am, Sir, yours obediently,

R. Branwell.

Montpelier-place, Brighton, September 21st, 1875.

THE LATE DR. MAUNSELL, OF DUBLIN.

To the Editor of The Lancet.

Sir,—I think it right to inform the readers of your journal that a memorial fund is about being raised in order to show a recognition of the late Dr. Maunsell's literary services to the public, the medical profession, and especially to the Poor-law service of the United Kingdom. The desirability of such a movement was thought of immediately after his death; but some delay was occasioned by the necessity of consulting the feelings of the family. His widow, however, having consented to receive a memorial, the difficulty has been removed. We shall have a special meeting in Dublin on Friday, the 24th inst., for the purpose of starting an organisation to carry out this object. Meanwhile subscriptions will be thankfully received by Dr. Joseph Rogers, 33, Dean-street, Soho, London; Dr. Grimshaw, 13, Molesworth-street, Dublin; and by myself.

I am, Sir, your obedient servant,

28, North Frederick-street, Dublin,
Sept. 20th, 1875.
Albert O. Speedy.

The following subscriptions to the Maunsell Memorial Fund have been announced:—

Sir William Jenner, Bart.	£5	5	0
Sir Dominic Corrigan, Bart.	2	0	0
Dr. Banks	2	2	0
Dr. Robert M'Donnell, F.R.S.	2	2	0
Sir William Wilde	1	1	0
Dr. Cruise	2	2	0
M. J. Kilgarriff, F.R.C.S.I.	5	0	0
Dr. Dudley White, No. 3, North City Dispensary	1	1	0
Dr. Speedy, No. 3, North City Dispensary	5	0	0
Lambert Ormsby, F.R.C.S.I.	1	1	0
Dr. R. T. Wilson, No. 2, North City Dispensary	1	1	0
Dr. Joseph E. Kenny, No. 2, North City Dispensary	1	1	0
Dr. John A. Byrne, No. 4, South City Dispensary	1	1	0
Dr. Smyly	5	0	0
Dr. Edward Moran	1	1	0
Dr. Spencer, Burton Port, Co. Donegal	1	1	0
Dr. James Shaw, Dublin	0	10	6
E. P. Ward, No. 3, North City Dispensary	0	5	0
Dr. Edmund B. Blakely	1	1	0
Dr. Baxter	1	0	0
Dr. Atthill	2	2	0
E. S. O'Grady, F.R.C.S.I.	5	5	0
Dr. M'Clintock, F.R.C.S.I.	3	0	0
Dr. Kidd, F.R.C.S.I.	3	3	0
Dr. Grimshaw	1	1	0
Professor M'Dowel	1	0	0
Charles P. Moore, South City Dispensary	2	2	0
Dr. Churchill	2	2	0
Dr. Ross Maguire, Castleknock Dispensary	1	0	0
George Porter, F.R.C.S.I.	2	2	0
John M'Donnell, M.D., Medical Commissioner, Local Government Board, Ireland	5	0	0
R. W. S. Maybury, Queen's Bench	1	1	0
Dr. Joseph Rogers, ex-President English Poor-law Medical Officers' Association, London	2	2	0
Dr. Cameron, City Analyst	1	1	0
Dr. Peel, No. 5, City Dispensary	5	5	0
Dr. J. F. Pollock, Blackrock, Co. Dublin	1	1	0
Dr. Hyman Marks, South City Dispensary	2	2	0
Henry G. Sadler, Esq.	1	1	0

ABUSE OF MEDICAL CHARITY.

To the Editor of THE LANCET.

SIR,—A good deal has been written of late concerning the abuse of medical charity. In many instances this abuse has been perpetrated in such a manner as to put the control of it beyond the power of medical men themselves, as, for instance, that which takes place in the out-patient rooms of our large hospitals, &c. Some cases, however, appear to be connived at by our *confrères*, as in the following instance, and I should be very glad to have your opinion on it.

A patient of mine has just been spending a month at W———. She is a retired shopkeeper, and in very comfortable circumstances, perfectly able to pay me (her medical attendant) my bill as soon as it is delivered. In fact, her means may be judged of by anyone who considers that she was residing, for her own pleasure, at the seaside for a month in the height of the season. On my seeing her on her return, she told me she had been under the care of Dr. ——, as an out-patient at the W——— Sanatorium. She told me with considerable satisfaction that "it was all gratis, and she had just as good advice as if she had called at Dr. ——'s house and paid a guinea for it." I asked her if any questions were asked as to her circumstances, &c. She said, No, and added that "there were some of the patients that appeared quite ladies and gentlemen, and one young man brought his sister, who had a gold brooch and locket and a gold watch and chain."

Now, Sir, the consequence is this. My patient brings with her a prescription from this sanatorium, by which she goes on taking medicine made up by her druggist, instead of again putting herself under my care. I see that the W——— Sanatorium is founded for the relief of "diseases peculiar to women and children." Whether the medical officers consider diabetes (such is my patient's malady) to come under that category I know not; but I should like to ask you, Sir, whether you think the abuse of medical charity can be carried much farther than in the case I mention. I asked my patient how she heard of this charming charitable institution? She said she heard of it from a lady with whom she became acquainted by sitting reading near one another on the beach, and who strongly impressed upon her the advantages (particularly pecuniary) to be derived from an attendance at its out-patient department.

I remain, Sir, yours obediently,

Cirencester, Sept. 8th, 1875. EDWARD CRIPPS.

BIRMINGHAM.

(*From our own Correspondent.*)

THE medical education of women question is now causing great public excitement in this town. An influential deputation, headed by the Mayor, and including Dr. Heslop, and Messrs. Furneaux Jordan and C. J. Bracy as medical representatives, attended the last meeting of the Council of Queen's College, and strongly urged the desirability of provision being made at the College for the teaching of women students. The Mayor assured the Council that the introduction of female students would popularise the College, and that the deputation would be prepared to overcome any financial or other difficulties that might arise to prevent the realisation of their wishes. Dr. Heslop pointed out that at present ladies were obliged to go to Paris, Zurich, or America for a medical education, and that, as the general public had come to the conclusion that those women who persisted in undergoing a medical training should have an opportunity of doing so in England, it was better that the education should be given in a school like that of Birmingham, which had a reputation, recognition from the Medical Council, and all the machinery for giving a good medical education, rather than that a new educational institution for the special use of women should be started. The Rev. C. Clarke, as chairman of the Queen's Hospital Committee, expressed his belief that there was public spirit enough on the part of the board to meet, if possible, the views of the deputation, and to prevent any difficulty being thrown in the way of the admission of women to the hospital, provided the Council of Queen's College would themselves accept their co-operation. After a long discussion, an understanding seemed to be arrived at that the assent of the hospital authorities must be obtained, and that the deputation must be prepared to guarantee the College a sufficient amount to cover the fees in those cases in which the Professors declined to lecture to double classes.

Dr. Richardson's success as a popular lecturer is so well known that one was not surprised at the large audience that assembled to hear his lecture on "Tobacco in relation to Health." The Midland Institute have wisely secured his services, as well as those of Dr. Ferrier, for lectures on physiological subjects during the ensuing session.

The medical profession in Birmingham have to deplore the death of Dr. Alexander Fleming, late Physician to the Queen's Hospital, at the comparatively early age of fifty-one. He had been in practice here about eighteen years, and during that time had acquired a high and well-deserved reputation as an exact and careful physician, and as a therapeutist of great skill. His kindliness and patience as a clinical teacher made him respected and beloved by all pupils, and his courtesy and ability secured for him the esteem and regard of a large circle of professional as well as private friends. Dr. Fleming died from chronic renal disease. Death has also been busy among the younger members of our body. Mr. E. B. Ravenhill, late house-surgeon to the General Hospital, Wolverhampton, died suddenly at the age of twenty-five, from syncope, after a few days' suffering, with symptoms of gastro-intestinal catarrh, the effect in all probability of overwork. Mr. J. T. Smith, of Sutton Coldfield, has also died quite suddenly, while in the full vigour of manhood. He had been, like Mr. Ravenhill, a distinguished student of Queen's College, and he had subsequently held the appointments of house-surgeon to the Lying-in Hospital and resident medical officer at the Birmingham Dispensary.

The Medical Institute is said to be making good progress. Two hundred volumes have already been presented, and a "local habitation" is about to be secured to give room for further gifts and purchases.

The necessary arrangements are being made for Hospital Sunday. The appeal from the pulpits will be made on Oct. 31st, and will be on behalf of the Queen's Hospital.

Diarrhœa is very prevalent, but in other respects the town is healthier than usual at this season of the year.

Birmingham, Sept. 20th, 1875.

NEWCASTLE-ON-TYNE.

(*From our own Correspondent.*)

WE boast of a Vegetarian Society here, and the other night it gave a grand banquet in furtherance of its principles. It was very numerously attended by ladies and gentlemen. The *menu* was as follows:—Vegetarian pie, vegetable marrow stuffed with fried potatoes, potatoes roasted, potatoes mashed, haricot beans and parsley sauce, English beans, English peas, tomatoes, onions boiled, onions roasted, boiled lentils, plain pudding, rice pudding, sago pudding, mixture of apples and preserved stewed apples, and stewed pears. Numerous enthusiasts in the vegetarian's *régime* were constantly explaining the qualities of the various dishes. The majority of the guests seemed undoubtedly to enjoy the banquet, but to many a sigh of relief involuntary came when the cooked dishes were removed and the *dessert* fruit was placed upon the table. A public meeting was afterwards held to promote vegetarian views, and the company separated on the whole well pleased with their harmless experiment.

The ancient and picturesque little town of Chester-le-street, with its historical castle at Lumley and interesting church so rich in sculptured monuments of knights and crusaders, used to be a favourite drive from Newcastle and Gateshead, and its neighbouring slopes attractive resorts for pic-nic and other excursion parties; but latterly the good old town has literally fallen into "bad odour" with all health and pleasure seekers, and travellers for some time past have been fain to give it the "go by," and endeavour to reach their destination by circuitous routes rather than cross its bridge and encounter the smells from its "burn," as the open sewer partly surrounding the town is called. Time was, no doubt, when the Chester Burn was a crystal stream and purling tributary of the Wean, but of late it has become a drain of the foulest character, poisoning the neighbourhood with its nauseous emanations. There have, of course, been meetings called for "the purpose of considering the state of the Chester Burn." "Sanitary meetings," "township meetings," "guardian meetings," inspections, committees, estimates, discussions, propositions, amendments, postponements; but still the stench increases. There has been no amendment in the nuisance; nothing has been really done, notwithstanding all that has been said to remove a plague which bids fair to blight one of our most quaint, interesting, and beautiful of northern towns.

Newcastle-on-Tyne, September 8th, 1875.

IRELAND.

(*From our own Correspondent.*)

Some time since a skating-rink was opened at Kingstown, which has been productive of not a few accidents, sufficiently important to require surgical treatment. Fractures of the radius and sprains and dislocations of the arm and wrist have in some instances resulted from this novel, so-called, skating. On the 6th inst., Mr. John Burr Maguire, a young gentleman only nineteen years of age, fell on the rink and died suddenly of heart disease.

The loss of the ironclad line-of-battle ship *Vanguard* continues to attract much of public attention here. Daily efforts are being made, with considerable success, by Captain Batt, of Devonport Dockyard, and the divers, riggers, and crew of the *Carron* steam-tug, in the recovery of rigging, &c., of the submerged ship. In a medical point, the process of diving at so considerable a depth is a matter of much interest; the present extremely fine weather is most fortunate for the work.

An unfortunate female, Anne Byrne or Burden, has just died at Steevens's Hospital of injuries sustained by falling from or being shoved out of a window, as she asserted, at the Royal Barracks in this city. Evidence has been forthcoming to show the fearfully degraded state of the wretched women inhabiting the houses in the locality to which Anne Byrne or Burden belonged, and which has been long since condemned by the medical officers of that district of the city as unfit for habitation. I believe that a recommendation has been made by the Dublin Sanitary Association that the place in question, Skinner's-alley, should be pulled down, and that the houses comprising it are all of the number condemned long since by the Dublin Corporation as unfit for human habitation. I trust, moreover, that an investigation will be undertaken as to the condition of localities occupied by the class of unfortunates in some of the worst localities in Dublin, and that the inquiry will embrace the very important question of the propriety of extending to this city the Contagious Diseases Prevention Act. Such places are too frequently a snare for young soldiers and other strangers in Dublin, and parties of military are not uncommonly to be seen on duty in such localities, endeavouring to find missing men.

Statements as to the condition and unsuitable position of certain slaughterhouses in Dublin having been made to the Dublin Sanitary Association by owners of property adjoining some of these places, complaining of injury arising therefrom to the public health and to property, the Association asked the local authority for a list of the licensed slaughterhouses, which was at first evaded, and, lastly, refused so discourteously as to draw forth comments from all the leading local journals reflecting severely upon such conduct.

The citizens who have at heart the interests of the working classes, and therefore of the whole community, bound up together as we are by so many ties, not apparent, as it may be, to casual observers, have been much surprised to learn that "the visiting committee" of the South Dublin Union approve the interment of 500 more bodies in a small tract of ground near St. Patrick's Cathedral long used as a burial-ground. I may observe that this place is close to the Meath Hospital and County Dublin Infirmary, is surrounded by overcrowded tenements, from which fever, exanthemata, or other illnesses, are never absent, and it was this neighbourhood that served as a centre for the spread of the worst form of small-pox and of cholera in recent epidemics; indeed, if space permitted, very many other reasons, as the coexistence of manure yards, schools for the poor, dairy yards, &c., in and around this spot, could be given, to show the injudiciousness of the recommendation in question.

The first meeting of the Council of the Pharmaceutical Society of Ireland took place at the College of Physicians on the 10th inst. The proceedings were announced as private, no reporter being present, and were, as I am informed, merely of a preliminary nature. The Council was adjourned, the next meeting to take place on or about the 22nd inst.

Captain Webb's swimming feat has induced others to attempt performances in the same line, which, though on a far more humble scale as to distance, resulted fatally in one case—that of a man who attempted to swim across one of the lakes in the centre of Ireland. Bathers in fresh water should bear in mind that, in addition to the diminished buoyancy of their bodies in water of a less specific gravity than salt water, there is also a greater frequency of coldness in parts of lakes, &c., from springs, which has often been attended with fatal consequences to bathers. In such water, too, there is wanting the peculiar stimulating effect of salt water, which doubtless favours the swimmer in sea water.

Dublin, Sept. 14th, 1875.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 16th:—

Archer, Robert Kendray, Cathcart-hill, Highgate.
Dearden, John Alfred, Douglas, Isle of Man.
Todd, John, Union-road, Tufnell-park.

The following gentlemen passed the Primary Professional Examination on the same day:—

William John Cant and Alfred Pratt, Queen's College, Birmingham.

The late Dr. Alexander Fleming.—The following resolution, carried unanimously by the Medical Committee of the Queen's Hospital, Birmingham, shows the high estimation in which that gentleman was held by his colleagues:—"The members of the Medical Committee desire to express their deepest sympathy with Mrs. Fleming in her great bereavement. In the death of Dr. Fleming they have been deprived of a most esteemed colleague, and the Queen's Hospital has lost a valued consulting officer."

Suicide of a Medical Gentleman.—A very distressing suicide is announced as having occurred in the West Riding. Dr. Tatham was in the company of his sister in his orchard at Burton in Lonsdale on Saturday evening, and while left alone for a few minutes he cut his throat. On being found in this condition shortly afterwards, he was conveyed into his house close by. Medical assistance was at once obtained, and the wounds were sewn up. The deceased, though sensible, never rallied, and died about two hours afterwards. Dr. Tatham had been suffering from general ill-health for some time, but beyond this there is nothing to account for the act.

Mortuaries.—At a meeting of the Strand Board of Works, on Wednesday, September 22nd, the following motion, by Dr. Joseph Rogers, was carried unanimously:—"That with the view to the more effectually and economically securing the establishment of mortuaries in the metropolis, this board do memorialise the Metropolitan Board of Works to apply in the next session of Parliament for powers authorising that body to undertake their erection in such parts of the metropolis as may be considered necessary." It was also resolved that a copy of the resolution should be forwarded to the several boards of works in the metropolis, and that they should be requested to co-operate with the Strand Board in pressing the question on the attention of the Metropolitan Board. Dr. Joseph Rogers, Mr. Betts, Mr. Phillips (the representative of the board on the Metropolitan Board), and Mr. Jenkins, the clerk, were appointed to draw up the form of memorial to be forwarded to the Metropolitan Board.

Vaccination Certificates by Unqualified Practitioners.—At the Chester-le-street Petty Sessions Mr. Percival Hall, of Holmside, was charged under the 40th section of the Medical Act, 1858, with having signed a vaccination certificate, he having no qualification entitling him to give such certificate. No attempt was made to dispute the facts, but on behalf of the defendant it was contended that the case did not come within the Act. The magistrate, after consultation, inflicted a fine of £10 and costs, but, on the application of the defendant's solicitor, granted a case for a superior court.

Medical Appointments.

Adams, R. S., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Lymington District of the Lymington Union.

Addy, B., M.D., M.R.C.S.E., has been appointed a Medical Officer to the new Branch of the Salford and Pendleton Royal Hospital and Dispensary, Manchester.

Brook, C., M.R.C.S.E., has been appointed an Hon. Surgeon to the Lincoln General Dispensary, vice Snow, deceased.

Brookfield, J. S., M.D., M.R.C.S.E., has been appointed Medical Officer for the Emley and Flockton Districts of the Wakefield Union.

Calthrop, E., L.R.C.P.L., M.R.C.S.E., has been appointed Surgeon to the St. Saviour's Hospital and Refuge for Women and Children, Upper Holloway, vice Lucey, appointed Resident Physician to the Ben Rhydding Hydropathic Establishment.

Cobban, A. R., M.B., C.M., hitherto Medical Officer of Health for the Kimberworth Sub-district of the Rotherham Rural Sanitary District, has now been appointed to the whole district.

Crawford, W., M.B., C.M., has been appointed House-Surgeon to the Blackburn and East Lancashire Infirmary, vice Stewart, resigned.

Eaton, J., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Parishes of Sandsting and Walls, Shetland, vice Pole, resigned.

Elder, G., M.B., C.M., has been appointed Surgeon to the New Hospital for Women, Nottingham.

Elliston, G. S., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Ipswich, vice Adams, resigned.

Fay, T., M.R.C.S.E., has been appointed an additional Hon. Dental Surgeon to the Liverpool Dental Hospital.

Fiske, J. F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Donhead District of the Tisbury Union, vice Thompson, resigned.

Freer, J. H., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Rugeley District of the Lichfield Union, vice Tibbits, resigned.

Greenwood, J. W., M.R.C.S.E., L.M., has been appointed Medical Officer for the Shitlington District of the Wakefield Union.

Harrison, C., M.D., has been appointed Hon. Physician to the Lincoln General Dispensary.

Hesslegrave, J., M.R.C.S.E., has been reappointed Medical Officer of Health for the Golcar, Linthwaite, Longwood, Marsden-in-Almondbury, Marsden-in-Huddersfield, Scammonden, and Slaithwaite Urban Sanitary Districts.

Heaps, J., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer for the Lofthouse-with-Carlton and Thorpe Districts of the Wakefield Union.

Hirst, C., L.R.C.P.Ed., has been appointed Medical Officer for the Ardsley West District of the Wakefield Union.

Horsfall, H., M.R.C.S.E., has been appointed Medical Officer for the Crofton District of the Wakefield Union.

Jameson, T., M.D., L.R.C.S.Ed., has been appointed Assistant Visiting Surgeon at Plymouth, Devonport, Dartmouth, Ivy Bridge, and Plympton, under the provisions of the Contagious Diseases Acts (Women), vice Archer, appointed Visiting Surgeon.

Kemp, B., M.R.C.S.E., has been appointed Medical Officer for the Ardsley East District of the Wakefield Union.

Lorraine, W. J., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer for the Chevet, Sandal-Magna, and Walton Districts of the Wakefield Union.

Loudon, J., M.D., has been appointed Medical Officer to the Combination Poorhouse, Hamilton, Lanarkshire, vice Naismith, deceased.

Lucas, R., M.D., C.M., has been appointed Certifying Factory Surgeon for Dalkeith, vice Jefferiss, deceased.

M'Kechnie, A., M.B., C.M., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Inverness District Lunatic Asylum, vice Weir, whose appointment has expired.

Mackenzie, W. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Sharlston District of the Wakefield Union.

Madeley, G. S., M.R.C.S.E., has been appointed Surgeon to the Hospital for Incurables, Ardwick-green, Manchester.

Marshall, J. S., M.D., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Hamilton, Lanarkshire, vice Naismith, deceased.

Newman, W. J., M.O.S. Gt. Brit., the founder of the Liverpool Dental Hospital, has been appointed a Consulting Dental Surgeon.

North, S. W., M.R.C.S.E., L.M., has been appointed President of the newly formed Association of Medical Officers of Health of Yorkshire.

O'Keefe, M., M.D., has been appointed second Examiner in Medical Jurisprudence at the Queen's University in Ireland.

Orchard, T. N., M.D., C.M., has been appointed a Medical Officer to the new Branch of the Salford and Pendleton Royal Hospital and Dispensary, Manchester.

Pasley, A. C. B., L.R.C.P.L., L.R.C.S.I., has been appointed Resident Medical Officer to the Dover Hospital and Dispensary, vice Webb, resigned

Phillips, E. J. M., M.R.C.S.E., L.D.S., has been appointed an additional Hon. Dental Surgeon to the Liverpool Dental Hospital.

Smailes, T., M.R.C.S E., has been appointed Medical Officer to the County Constabulary, and to the Odd Fellows', Druids', and Gardeners' Friendly Societies, Honley, Yorkshire, vice Todd, deceased.

Smith, R. D., M.R.C.S.E., has been appointed Resident Medical Officer to the London Hospital, vice Lewis Mackenzie, L.R.C.P.L., resigned.

Stewart, R. E., L.D.S. R.C.S.E., Senior Dental Surgeon to the Liverpool Dental Hospital, has been appointed a Consulting Dental Surgeon.

Thomas, E. F., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Shepperton District of the Staines Union, vice Jones, resigned.

Wesley, J. S., M.B., M.R.C.S.E., has been appointed Secretary and Treasurer of the newly formed Association of Medical Officers of Health of Yorkshire.

Wilkinson, T. M., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a Medical Officer to the Lincoln General Dispensary, vice Lowe, resigned.

Wise, T., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Northleach Union, and Medical Officer of Health for the No. 2 Sub-district of the Northleach Rural Sanitary District, vice Swan, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Bryant.—On the 10th inst., at Sussex-square, the wife of John H. Bryant, L.R.C.P.Ed., of a son.

Farr.—On the 17th inst., at Slade House, Kennington-road, the wife of Geo. F. Farr, L.R.C.P.Ed., of a son.

Hoffman.—On the 17th inst., at Fulham, the wife of H. W. Hoffman, M.B., of a son.

Noad.—On the 18th inst., at East Cowes Villa, Lower Norwood, the wife of H. C. Noad, L.R.C.P.L., of a son.

Oliver.—On the 18th inst., at West-end-park, Harrogate, the wife of Geo. Oliver, M.D., of a daughter.

MARRIAGES.

Blythman—Ellis.—On the 16th inst., at Thurnscoe, Clement S. Blythman, M.B., of Swinton, to Annie, only daughter of J. D. Ellis, Esq., of Thurnscoe Hall, Yorkshire.—No Cards.

Hill—Nelson.—On the 9th inst., at Sparham, Norfolk, T. Wood Hill, L.R.C.P., M.R.C.S., L.S.A., of West Cromwell-road, South Kensington, to Mary, daughter of the late Thomas Nelson, Esq., of Sparham.—No Cards.

Dyer—Barton.—On the 15th inst., at St. James's Church, Sutton, Macclesfield, Cheshire, Henry Gearey Dyer, M.R.C.S.E., L.R.C.P.Ed., of Ringwood, Hampshire, to Annie Louise, youngest daughter of the late Samuel Barton, Esq., of Parvey, Sutton.

M'Dowall—Carey.—On the 21st inst., at the Parish Church, Ryton-on-Tyne, Dr. T. W. M'Dowall, Northumberland County Asylum, Morpeth, to Alice, eldest daughter of H. C. Carey, Esq., of Elsinore, Denmark.—No Cards.

Maclaren—Campbell.—On the 15th inst., at St. Paul's Church, Carlisle, Roderick Maclaren, M.D., to Isabella Emma, youngest daughter of the late Rev. Duncan Campbell, of North Knapdale.

DEATHS.

Bower.—On the 7th inst., at Wilmslow, Cheshire, Joshua Bower, M.R.C.S.E., aged 44.

Clarke.—On the 5th inst., at Trincomalee, Wm. H. Clarke, M.R.C.S.E., Staff Surgeon R.N., aged 52.

Cooper.—On the 17th inst., at Woburn-place, Geo. L. Cooper, F.R.C.S.E., aged 65.

Dempsey.—On the 14th inst., at Charterhouse-square, Joseph M. Dempsey, M.D.

Gell.—On the 10th inst., at Southam, Warwickshire, Isabella Sarah, wife of Alfred Scott Gell, M.R.C.S.E., aged 38.

Hirst.—On the 16th inst., at Morley, Yorkshire, Lionel Hirst, M.R.C.S.E., aged 32.

Pope.—On the 16th inst., at Scarsdale Villas, Kensington, Catharine Eliza, wife of Edward Pope, M.R.C.S.E., L.M., of Tring, Herts, and mother of H. Campbell Pope, M.B., B.S., Queen's College, Birmingham.

Richardson.—On the 18th inst., at Oatlands, Mortimer-road, Kilburn, Wm. Richardson, M.D., aged 64.

Smith.—On the 12th inst., J. T. Smith, M.R.C.S.E., of Sutton-Coldfield, Warwickshire, aged 39.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

A Rare Wine.

At a banquet given lately by the Board of Irish Lights to the officers of the Reserve Squadron of the Channel Fleet at Kingstown, among various dainties provided for the guests was some port wine which was on board Lord Nelson's ship, the *Victory*, at the battle of Trafalgar. That port wine or indeed any wine at that age could be worth drinking is a matter of opinion; but even the most inveterate temperance advocate might safely enjoy a beverage of the kind, as only the merest trace of alcohol would be likely to be present.

F. E. H. I.—Speaking generally, a marriage of such near consanguinity would be decidedly unadvisable. There may, however, be exceptioal circumstances, such as the most perfect health on each side, which would minimise any mischief likely to ensue.

Mr. J. V. Solomon, (Birmingham.)—We do not publish communications that have appeared elsewhere.

Practical Hints for the Sick-room.

Notwithstanding the way in which the training of nurses for the sick and the like has been discussed of late years, the subject still affords opportunity for an intelligent and shrewd observer to say something worth reading. *Chambers's Journal* for the 11th inst. has a short article, headed "Practical Hints for the Sick-room," in which the subject is touched with a light hand—presumably a lady's hand,—but with acuteness and good sense. To make a really good nurse requires suitable qualities of character and temperament; but whether a woman possesses these or not, she is pretty sure to have to discharge at some time or other the duties of a nurse, and it is something in her favour if she knows how to avoid being a worry to her patient and everybody else, instead of a help. Thoughtfulness is one thing, fussiness another, and there are a few practical points and considerations in the article to which we are referring which a lady will be none the worse for appreciating. We agree with the writer in protesting against the common practice of the amateur sick nurse making a "guy" of herself; but we think that a print dress is, on the whole, the best. There is much truth in the remarks on that over-zealous, excitable variety of nurse, who insists that she can keep up, but is always hinting, nevertheless, that she must inevitably break down in time—a kind of self-sacrifice that is always acting as its own bill-poster.

Mr. Jeaffreson, (Newcastle.)—It shall be kept in mind.

Poisoning by Six Grains of Strychnia; Recovery.

To the Editor of The Lancet.

Sir,—I was called on August 31st to see Miss ——. When I arrived my friend Mr. Cambridge (who was in charge of the case) informed me that a poisonous dose of strychnia had been taken in the form of vermin-killer. At about 3.30 p.m., after a good dinner, it had been swallowed. About 4.30 p.m. it was discovered by her friends, who, not knowing what she had taken, commenced to walk her quickly up and down a passage till the tetanic spasm became so severe that she was no longer able to walk. About 5 p.m. she was found by us lying upon the couch in her bedroom, her face ghastly pallid, covered with perspiration, wearing an expression of fearful mental agony, in the apprehension of death. She was thrown into violent clonic spasm by sound or movement, even of a slight nature, especially if that sound or movement were sharp. The spasm, too, was general, and when the seizure was at its height there was well-marked opisthotonos and fearful muscular pain, with great diminution of respiratory movement. Mr. Cambridge, I found, had already administered one scruple of sulphate of zinc. This quickly acted. The first vomit was of a bluish colour. We then supplied her with warm drink, encouraging her thus to continue vomiting. I hoped to empty the upper part of the small intestine. When the emetic action had ceased, we administered tincture of conium, one drachm; tincture of belladonna, forty minims; water, one ounce. The belladonna was then continued in ten-minim doses every quarter of an hour till one drachm ten minims had been given. The expression was now less horror-struck, the pupils were dilating, and spasms less marked, but still severe. Doubting the propriety of giving any more belladonna, I immediately commenced the inhalation of chloroform. To my great satisfaction the fits grew less and less marked, till after two hours' administration they had almost entirely ceased. Her reflex functions were, however, greatly exalted. For hours, if the bedstead were touched suddenly, there was more or less spasm. She is now well.

I find upon inquiry at the chemist's who sold the vermin-killer that she took "six grains" of *strychnia!* and *this amount can be purchased by any adult of respectable appearance who gives a satisfactory reason for the purchase!* Now, is the sale of poisons to be restricted? How is it possible to carry out the measures for this end if poisonous doses of strychnia can be bought for a few pence under another name?

I remain, Sir, yours truly,
C. Lammiman, L.R.C.P.L., &c.,
September, 1875. House-Surgeon, Tunbridge Wells Hospital.

Medical Officer.—The unpopularity is due, among other things, as Dr. Lush pointed out in the House of Commons, to the state of uncertainty as regards everything connected with the position of the medical officers, consequent upon the frequent issuing of warrants, and the cancelling of the provisions of some immediately afterwards by circulars; taking away from the medical officer to-day what was given to him yesterday. Mr. Hardy has done nothing yet to relieve the existing tension, and medical officers must for the present be content to remain in a state of expectant attention.

Insurance against Sickness.

To the Editor of The Lancet.

Sir,—Seeing the letter of "Nemo" in your impression of Sept. 4th in reference to having a Sick Club in connexion with the profession, I am sorry to say there is no such Society in existence. It would, however, be very easy to get up one, and it could be registered under the new Friendly Societies Act without any expense whatever. I would propose to form a Society, age of admission from twenty-five to fifty, allowing £1 10s. per week in illness or accident, with £30 at death; £2 per week and £40 at death; £4 per week and £60 at death; half benefit in six months, full benefit in twelve months, after joining the Society. The sick pay to continue for twenty-six weeks; half pay for twenty-six weeks longer; after that to be reduced to quarter benefit. Having been connected with large Industrial Insurance Companies for some years, I shall be most happy to draw up tables for the formation of a Sick Fund in connexion with the profession; and if "Nemo" and any other gentlemen will join in the establishing such a Society, I shall be glad to have their names and addresses in next Saturday's Lancet. Yours very truly,
September 6th, 1875. L.S.A.

P.S.—It would require a Committee of at least twelve members to meet once a week, having a chief office in London. All premiums should be paid quarterly in advance.

Infected Linen.

Dr. Sedgwick Saunders, in a recently issued report on the Sanitary Condition of the City, states that a striking illustration of the mode in which disease might be spread by washing infected linen had arisen within the last few days, and it might serve as a warning to mention the following details. Two children of a City policeman hed passed successfully through an attack of scarlet fever, and upon their recovery the clothes and bedding they had used were sent to the laundress to be washed. That woman had two children, who at the time she received the articles were in perfect health. Shortly afterwards both were seized with scarlet fever, and passed through its various stages, happily without fatal results. In view of the serious consequences which might and often did accrue from the too frequently culpable indifference shown in mixing the clothing and bedding of infected persons with those of the healthy, he had taken some pains to investigate the facts of the case in order to ascertain how far there had been any infraction of the law, which directs certain penalties against any person who should by negligence or want of reasonable precaution favour the spread of infectious diseases; and having ascertained that the father of the children first attacked gave notice to the laundress of the circumstances attending their illness, he did not recommend any further steps to be taken in the matter.

Mr. Thoms is thanked for his courteous communication.

An Appeal.

To the Editor of The Lancet.

Sir,—May I ask you to find room in your columns for the following sad case:—

W. H. Goodchild was for many years dispenser to the Metropolitan Dispensary, where he earned the esteem of the staff and the affection of the patients. He had entered as a student at St. Bartholomew's Hospital, and, in spite of the many other calls on his time, he had, in April last, passed the primary professional examination of the College of Surgeons. On Saturday, Sept. 4th, after finishing his dispensing, he complained of lassitude and sore-throat; the next morning the rash of scarlatina appeared, and on Wednesday he sank, the poison of the disease being too much for a body borne down by overwork. The most lamentable feature of the case is that he leaves a widow and three children (with an addition expected) to subsist on the produce of a small life policy. In the hope that some of your readers may be induced to come to the assistance of the family so suddenly reduced from comparative comfort to the verge of want, I have ventured to trespass on your space.

Subscriptions will be most thankfully received by the Manager of the London and County Bank, Aldersgate-street Branch; by Dr. Southwood at the Metropolitan Dispensary, Fore-street; and by,

Your obedient servant,
F. de Havilland Hall.
6, Bedford-place, Russell-square, Sept. 11th, 1875.

⁂ The case brought under the notice of the profession by Dr. Hall is a sad one, and will we hope evoke the sympathy and practical support of those members who, in affluent circumstances themselves, have little conception how sorely the battle of life presses on their less fortunate brethren, or of the privations and distress frequently endured by their bereaved families. Our columns are never closed to appeals of this nature, and we are pained that the necessity for making such appeals arises so frequently.—Ed. L.

M.D.—An establishment employing six girls is distinctly under the Workshops Act, and subject to inspection by the Factory Acts staff. The particulars should be forwarded to the Chief Clerk, Factory Inspector's Office, New Home Office buildings, Whitehall, who will furnish all necessary information.

The Penetrating Power of Salt.

To the Editor of The Lancet.

Sir,—A strong solution of salt and water was left standing all night in a ware jug, *glazed both inside and out,* and in the morning the outside of the jug was found to be thickly covered with crystals of common salt. The experiment was repeated the next night, great care being taken to dry the outside of the vessel, and in the morning the crystals were again found on the outside of the jug over a surface exactly corresponding with the amount of water in the jug. It shows the great power of penetration which is possessed by salt, and consequently I think it must be considered of great value as a local remedy in cases of gout, rheumatism, &c.

I am, Sir, yours truly,
September, 1875. A. B.

A Constant Reader.—It is usual to make charges in such cases, although we are aware many practitioners, actuated by motives of generosity, never think of sending in a bill for attendance and medicines, except under special circumstances.

F. E. P. H. should consult a medical practitioner.

The Treatment of Tumours of the Lymphatic Glands.

To the Editor of The Lancet.

Sir,—I have received a letter from Mr. Coates, Surgeon to the Salisbury Infirmary, stating that he has for many years employed iodine subcutaneously in treating enlarged glands and various other tumours, and refers me to a paper in the *Medical Times and Gazette* for Nov. 2nd, 1867, in confirmation of this statement. I much regret that I was not aware of Mr. Coates's priority in this matter, as I find I have unintentionally taken credit to myself for what he had in almost every particular described eight years ago, and I write now in the hope that I may be able to undo the wrong I have done him in claiming this plan of treatment as a discovery of my own.

I am, Sir, yours &c.,
Manchester, Sept. 14th, 1875. S. Messenger Bradley.

Quacks in Liverpool.

Our contemporary the *Globe* shows that Liverpool is especially infested by quack doctors. An auctioneer's services were recently called for by a cobbler who had agreed to purchase the business and stock-in-trade of a certain quack. For the goodwill £300 was charged, but the drugs had to be taken over at a valuation. On inspecting these, the auctioneer found them to consist of about 500 pills made of Windsor soap, coated with silver, and some bundles of dried parsley and mint. In addition to these valuable goods, a number of foreign diplomas were to go with the business, although the outgoing "doctor" could neither read nor write. Another correspondent describes the *modus operandi* by which some of these unscrupulous cheats manage to pluck their victims. A patient waits upon one of the fraternity, and describes his symptoms. The quack shakes his head, and assumes a very serious look. "Yours is a very bad case, very bad indeed," he says, fingering away at his visitor's pulse; "I cannot take upon myself to treat it without professional assistance." Of course, the victim, terrified by this alarming diagnosis, at once consents to have a regular physician called in, who in due time makes his appearance, consults with the quack, pockets a guinea fee, and takes his departure. It is needless to say that this eminent authority is no more a physician than the quack is a doctor, the two being equally ignorant of medical matters. In one case the physician was even discovered to be the barman at a neighbouring pothouse, who, on receiving notice from his accomplice, would slip off his white apron, don a black coat, and assume a solemn air, preparatory to consulting with his learned friend. In another instance a quack, who has advertised himself for years as "Dr.," and who has "M.D." painted after his name on the door of his house, possesses only the most elementary education, being barely able to spell words in one and two syllables.

Dr. Corfield.—The arrangement proposed will do very well.

Fever in Hurdsfield.

To the Editor of The Lancet.

Sir,—In your impression of last Saturday, in correcting a clerical error, you state that the Vicar of Hurdsfield (Macclesfield) refused to close his schools at the demand of Mr. George Bland, medical officer of health, during an outbreak of scarlet fever, but you make no mention of any reason on his part for so acting.

I think it only right, therefore, to explain that Mr. Handcock, the Vicar, was only acting on the advice of a large majority of the medical men of the town, who signed a memorial to the effect that they considered the children far more safe from infection in the clean, well-ventilated, and well-drained Hurdsfield schools than in the dirty, insanitary state of their own homes. That the schools were in a proper state was proved by the detailed report of the sanitary inspector, who investigated into the matter, and who certified that there was no defect whatever in the drainage of the place, and that it was clean and well ventilated. I may add that the memorial before mentioned was signed (with the exception of Mr. G. Bland and his father, Mr. J. Bland) by the whole of the staff of the Macclesfield Infirmary.

Having while on a visit to Mr. Handcock been over the schools in question, I can most thoroughly endorse the fact of their thorough cleanliness and ventilation, and feel sure that one visit would be enough to convince anyone (both by sight and smell) of the filthy and unhealthy condition of a great number of the houses in the parish. That the epidemic ever did really originate or increase through the schools, no satisfactory proof was ever brought, and no one who knew the facts of the case thoroughly could ever assert truthfully that Mr. Handcock ever did, or could, want to obstruct the medical officer in his work.

I am, Sir, yours faithfully,
Leighton Kesteven.
Verulam Club, St. James's-street, S.W., Sept. 20th, 1875.

Population in Europe.

The *Revue Scientifique* states that in Europe there is an increase of population in every State; but this augmentation is not constant, and decreases gradually. Thus, in France, during the ten years comprised between 1821 and 1831 it was 0·69 per cent.; from 1831 to 1841 it fell to 0·50 per cent.; from 1841 to 1851 to 0·46 per cent.; and from 1851 to 1861 to 0·26 per cent. In England for the same period, the figures were respectively 1·46, 1·35, 1·19, and 1·20 per cent. In Prussia, from 1817 to 1828, it amounted to 1·71 per cent.; from 1828 to 1840 to 1·35; from 1840 to 1846 to 1·27; and from 1846 to 1864 to 1·09 per cent. In the following table, compiled by M. Maurice Block, the present annual increase in each country is given, together with the number of years in which the population would be doubled if the same ratio continued:—

Countries.	Annual increase per cent.	Years.
Russia	1·39	50
Scotland	1·31	53
Sweden and Norway	1·30	53½
England	1·29	54
Prussia	1·13	61½
Saxony	1·10	63
Denmark	1·09	64
Wurtemburg	1·04	67
Spain	0·89	78
Italy	0·70	99
Ireland	0·59	118
France	0·35	198

Inquirer.—Lord Blachford's article on Prof. Huxley's hypothesis that animals are automata will be found in the *Contemporary Review* for the present month.

Mr. Osborn Walker.—Certainly not. It would be illegal.

Medical Extras.

The guardians of St. Pancras are chafing at the great increase of expenditure incurred by the consumption of "medical extras" in the St. Pancras Workhouse. The following is described as the average dietary allowance for one week of an inmate receiving these extras, which, we confess, is by no means illiberal—viz., 5½ lb. of bread, 3½ lb. of eels, 3½ lb. of meat, 14 eggs, 14 pints of tea, 3½ lb. of rice pudding, 8 oz. of butter, 7 pints of milk, 3½ pints of porter, 14 oz. of arrowroot, 14 oz. of sugar, 42 oz. of whisky, and 14 lemons. It is added that sometimes the diet varied, the eels being substituted by soles or poultry. To buy all these things, it was stated, in the ordinary way would cost 20*s.* per week, but even at the contract prices they cost over 15*s.* It was asserted that the "medical extras" reached during the year £2064; that the consumption of brandy had increased from £143 in 1871 to £451 in 1875; that the expenditure in gin had increased by 140 per cent.; and that whisky, an item never previously known, had cost £117. Fish had increased from £15 to £127; and the speciality of eels, not known before, had cost £14. As the medical officer, Dr. Hill, held out no hope of any reduction, arguing that the increase of extras was owing to the changed character of the cases in the house, the committee of guardians feel they have no power in the matter. A motion to send the whole matter to the Local Government Board has been carried.

Hope, (India.)—We do not think it advisable to notice the subject. Our doing so would only give it a prominence which it does not merit.

Meningitis and Orchitis after Mumps.

To the Editor of The Lancet.

Sir,—The following case may be considered of sufficient interest to have a place in your columns.

Mr. B—— is a muscular, active man, aged twenty-eight. His uncle when twenty-two years old had mumps, which went to the testicles and brain; three adult sisters and one brother (aged nineteen) have had this disease; in the brother's case orchitis followed. No discoverable source of infection. On the 10th July, after an exhausting day, he sat out the evening, and slept in his wet clothes. On the next day he fainted in church; sickness; hepatic tenderness; tongue furred; headache.

July 12th.—Feels better; deglutition difficult and painful from stiffness.

13th.—Well-marked swelling of both parotids.

17th.—Swelling of parotids has disappeared; left testicle tender.

18th.—Well-marked orchitis of left testicle.

19th.—Face flushed; expression of great pain; nausea; tongue dry, yellow, and glazed; bowels confined; skin dry; shooting pains across forehead and at back of eyes, muscæ, flashes; delirium; no sleep; feels as though a great weight were pressing on his head; general hyperæsthesia; does not complain of testicle, which seems in the same condition. Temperature 103·6°; pulse 96, small and hard.

20th.—Morning temperature, 102·9°; pulse 96. Evening temperature, 103°; pulse 96. No sleep; pain general over head; any movement increases it; cannot bear the light; testicle tender, but not painful; sweats profusely; complains of nose feeling hot.

21st.—Morning temperature, 101·7°; pulse 72; respiration 21. Evening temperature, 102°; pulse 78; respiration 20.

22nd.—Morning temperature, 99°; pulse 84. Evening temperature, 98·5°; pulse 54. Epistaxis; profuse sweating; sudamina; pain in head gone.

23rd.—Pulse 52.

25th.—Pulse 48. After this the pulse gradually rose in frequency.

Aug. 2nd.—A servant in the house has mumps.

I remain, Sir, yours truly,
September, 1875. M. S. Duke.

Dr. Berridge, (Highbury.)—We have failed to discover any Transactions of the Royal Medico-Botanical Society of London, and we suspect that the only record of its proceedings extant is that to which our correspondent refers—viz., in the pages of the *London Medical and Surgical Journal*, which was edited by John Foote, who was also one of the Secretaries of the Society. In his "Autobiographical Recollections" the late Mr. Clarke has devoted a chapter to the history of the rise and fall of this curious Society, which only existed during the tenure of office of its first President, Lord Stanhope. Perhaps some of our readers who were members of it may be enabled to inform our correspondent whether any Transactions or MSS. of the Society are in existence.

Z. Y.—Certainly.

Dr. W. Alexander's paper on "Progressive Muscular Atrophy," &c., has been received, and will shortly be published.

An Idea.

To the Editor of The Lancet.

Sir,—Immediately I heard of Mr. Darwin's experiments with insectivorous plants, it occurred to me that the principle or principles in virtue of which these plants dissolve albuminous substances might possibly be found useful, as pepsine is, in assisting the digestive powers of the human stomach. This idea must have occurred to many others as well as to myself. But have any steps yet been taken with the view of ascertaining whether it can be turned to any practical account? Your obedient servant,
Sydenham Hill, Sept. 5th, 1875. F. Chance.

Mr. W. B. Holdernesse, (Huntingdon.)—Almost any maker of chemical apparatus could supply what is necessary. It would not be fair to mention the names of individual firms.

Dr. Swift Walker is thanked.

M. A.'s letter respecting our Public Schools Commission must have his name attached. An anonymous communication would have no weight.

Dr. Bell Taylor.—If possible.

Mr. Robson.—The mistake has been rectified, as our correspondent will find if he will refer back.

American Degree Brokers.

The following letter is sent to us for publication. It was written to one of the assistants of a leading firm of druggists:—

"Packington College, 145, Packington-street,
London, N., Sept. 2nd, 1875.

"My dear Sir,—I can influence you the diploma of A.M. and Ph.D., or B.Sc. or D.Sc., &c., from several Universities in the States; and if you will call here between four and eight or *any time* by appointment, or state a time when you wish me to call on you, I can show you the documents, and give you every information; or if you send the fee (£15), I will send the document at once, with the registration certificate, &c. &c.

"Yours very truly,
"E. Sturman.

"P.S.—You can arrange with me as regards money matters."

Apropos of this subject, we publish from *The Times* the letter of his Excellency the Minister of Education at Washington, in reply to Mr. A. L. Sparkes, of Shelton, Stoke-on-Trent, who had very happily forwarded to that distinguished functionary the letter of that mysterious person in Jersey who considerately caters for those who want degrees *in absentia* at the small cost of £20:—

"Department of the Interior, Bureau of Education,
Washington, United States, August 18, 1875.

"Sir,—Your letter of the 1st inst., enclosing a communication from Dr. ——, dated the 16th of July, 1875, and offering to procure the degrees of Ph.D. and M.A. from the University of Philadelphia for the sum of £20, was received on the 16th inst. In the absence of General Eaton, Commissioner of Education, I sent the documents in question for the examination of Hon. J. P. Wickersham, Superintendent of Public Instruction of the State of Pennsylvania. The Charter of the University of Philadelphia was revoked some two or three years ago on account of the notorious and shameless sale of degrees and similar rascalities. It has no actual or legal existence.

"Allow me to assure you, Sir, that no respectable institution of learning in the United States confers degrees for money. If degrees are conferred at all they are granted with other motives than pecuniary gain. The reason why this particular fraudulent institution has been successful is because the University of Pennsylvania, whose name it imitates, is an institution of great corporate wealth and high intellectual character.

"I return Dr. ——'s letter after taking a copy of it.

"I am, Sir, very respectfully, your obedient servant,
"Charles Warren, Acting Commissioner.

"To A. L. Sparkes, Esq., B.A., Shelton,
Stoke-on-Trent."

A Directory of Qualified Veterinary Surgeons.

To the Editor of The Lancet.

Sir,—May I suggest through your columns to the Editor of the Medical Directory the desirability of appending a carefully prepared list of all properly qualified veterinary practitioners. It is important to country practitioners at least to know what "vets" are legally qualified, as it is presumed that no medical man would knowingly employ an unqualified person.

Yours truly,
Shepton Mallet, Sept. 15th, 1875. F. Porter Smith.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Sir J. Alderson, London; Prof. Gamgee; Sir L. M'Clintock, Portsmouth; Dr. Broadbent, London; Dr. Fothergill, London; Dr. Speedy, Dublin; Mr. Burdick, Chertsey; Dr. Branwell, Brighton; Mr. Sedgwick, London; Dr. Corfield, London; Mr. Kesteven, London; Mr. G. Brown, London; Mr. Robson; Mr. Thoms, London; Dr. Mackintosh, Chesterfield; Mr. H. Ormond, Westbury; Mr. Innes, London; Mr. Walker, Hanley; Mr. Maunder, London; Dr. Mahomed, London; Mr. Reid, Stafford; Mr. J. Martin, Woodford; Mr. J. Robinson, Chester; Dr. Addy, Pendleton; Mr. Morton, London; Mr. Rendall, London; Mr. Davies, Corwen; Dr. Taylor, Nottingham; Mr. Jeaffreson, Newcastle-on-Tyne; Mr. Richardson, Dover; Mr. Stewart, Leith; Mr. Taylor, Hornsey; Dr. Hopkins, Llantrisaint; Mr. Lewis, Burnley; Mr. Brooks, London; Dr. Walker, Aldborough; Dr. Macpherson, Chichester; Dr. Walker, Maidford; Dr. Frodsham, Upper Streatham; Dr. C. White; Dr. Cochrane, Port Patrick; Mr. Giles, Stanton-on-Wye; Mr. Needham, Gloucester; Mr. Prichard, St. Leonard's; Mr. Walker, London; Miss Halker, Lytham; Messrs. Bernard and Co., Leith; Mr. Hall, Thurso; Mr. R. D. Smith, London; Union Surgeon; Z. Y.; Alexis; H. F. P.; E. H.; Delta; M. A.; F. E. P. H.; Chirurgicus, West Bromwich; Hope; &c. &c.

Letters, *each with enclosure,* are also acknowledged from — Mr. Harris, Leighton Buzzard; Mr. Sunderland, Birmingham; Mr. Somerville, Edinburgh; Mr. Carruthers, Coundon; Mr. Stead, Silverdale; Mr. Robinson, Ditchling; Mrs. Miles, Cardiff; Mr. Martin, London; Mr. R. Hordley, Hartshill; Dr. Maclaren, Edinburgh; Mr. Steele, Stoke; Mr. Butler, London; Dr. Hains, Norwich; Mr. Miller, South Brent; Mr. C. E. Ellis, Rotherham; Mr. Davies, Moriston; Mr. Moore, Cheltenham; Mr. Gell, Southam; Mr. Garforth, Sheffield; Mr. Jones, Llanfyllin; Mr. Green, Hoyland; C. R.; M.D., Bishop Auckland; Medicus, Burham; C. H. T.; Chirurgus; C. M., Waterford; M.D., Bath; W. M. S., Tunbridge Wells; Medicus, Leeds; F. W., Bushey; G. N., London; An Enquirer; F. T. B.; F. W.; B. A., Portmadoc; Ferri; J. S., Oldham; M. A., Aberdare; J. B.; E. L. O.; J. M. P.; W.; J. C. F.; R. N. M.

Surrey Advertiser, Birmingham Morning News, Leighton Buzzard Observer, Newcastle Chronicle, Manchester Guardian, Metropolitan, Edinburgh Daily Review, Cork Constitution, Huddersfield Chronicle, Western Morning News, Liverpool Post, East London Observer, Western Daily Press, Record, Merthyr Express, Grimsby Observer, Daily Bristol Times, Saunders's News-Letter, and *Isle of Man Times* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Sept. 23rd, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Sept. 17	30·09	E.	60	62	105	77	56	0·24	Raining
„ 18	30·07	E.	59	60	107	81	58	...	Misty
„ 19	30·00	E.	65	70	105	80	59	...	Fine
„ 20	30·00	W.	57	60	105	72	57	0·10	Misty
„ 21	29·93	W.	58	60	75	67	57	...	Overcast
„ 22	29·65	W.	63	63	80	70	59	0·64	Overcast
„ 23	30·11	E.	54	56	...	......	55	0·12	Overcast

Medical Diary for the ensuing Week.

Monday, Sept. 27.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ A.M. each day, and at the same hour.
Royal Westminster Ophthalmic Hospital.—Operations, 1½ P.M. each day, and at the same hour.
St. Mark's Hospital.—Operations, 9 A.M. and 2 P.M.
Metropolitan Free Hospital.—Operations, 2 P.M.

Tuesday, Sept. 28.

Guy's Hospital.—Operations, 1½ P.M., and on Friday at the same hour.
Westminster Hospital.—Operations, 2 P.M.
National Orthopædic Hospital.—Operations, 2 P.M.
West London Hospital.—Operations, 3 P.M.

Wednesday, Sept. 29.

Middlesex Hospital.—Operations, 1 P.M.
St. Mary's Hospital.—Operations, 1½ P.M.
St. Bartholomew's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.
St. Thomas's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.
King's College Hospital.—Operations, 2 P.M., and on Saturday at 1½ P.M.
Great Northern Hospital.—Operations, 2 P.M.
University College Hospital.—Operations, 2 P.M., and on Saturday at the same hour.
London Hospital.—Operations, 2 P.M.
Samaritan Free Hospital for Women and Children.—Operations, 2½ P.M.

Thursday, Sept. 30.

St. George's Hospital.—Operations, 1 P.M.
Royal Orthopædic Hospital.—Operations, 2 P.M.
Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 1.

St. George's Hospital.—Ophthalmic Operations, 1½ P.M.
Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

Saturday, Oct. 2.

Royal Free Hospital.—Operations, 2 P.M.
Charing-cross Hospital.—Operations, 2 P.M.

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Introductory Address[1]

DELIVERED AT

ST. GEORGE'S HOSPITAL,

October 1st, 1875.

By ROBERT BARNES, M.D.

It is generally felt that the hardest duty that can be allotted to a teacher is to make him give the "Introductory" on the opening of the medical session. The feeling therefore with which I accept the honour awarded to me is not one of gratitude without alloy. At the same time I cordially acknowledge the graceful and kindly courtesy which prompted my colleagues thus to initiate my return as a teacher to the school in which I am proud to have been a student. I have been a vagabond over London dragging at each remove a lengthening chain, but still, holding on by the instinct of affection, it has brought me home at last.

One of the penalties of my wandering career is that I am now called upon to give my third "Introductory." The difficulty of acquitting oneself becomingly is not, I am afraid, diminished by experience. The choice of a theme becomes more contracted, and the difficulty of illustrating the theme that may be chosen is increased by the conditions under which these addresses are now delivered. Not many years ago the introductory lecture was a purely intra-academical discourse. It was almost invariably confined to historical disquisition, to praise of one's own school, to an exposition of the curriculum of medical study, concluding with a homily to the students on the text of diligence and good behaviour. All of this is somewhat trite; and the homily I venture to say is a work of supererogation. But with the rapid advance of medical knowledge, and its consequent extending influence upon legislation, statutory and administrative, medical education and the preceedings of our medical colleges are now invested with a degree of public interest previously unknown. Altered circumstances, therefore, seem to invite, if not to compel, those who have to give these addresses to select for their theme some of the wider and more general aspects of medicine; to endeavour to point out some of the relations of medicine to the public good; to expose some of the defects in the construction or administration of our laws that hinder the just and beneficent application of science to the public service. Thus, we may suggest to you some idea of the higher aims of the profession you have chosen, of the position you will occupy in relation to other professions and to society at large, and of the duties that devolve upon you in maintaining and extending that influence upon which the future welfare of mankind so largely depends. What was once called the "healing art" has now a far greater sphere than the term expresses. Medicine in its modern sense and work is "preventive" as well as "healing." Medicine is no longer simply an art directed to the alleviation or cure of individual suffering. Applied to the task of aiding in the administration of justice, of removing the causes of disease, of restricting or annihilating epidemics, of increasing the sum of national health, it becomes a moving power in government. State-Medicine then is the offspring and the complement of the "healing art."

An education framed in such a manner as to prepare men for duties so vast and so important must be comprehensive in its range, accurate in its method. Medicine deals especially with the phenomena of life. But since life depends upon or is influenced by external conditions, biology is impossible without a fair knowledge of physics. These two departments of knowledge are the foundation and the glory of medicine. The study of them, directed to a practical application—the health and happiness of man—constitutes an education superior to that pursued by any other profession. It is superior in the range and precision of its knowledge; it is superior as an organon for the training of the intellect; it is not inferior in the formation of the higher moral attributes.

That which distinguishes modern medical education is its accuracy. The application of instruments of precision, as the thermometer, the sphygmograph, the stethoscope, the ophthalmoscope, the laryngoscope, and other contrivances for extending sensual perceptions into the interior of the body, together with microscopical and chemical analysis, enable us to observe, to record, and to compare the phenomena of health and disease to such a degree as to bring medicine nearer and nearer to the rank of an exact science.

Medical education possesses this inestimable advantage: its foundations are laid deep and wide in objective study. It is first circumspective, then introspective. It rests upon observation. And yet it does not exclude the play of the imagination. Without this divine faculty we should have few discoveries; and every page of the history of medicine glows with brilliant discoveries. But still the chaotic materials which imagination forges into laws are the fruit of laborious observation. And these laws are being continually tried by the test of fresh observation. Medical science is being incessantly extended and corrected by the interrogation of nature. And nature rarely refuses an answer to the patient and humble inquirer. It is in this court of appeal, always open, that the strength of medicine lies; the source of her controlling power over the schools of theology and law. I should be loth to utter one word of disrespect towards the sister faculties. Society could not exist without religion and without law. But I hope to be forgiven for pointing out that both religion and law will be strengthened the more they are brought into harmony with science. Each is the complement of the other two. But the day has come when science must lead. The last-born, perhaps, now that the day of her emancipation has arrived, the most vigorous, the most progressive, and therefore destined to exercise the greatest sway in the future. Theology and law are in their essence stagnant. Religion is wholly revealed. Presumption alone can add anything to its sublime and simple truth. Law, when not informed and vivified by science, is dogmatic—the slave of authority seeking a solution of its doubts in precedent, which is too often nothing more than error upon error crystallised by time. And so it must be with an almost purely subjective study. Deriving the bulk of his knowledge from oral or written tradition, the lawyer, according to the bent of his organisation, assimilates what he learns—makes it a part of himself. It thus undergoes a subjective transformation. And since men's minds differ in their constitution and construction, there results an infinite diversity of opinions, whilst there is no appeal but to the opinions of those who have gone before, and who from that very circumstance are more likely to be wrong than themselves. Hence those incessant conflicts in our law-courts, those frequent reversals of the decisions of one civil court by another, which are the despair of the uninitiated. If there were a court of appeal in criminal cases, reversals would probably be no less frequent; and still greater would be the difficulty of the Irishman, who, when asked to plead Guilty or Not guilty, replied, "'Faith, how do I know till I'm tried." Recently the Legislature has decreed certain changes in the machinery and proceedings of the law. I dare not, with profane hand, touch this mystery of mysteries. Let us hope that the changes will result in more speedy justice and diminished bills of costs.

Since the function assumed by the law is not to add to human knowledge, and since laws must in the end be brought into harmony with knowledge, it might be expected that law-makers and law-administrators would accept with more deference than is often shown the teachings of those who have made science the occupation of their lives. The obvious objection urged is, that the teachings of science are themselves conflicting. But it is equally obvious that those who make science their study are more likely to be right on questions of science than those who trust to their common sense. As Whately put it: no one would trust himself to navigate a ship by common sense. The skilled sailor may sometimes founder, but the rash landsman is pretty sure to come to grief. Still, making full allowance for the necessity of caution, admitting that science must always be in advance of law, we may not unreasonably complain that law lags so very far behind; that it limps along with such hesitating step.

There are certain flaws, which are a real discredit to the law, which involve inconsistencies so gross as to be revolting not alone to the scientific mind but to the sense of the community. Of these, let me instance the well-known practice when pregnancy is pleaded in bar of execution. The law directs that the prisoner shall be examined, not alone as to the bare fact of pregnancy—in itself sometimes no easy task for a skilled physician,—but also as to whether she is "quick" with child. This latter fact it is often impossible to determine. In the first place, the so-called "quickening" is with many women an entirely subjective phenomenon—a sensation they think they perceive, but which is not perceptible by others. She may affirm that she is conscious of having quickened, and the examiner is not in a position to refute her assertion because he or she may not obtain objective proof. In the next place, some women never consciously quicken at all, and the examiner may equally fail to get evidence of the event. And many women quicken, or think they do, who are not pregnant. Again, the movement or impulse felt by the examiner, and which is presumed to be proof of a "quick" child, is often fallacious. The late Dr. Tyler Smith insisted that the movements felt by the mother and by the examiner were not produced by the child, but by the womb itself; and it is now known that these movements of the womb can be detected before the earliest period assigned for the quickening of the child.

We ought perhaps logically to begin by defining the condition of being "quick with child." Lawyers, I am afraid, sometimes find a malicious pleasure in pressing scientific witnesses for a definition. No skilled witness would, I venture to say, attempt to define this condition. It is a legal fiction, not a natural fact. The burthen of definition, then, rests with the lawyer. It is absurd for him to appeal to science for an answer. The legal definition is, I believe, as follows: "The term," says Taylor, "is derived from the old Saxon word 'quick,' signifying living; as, at the time when medical science was in its infancy, it was considered that the fœtus only received vitality when the mother experienced the sensation of its motion"! I need not point out the shocking absurdity of this doctrine. I cannot suppose that any lawyer now believes in it. But the law exists; so that we are driven to conclude that those who keep it on the statute-book respect the law more than the truth. But the climax of absurdity is reached when the determination of this abstruse problem, this impossible fact, is left to twelve matrons who may happen to be in Court. As Dr. Leake irreverently observed, the judge who should call upon twelve old women to execute this function must himself be an old woman. But I have known it done twice; and twice did the discreet matrons declare the prisoner "not quick with child"; and twice did skilled examination, and time, the solver of mysteries, prove that the prisoner's plea was good.

After all, then, it may be answered, the appeal was made to science in time, and no harm was done. The law directs the judge to empannel a jury of matrons, but does not preclude him or the Secretary of State from referring the decision to an expert. I do not believe that a pregnant woman, who pleads her pregnancy, will ever again be hanged on the verdict of a jury of matrons, unless, indeed, we are destined to see juries of matrons selected from legally qualified "medical women." This may happen when Macaulay's Lord Chancellor will be sitting on the woolsack with twins in her lap. Let us hope not before.

But the absurdity, the barbarity of the law in this relation does not end here. The law of England makes it felony to attempt to procure abortion. All right-minded persons will admit the wisdom, the justice, the necessity of this provision. But then see how lamentable is the inconsistency of the law. It declares that a pregnant woman may be hanged; it makes it felony to attempt to procure abortion. Justice in this case sanctions, nay, commits homicide and fœticide; and with blind inconsistency punishes those who are guilty of the simple attempt to procure abortion. It is scarcely an extenuation to urge that the shocking consequences that would result if the letter of the law were rigorously carried out are practically avoided. It is no small evil that a law representing ignorance so gross should disfigure the statute-book, and that practice so clumsy and ridiculous should stain the records of our courts. The indirect influence of authorised error cannot fail to be pernicious. When the judges thus sanction the theory that the embryo in its early stage has no life, and may be treated as non-existent, how can it be expected that the ignorant masses will look upon the procuring abortion as a crime? This most deplorable doctrine is not accepted in other countries.

There are other questions connected with this subject which scarcely appear to have been contemplated by the law, and which in the interest of humanity and justice ought to be considered. We have seen that a woman may be pregnant and not know it; thus, not pleading her pregnancy, she may be hanged, and the intention or the spirit of the law is frustrated. Again, a prisoner may be pregnant, and, knowing it, suppress the fact, suffer herself to be hanged without pleading; and thus again is the spirit of the law frustrated.

Here we are brought face to face with another relic of the age of ignorance which is still held in bigoted veneration. The irresponsibility of the insane is a question that is continually giving rise to the most painful discussions and the most conflicting decisions in our courts. In all civilised countries it is a fundamental rule that responsibility is the attribute of reason, and, therefore, that insanity implies irresponsibility. In its dealing with this admitted principle the courts practically abrogate the law. The judges, many years ago, in deliberation, put a definition upon the law, upon which their successors still hold themselves bound to act. This definition virtually declares that insanity does not carry irresponsibility. Their faith in the wisdom of their predecessors is absolute; their contempt for the teaching of modern science is unbounded. On a recent trial the learned judge (Brett) thus charged the jury:—"It was not sufficient to show that the prisoner was insane, unless it was also shown that he did not know the nature of the act he was committing, or did not know that it was wrong. The jury must disabuse their minds of the medical notions as to insanity, for the reason that these medical men had not met the court upon the ground which they desired them to do, and that their opinions were founded on their own ideas as to what the law of insanity ought to be." Notwithstanding this charge, the jury, without any hesitation, found the prisoner not guilty, on the ground of insanity.

The late Lord Campbell once said to a distinguished physician, who was giving evidence in a case of insanity, and who had been obliged to use the term "homicidal insanity": "Homicidal insanity! I will not allow those words to be used in my presence!" But this emphatic judicial repudiation did not alter in the slightest degree the fact of the existence of a type of mental derangement which manifests itself by homicidal propensities, and which psychologists will, until they discover a better name, continue to designate "homicidal insanity." But another Lord Chancellor went beyond this. After the Windham commission, he actually proposed to exclude medical evidence in commissions of lunacy, except in so far as it was based on *facts* within the personal knowledge of the witnesses.

Primâ facie, to establish insanity is to establish irresponsibility. Upon medical science it falls to make good this *primâ facie* case. And, having done this, the universal contention of those who have made lunatics and insanity their study, by clinical observation and other methods of research, is that they have done enough. They know the absurdity of attempting to reconcile reason and unreason, health and disease; they know that insanity, where it exists, alters the whole man; they know that a diseased organ cannot work healthily. Observation tells them that man, complex though he be, cannot be sane and insane—that is, responsible and irresponsible, at the same moment. Cases, indeed, there are, but they are not common, in which monomaniacs, as they are called, may appear sane until their particular delusion is hit; but it is a gross and dangerous, albeit a popular, error, to conclude that these persons are really sound even in part. They are more or less under the dominion of their craze; it underruns the whole current of their thoughts; it may at any moment sway them irresistibly. Surely the creed of phrenology is the foundation of the legal doctrine of coexistent sanity and insanity. If we suppose the mind to be made up of distinct faculties, as perception, comparison, volition, and so forth, each faculty having its own separate organ, it is possible to conceive that one of these faculties may suffer alone when its particular piece of brain is diseased. Lawyers, then, are phrenologists. I do not know whether they will accept this suggestion. It is, however, the best explanation that can be offered of their theory. True science repudiates it. They treat insanity as a purely metaphysical subject. They disregard the dependence of the mind upon the state of the brain. In Carlyle's "Sartor Resartus" is a world of wisdom. If the outward apparel of a man can sway his thoughts and character, how much more then will the condition of the brain and nervous system, upon which perception and reason depend, influence the mind. The metaphysical method of studying the aberrations of the mind is about as reasonable as were the speculations of the ancients upon the circulation of the blood and disorders of the heart before the discovery of Harvey. The basis of all sound knowledge of insanity must be anatomy, physiology, and clinical observation. To neglect this is to flounder in hopeless error.

What the judges declared to be the law, was not really the law, but their arbitrary interpretation of it. We may claim the liberty to question whether this interpretation be the just one. It hangs upon an impossible postulate. No man who has been at one time sane, and therefore trained in accordance with the modes of thought of his fellow-men, can, even on becoming insane, be freed altogether from the influence of that training. The sense that killing is wrong may remain. It is transcendently absurd to look for a man so demented as not to know that striking another man on the head with an adze is likely to injure or kill him. Such a man can hardly be found in a lunatic asylum; and, *à fortiori*, can hardly be found out of one. He is a creation, not of nature, but a legal figment. Carried to its legitimate applications, the legal doctrine would simply abrogate the law of irresponsibility on the ground of insanity. The doctrine, then, must be revised by the light of science; for assuredly juries will continue to reject it. In spite of strong dictatorial charges, it is becoming practically obsolete. It must at no distant date be given up even by the lawyers.

The doctrine that it is right to punish, even to hang, madmen according to their knowledge of right and wrong, ought, in its logical application, to embrace a graduated scale of responsibility and penalties. The attempt to define the degrees in this scale will hardly be undertaken even by the trained analytical subtlety of lawyers. The truth is that only one line of demarcation is possible. That line must be drawn with a resolute hand between sanity and insanity: responsibility on the one side; irresponsibility on the other.

A not uncommon argument in favour of the legal interpretation is that "the theoretical superiority of the medical criterion is far outweighed by the practical value of the judicial test. Its error on the score of excessive stringency is in practice corrected by the action of the juries." The fallacy of this reasoning is transparent. It is simply to assert that it is right to hang a madman if a jury will allow it. An argument of this genus was used—and too successfully—by the Attorney-General (Coleridge) who prosecuted the boy O'Connor for an attempted assault upon the Queen. He represented to the jury that it was better for the boy to be sent to prison for a definite term than to an asylum! To prison he was sent; and there his insanity—the evidence in proof of which had been ridiculed at the trial—became manifest, and he had to go to an asylum after all. The gaol did not cure him. It seldom does cure insanity. In this respect it is inferior to the gallows.

Absolute laws seldom endure long without question or mitigation in practice. Hence we see that whilst judges would, by an arbitrary and untenable definition, abrogate the law that insanity carries irresponsibility, juries with minds untrammeled by traditional authority, open to evidence, accept the opinions of experts on this subject; act upon the spirit of the law; restore it to its integrity; and save civilisation from the revolting spectacle of hanging the insane.

There are two principal provisions by which undue harshness or error in the administration of justice in this country are mitigated or corrected. This corrective action is exercised by the juries, or by the Secretary of State for the Home Department. The Home Secretary's action is usually assisted by the representations of the judge or jury, or by some expression of public opinion. In this way a man who is proved to have been innocent of a crime for which he was convicted is, by a subtle process too perplexing to be fathomed by a plain understanding, "graciously pardoned."

If lawyers meeted out to themselves the same law which is applied to doctors and naval commanders, surely they ought, when a prisoner is wrongfully condemned, to be themselves subject to action for damages or to a criminal prosecution. It cannot be doubted that innocent men have been sent to the hulks or hanged through the incompetence of their counsel.

Is there no such thing as malapraxis in law? The jury is, however, the best and most trustworthy security against arbitrary law. Originally instituted as the most effectual safeguard against political oppression, the jury now exercises a scarcely less valuable function in checking the arbitrary tendency of the law. Through the jury is felt the wholesome influence of public opinion. Through the jury the due authority of science is often asserted. It is true that juries may now and then reflect popular prejudices; but they can rarely be accused of servility.

Inexorable Time, not unkind to me or to you, warns me not to open new matter, or I might be tempted to say something about sanitary legislation. We have now a sanitary Parliament. Unfortunately there are not half-a-dozen doctors in the House to inform and to control the overwhelming majority of dilettante dabblers, or illegitimate practitioners, in this branch of medicine. No very great success therefore has yet marked a policy whose intention is worthy of all praise. The most immediate result will at any rate be appreciated by our profession. The doctors are to do nearly all the work, with little moral help, at no small personal risk, for very little substantial pay. So much money is wanted for law, and for defensive and destructive armaments, that we must economise somewhere. As a humble Conservative I venture to hope that our chief will continue to educate his party to the conviction that a successful sanitary policy can only be carried out by a proper appeal to medical science, and a more liberal treatment of medical practitioners.

I must, however, refer to a matter immediately related to my theme: the mode of taking scientific evidence. I think it will not be denied that, howsoever excellent the practice in force may appear to lawyers, it is eminently unsatisfactory to experts. Seldom, probably, does a scientific witness leave the box quite easy in mind as to whether he has spoken "the truth, the whole truth, and nothing but the truth." And not seldom does he experience the mortification of finding what he said utterly wrested from its proper meaning by the perversity of counsel, or misunderstood by the court and jury. The theory that through the conflict of opposing counsel by examination and cross-examination, and the impartial interrogation of the court and jury, the truth is elicited, often signally fails in practice. The questions of counsel are generally prompted by hints gathered from books, or from experts sitting at their elbows. But they are very wary in accepting these suggestions. They may not understand them; and, if they do, they may in their discretion fear that the answer drawn will damage their case. Thus it constantly happens that the expert is only allowed to say so much of the truth as may suit the purpose of counsel; and everyone knows how detached fragments of truth may be made to support a false argument.

A most serious objection to this interrogatory method is that the knowledge and conclusions of the expert can rarely be given in such a way as to challenge the judgment of his profession. Few experts descending from the witness-box would be content to be judged by his fellows upon his evidence as produced in a court of law. It would be in the highest degree unreasonable to hold them responsible for an exposition of their views, which, if they did not repudiate it altogether, they would desire to qualify materially.

The mode of "getting up" evidence is often a curious illustration of "how not to do it." The choice of experts and the nature of the evidence set before the court is in many cases a pure matter of accident. The initiative set by policemen is often held sufficient. It is left to the discretion of the attorneys on either side to select what witnesses they think proper, the choice on the part of the Crown being commonly restricted by parsimonious instructions, and on that of the accused by poverty. In making a selection, the first consideration usually is to get witnesses whose evidence will fit in with the theory of the prosecution or the defence. Great care is taken to avoid those experts who are apt to speak their convictions unreservedly. These are considered "bad witnesses."

Those who are prepared to admit that the perfection of the practice in our courts is a question open to discussion, may probably see in the practice of foreign courts some points not unworthy of imitation. When an offence against the person is suspected, a judge of instruction appoints one or two experts to make the preliminary investigation; these make a formal report in writing, and this report is a document that has to stand the criticism of their professional brethren. It cannot be suppressed by counsel.

It must often happen that the scientific case as presented to a jury is inaccurate and imperfect, and that further inquiry would clear up all doubt. I am not lawyer enough to know whether the superior criminal courts have the power to do what a coroner or a magistrate sometimes does—that is, to adjourn a trial for the revision of the scientific conclusions; but I do not remember to have heard of such a course being adopted. Such a power of adjourning for further evidence would be the most efficacious check upon the perverse ingenuity of counsel in raising a cloud of doubt by insisting upon some defect or point omitted, and which could often be cleared up by proper reference. But this, the true scientific method, is not that of the law. As the case is presented, so it is dealt with. And here again we sometimes see the jury evade the difficulty by not agreeing to a verdict. A bungling proceeding, rather; for the result is simply a miscarriage of justice.

In France the president of the court may call for fresh scientific evidence, and appoint new experts. Men so chosen are more likely to be free from bias than when they are chosen and paid by one side or the other. The way of taking the opinions of an expert in court is extremely ingenious. He is expected to hear the evidence; but he must not give his opinion upon it, for that would be to usurp the functions of the jury. He must answer upon a "hypothetical case" framed by the counsel upon data more or less accurately representing the facts given in evidence. It is not too much to say that the case so put often bears little resemblance to the true one; and the witness may be harassed by a number of discordant hypotheses. But the clumsiness of the process is best shown by the fact that it constantly breaks down; and judge and counsel are continually lapsing into common sense by putting questions directly bearing upon the case. The general effect of the mode of getting up evidence and of examining experts in courts of justice is to deter many of the best men from appearing as witnesses. This is a most serious injury to the public. It involves a virtual suppression or exclusion of the truth.

But I should exhaust your patience long before I could exhaust the false relations between law and science. The illustrations I have imperfectly drawn will serve the purpose of showing you in some degree the higher public duties which lie before you. As science advances, as education spreads, the legislature and the law will be more and more prepared to welcome your aid and counsel. For this, the diligent prosecution of the scheme of study laid down by the examining boards is the best preparation. No pains have been spared in this school to provide all the appliances and opportunities this scheme demands for its full development. These opportunities you will use to your utmost. And if you want a stimulus to industry beyond the vulgar, but very proper, one of fitting yourselves to succeed in life, and beyond the feeling of duty that animates every honest man, you may find it in the glorious traditions of this hospital, where so many illustrious men have worked, and given the example of work. The light which John Hunter, greatest of biologists; of Thomas Young, second as a natural philosopher only to Newton; of Matthew Baillie, one of those who laid the foundations of modern pathology; of Brodie, for intellectual power second to no surgeon of this century, have shed over the whole profession, and, indeed, over the civilised world, shines with peculiar brightness here at the centre, whence it beamed. We might claim these great men as our scientific ancestors. But such men live for ever. Each has left his soul stamped upon works that will last as long as history shall record the achievements of genius for the delight, the instruction, and the welfare of mankind.

Introductory Lecture

ON

MEDICAL EDUCATION; ITS SPIRIT AND ITS METHOD.

Delivered at King's College, London, Oct. 1st, 1875,

BY JOHN CURNOW, M.D. LOND., M.R.C.P.,

PROFESSOR OF ANATOMY IN AND HON. FELLOW OF KING'S COLLEGE, AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

MR. PRINCIPAL AND GENTLEMEN,—My colleagues have deputed to me the pleasurable duty of addressing to you those words of encouragement and welcome with which, in accordance with a time-honoured custom, we commence the labours of a new medical year. I could have wished, for your sakes, that this duty had fallen on older shoulders than mine; the more especially when I look back on the addresses, laden with wisdom and information, which I have heard in this theatre from some of the senior members of our staff. But though I shall fail in the inculcation of truths that only mature observation and long experience can teach, I must lay claim to an intense and ardent sympathy with the hopes and fears of every student among my audience, for a vivid reminiscence of my mixed feelings of apprehension, wonder, and expectation, on first taking a seat on those benches, has haunted me ever since I accepted the privilege of welcoming you here in the name of the medical staff of this College. I most cordially and sincerely congratulate the new students on their choice of our profession—a profession whose benefits are now so generally acknowledged, and whose duties are increasing so greatly every day. I can promise to them every assistance and encouragement that is within my power and in the power of every and any member of this staff toward the attainment of such knowledge as is necessary for the practice of their duties with that proficiency which will lighten their after-labours and increase the obligations of a suffering humanity. To the older students such expressions are, I am sure, quite unnecessary, and I shall content myself with the assurance of our continued interest in their work, and the wish that every succeeding anniversary of our opening day may find them as eager, as hopeful, and as determined to add to the amount of fair and honest endeavour, as when they commenced their medical studies. All true work lives for ever; but

"Work without hope draws nectar in a sieve,
And hope without an object cannot live."

Before passing on to the main objects of this address, it is incumbent on me to refer to one or two alterations in our teaching staff which have taken place during the past year. By the appointment of Professor Rutherford to the chair of the Institutes of Medicine at the University of Edinburgh, this College sustained a loss which was severely felt, not only by his late colleagues, but by every student who had the great advantage of attending his carefully prepared and graphic demonstrations and lectures. The energy which he infused into his teaching was so evident as to be at once reciprocated by everyone who was brought into contact with him, and greatly increased the difficulty of finding a worthy occupant of the vacant chair. I can, however, congratulate the authorities of this College and our junior students on the happy selection that has been made in the appointment of his successor. Dr. Gerald Yeo has supplemented a brilliant career as a student at Trinity College, Dublin, by some years of special physiological training in the best continental laboratories, and has already secured an excellent reputation both by his original researches and by his success as a teacher in the Carmichael School of Medicine at Dublin. We therefore confidently anticipate that new laurels will be added to the ancient glories of our physiological chair—a chair that has been successively occupied by such distinguished teachers and physiologists as Todd, Bowman, Beale, and Rutherford. I offer our new professor every cordial greeting.

Not only can I congratulate King's College on securing the services of Dr. Gerald Yeo, but I can also congratulate him on being able to begin work at once in a new laboratory, which I believe will, in the completeness of its arrangements and the perfection of its appliances for teaching, vie with any in Great Britain, and with most of those on the continent.

Another link in the chain which binds us to the past history and traditions of King's College has been severed by the resignation of Professor Cartwright, whose genial disposition and courteous manner were so fully appreciated by successive generations of students during the long period of thirty-one years. The appointment of Mr. Hamilton Cartwright to the senior offices will give him a wider field for the energy and talent which he displayed whilst holding the junior post.

The last two or three years have been very eventful in the history of the medical school of this College, and the large infusion of new blood into its teaching staff must make all of us anxious for its future. The recent date of my own appointment and my great attachment to our *alma mater* will be an excuse for my pointing out that the patriotism necessarily implied in so many of your recent vacancies being filled by King's men must be an additional claim on all old King's students, and instil into us a worthy emulation in striving to maintain our ancient prestige.

The first question which confronted me in thinking over the subject-matter for this occasion was the obvious one,—What is the purpose of an introductory lecture? When they were originated they were felt to be necessary in order to explain to the new-comer the objects with which the various subjects in our medical curriculum were introduced, the best mode of obtaining a fair knowledge thereof, and to point out to him what parts of the collateral sciences had a practical bearing on the exercise of our professional avocations. But gradually most lecturers have strayed from this path: many have made use of such addresses to declaim on the peculiar beauty and excellence of that branch of science to which they had devoted their attention; some took occasion to show the great claims of our profession on the public, and urged the advances made therein in a few previous years, or contrasted our medicine with that of bygone ages; whilst others have even been tempted to take prophetic glimpses into the dim vistas of its future. Thus critics have been led to expect, on these occasions, some explanation of our *raison d'être*, or some new guarantees of our onward progress, and their omission from many of the addresses of last year was thus commented on by a leader-writer in *The Times*:—"The lecturers who would instruct the educated portions of the public with regard to the actual position of medicine and surgery among the sciences, with regard to their weaknesses and shortcomings, as well as with regard to their achievements and strength, would render a highly important service." He quite forgets the primary object with which the lectures should have been delivered. I prefer reverting in some measure to the old ideas, and shall address you on the objects of your medical education, and the spirit and methods with which the various subjects embraced therein should be studied, rather than discuss any of the various medical questions in which the lay public are so greatly interested. These are topics for more suitable places, and to be dealt with by the leaders of our profession.

I shall not detain you with a detailed list of the numerous medical studies, for what they are, and in what order they should be attended to, are so explicitly laid down by the various examining bodies, that, however much and in whatever way we may be inclined to differ therefrom, we are powerless to alter them. I take it that most of you are already familiar with their general purposes, and the order in which they must be mastered. To those who are ignorant thereof, the Dean or any of your teachers will give every explanation.

I must first deal very shortly with a few points in the preliminary or general education of the medical student. I regret very much that the standard of the subjects required by some of our examining bodies is still very low, and that the course of education in some even of our higher-class schools is still very deficient, for it throws additional work on the student at the earliest and most difficult part of his career, and prevents the teacher from at once entering on the details of his subject. Thus the demonstrator of anatomy finds himself obliged not only to teach his science, but to point out the elementary laws and facts relative to the life-history and functions of living beings in general, and very frequently to supplement this by the explanation, and occasionally by the orthography, of almost every technical term that he is compelled to use, whether derived from the ancient or the modern languages. This, as has been well put by a colleague of mine (Prof. Baxter), is "as if a professor of Arabic were to begin his course by teaching his class how to spell their mother tongue." It might easily be obviated by requiring such a knowledge of the Greek and Latin classics as would explain our medical terminology; of physics, as would ensure that the student was familiar with the fundamental laws that govern the world of inorganic nature; and of biology, that he should understand the elementary data of that science. By this I do not mean the acquirement of every detail as is insisted on in some of our examinations—the Preliminary Scientific M.B. of the University of London, for example; but on such a course as would call forth and exercise the observation and reasoning powers of the future student. Those of you who start, having had these faculties at all cultivated in the ordinary routine of school life, have obtained an immeasurable advantage at the outset of your medical career. I am glad to see that this plan of study is rapidly supplanting the old one, of knowing some of the practical details of the arts of medicine and surgery through an apprenticeship ofttimes extending over the most important part of one's student life. As one brought up under the old system, and who, before attending a lecture or seeing the interior of a hospital, was fairly conversant with the mystery of bandaging, and could perhaps set an everyday fracture, or, without knowing the why or the wherefore, deftly combine the pharmacopœial armamentarium against each and every case of vomiting or attack of dyspnœa, allow me to assure any of you who deplore your ignorance of such matters that they will come unknown and unforeseen in the after-part of your clinical studies, and when you are far better able to assess them at their proper value. The path of success lies in an early guidance into the proper methods of study, and everything technical comes easily afterwards in due rotation. In insisting on this, I am aware that I am at variance with many excellent authorities and teachers; but I know of no instance in which a student who has devoted his time in early years to a scientific course of study has not mastered all the details of our practical experience with as great facility as he would have done had he occupied the first year or two of his professional education in their acquisition. I therefore congratulate those of you who are commencing your purely medical education with a foundation of scientific knowledge—its aims and its methods. I consider that system by which an acquaintance with the collateral sciences is obtained before the student begins his more strictly medical education one of the most important and useful innovations of late years. In fact, it seems to me that as a knowledge of physics, mechanics, and inorganic chemistry is essential in the early training of an engineer, so an acquaintance with elementary biological phenomena and with their laws is a preliminary necessity for every student of medicine. The more general sciences, then, such as zoology, botany, physics, and inorganic chemistry, should precede the special ones of human anatomy, physiology, and organic chemistry, on which the principles and practice of medicine are based, in order that the medical student may make the best use of the limited time at his command, or otherwise he will either entirely fail to obtain the necessary habits of thought induced by scientific studies, or will only gain them with a vast expenditure of time and trouble. Although, in the case of most of you, this acquaintance with scientific study has not yet commenced, I must as forcibly as possible impress on all its necessity in the formation of the typical physician and surgeon. I earnestly hope that no mere question of the after-utility of so much of this or of that special science will tempt you to limit yourselves to a purely technical education, and so prevent your obtaining the benefits of a liberal scientific culture.

Medicine is advancing daily, and in such advance "the ultimate court of appeal is observation and experiment, and not authority"; and the sooner you educate yourselves to observe closely and carefully, and to draw correct inferences from your observations, the more self-reliant you will become, the less liable to be turned hither and thither by every new-fangled idea in medical doctrines, and the less servile a follower of some dominant theory or captivating teacher." "L'homme," says Pascal," "est visiblement fait pour penser; c'est toute sa dignité et tout son mérite, et tout son devoir est de penser comme il faut."

Another great advantage of early scientific training is that, at the most impressionable period of life, it brings you face to face with facts and not with mere words only, and teaches you to appreciate the great lesson that "learning and knowledge in science, as in life, are distinct; whereas, in the world of letters, learning and knowledge are one." In medicine you will quickly find that your books and your teachers are guides only; you cannot depend on them exclusively: new problems in disease caused by a never-ceasing change in the circumstances acting on the organism, and by alterations in the organism itself, partly due to those circumstances, and partly, perhaps, to its normal evolution, will speedily necessitate your judging for yourselves. The best teaching that you can have is that which leads you to educate your reasoning powers, instead of stultifying them by artificial tricks of memory or other similar devices which have in the mind a verbal existence only, instead of establishing therein some definite image. This fixation of something almost tangible in distinctness is nearly the only means of acquiring *real* knowledge, and its superiority is exemplified by the well-known advantage of pictorial illustration in teaching the young; and, again, when we consider that, however abstract any word may have become, it originally had a purely concrete meaning, and that the proverbs of all nations—so pithy, of such vast signification, and so easily recalled—consist usually of a natural fact, selected as a picture or parable of a moral truth. "A rolling stone gathers no moss"; "long-lived trees make roots first."

It is your privilege that of late years the lecture system, which formerly was almost exclusively in vogue, is supplemented in every branch of medical science by systematic demonstrations, whilst but a short time ago these were made use of in the teaching of anatomy only. This, however, is no new plan of instruction, but herein we find history reproducing itself. In the earlier days of each science, when learners were few, whatever might have been the paucity of material, the teacher exercised a direct and personal influence over his pupils by demonstrating to them clearly and explicitly the facts on which the ideas that he sought to inculcate were based. But when in the sciences dealing with human life and its conditions prejudices overmastered the teacher, and pupils became more numerous, the lecture system, which was sufficient to spread a knowledge of the abstract and more exact sciences, gradually took the place of, instead of merely guiding, the practical study of the concrete sciences, and we have only recently returned to that method which so clearly attested "the wisdom of the ancients." The well-known pictures of "The Anatomical Lesson," by Rembrandt, and of "Harvey demonstrating his theory of the Circulation of the Blood to Charles I.," by Hannah, show how earnestly the pioneers of our science endeavoured to excite the enthusiasm of their contemporaries by this mode of instruction. And here I would venture to hope that no extraneous difficulties will be thrown in the way of carrying out, under proper and humane regulations, this method of teaching that all-important science, physiology. "Use your eyes as well as your ears" was one of the first axioms instilled into me by our distinguished senior surgeon, and those who interfere with this mode of imparting knowledge will have much to answer for. That penal regulations should be demanded to restrict the advancement of any branch of scientific inquiry is surely to forget the lessons of history, and to ask us to return to the darkness and ignorance of the first fourteen centuries of our era, and which were only overcome when the "giants of those days," Descartes, Galileo, and our own Bacon and Newton, made the first onward step from the time of the early Greek and Roman philosophers, by applying physical methods to the investigation of natural phenomena, and by substituting the inductive mode of reasoning for that purely deductive plan which had alone been used in substantiating the truths of the mathematical sciences. Progress in medicine is, to borrow a phrase from Mill, "a function of two variables"—direct observation and novel experimentation, and is perfected by correct inductive reasoning, which alone can give facility in separating the real points of importance in a given case from those that are adventitious or subsidiary. Indeed, the cultivation of the same faculties and an appreciation of the same methods are requisite even to follow the scientific history of our profession, or to estimate fairly and justly its present position; and, unless we are able to judge of every advancing step from this standpoint, we are merely taking a "leap in the dark" at the bidding of someone perhaps as blind as ourselves.

I shall now pass on to show that the earliest studies to which you will have to pay your attention are eminently qualified to strengthen these faculties, and to render you skilful in their employment. It is hardly necessary for me to remark that it is impossible to practise our profession without doing a vast deal more harm than good, unless we possess a thorough mastery of the technical parts of anatomy. I may, however, insist on the importance of *medical* anatomy technically, as well as those portions which are more necessary for the attainment of *surgical* skill and precision, and which are in general more prominently brought before your notice. Painstaking and accurate dissections can alone give that aptitude in the use of the knife and of the hands which is expected of the surgeon. If these were all the benefits—great though they are—that any of you should derive from the study of anatomy, I should still consider that you would lose the greater portion of its advantages, for it ought to teach you to observe and see things for yourselves, to study relations in size, position, and importance, and to cultivate your powers of memory. To those who have had in their scientific studies a *practical* training in comparative anatomy or in structural botany, this subject will be merely a further step along the same road, and there will be but little difference in the plan by which it is to be mastered; whilst to those who start without such an advantage it will be the first means—as, indeed, it is one of the best—of calling forth your powers of observation.

Physiology and chemistry are of vast importance as educational factors. The latter shows how constant and definite is the relation between cause and effect, and how the slightest modification in the circumstances under which an experiment is performed leads of a necessity to a modification in the conclusions that would be drawn from that experiment. Both of them necessitate the closest observation; they also lead the mind from minute details through a systematic classification up to the widest generalisation, and being eminently progressive, stimulate the inventive faculty, and at the same time discipline and develop the reason. When contrasted, they teach us how simple, definite, and exact are the laws that govern the inorganic world in comparison with the complexity and difficulty of the problems which open before us when we once enter the domain occupied by living organisms. Physiology in its present condition is far removed from the position of an exact science like mathematics, and is therefore of especial significance in making us cautious in our conclusions, in leading us to estimate accurately the value of approximate and probable data, and in teaching us how causes—slight in appearance—persist, grow, and develop, so that the result never becomes final, but quickly surpasses any conception which might be formed from an acquaintance with the laws of dead matter. This is, in fact, one of our most instructive lessons, and one which we are daily called on to correctly estimate and value, even in the routine discharge of our professional duties. It is impossible to overrate the necessity of a technical knowledge of physiology and chemistry to the medical man, and indeed this is rarely lost sight of. Everyone eagerly inquires how much and what parts will it pay me to know, and few are so blind to their own interests as to be ignorant of such portions as they consider necessary from this point of view. The intrinsic and peculiar advantages derived from acquiring proper habits of thought by a careful and honest study of the laws and methods of these sciences are much less frequently taken into consideration. It is impossible to commence our journey in the right path too early. "Character is destiny," says Novalis, or as the idea has been expressed in a recent novel:—"You don't know that you are forming a habit; you take each act to be an individual act which you may perform or not at will; but all the same the succession of them is getting you into its power. Custom gets a grip of your ways of thinking as well as your ways of living; the habit is formed, and it does not cease its hold until it conducts you to the grave."

In pleading thus earnestly for your early acquisition of the laws and methods of scientific inquiry, I would add one other consideration. Few can pursue such studies without taking an especial interest in, and gaining a great delight for, some branch of science; and this becomes an important source of relaxation and pleasure in the moments that can be and are snatched from even the busiest professional life. They give the brain that change of pursuit and occupation which is requisite to relieve the monotony that enters into our profession, as well as into other avocations. With what keen relish does the educated mind, when overburdened with the cares and anxieties of everyday practical life, turn to the contemplation and investigation of some congenial nook in the wide field of nature, and how intense is the satisfaction of making even one step toward that "untravelled world whose margin fades for ever." Is it not a peculiar boast, and one of the greatest glories of our profession, that so many of its most active members have found time to add to the world's ever accumulating treasures of knowledge, and that so many of the most prominent philosophers and votaries of science in every age have been enrolled in our ranks?

A consideration of the sciences which are concerned with human structure and functions in health leads us to those which are devoted to their study when the body has become the arena of those "ills that flesh is heir to." Morbid anatomy and pathology are the necessary complements of healthy anatomy and physiology; they are to be learnt by the same methods, and the cultivation of the habits of thought requisite for a proper knowledge of the latter will be sufficient to grasp the more advanced subjects. Bonetus in 1700 started morbid anatomy, S'Gräuwen in 1771 pointed out its utility and necessity, and Morgagni instituted a thorough inquiry into its domain, and published his results in 1793, in his "De causis et sedibus Morborum." Since then, this science has been, and is being, assiduously cultivated. I need scarcely impress on you that, however diligently you may attend the dissecting-room in your earlier student-days, you cannot conscientiously consider that you are making the best use of your opportunities unless you carry the same assiduity, earnestness, and close observation into the post-mortem theatre. Morbid anatomy is in general fairly well taught in our schools, but it would be a manifest advantage, and lead to immense results, if every physician and surgeon were to make it a point to carry his teaching in fatal cases from the bedside to the deadhouse, and to point out how far the symptoms observed during life are related to, and dependent on, the appearances disclosed after the death of the patient. Until this be done, the scrupulous care which is taken in the early education of the student will lose much of its benefit; guess-work takes the place of exact information, and his instruction becomes incomplete and unsatisfactory.

Anatomy, whether in health or disease, is a science of observation only, and as the mind will never remain satisfied with merely seeing and recording phenomena, but at once seeks with ardent quest the laws and conditions under which they occur, so we find pathology—the science of diseased functions—arising out of and aiding the inquirer into the facts of morbid anatomy, just as, since the time of Haller, physiology has sprung from and been the handmaid of normal anatomy. Here we are again landed into the region of experimental research and consequent inference, and it is only of late that we have passed the threshold and begun to formulate the laws of this science. Disease has already been displaced from its old position as an entity, entering into and leaving the body almost at will, and we now know that general or local perversions of nutrition, qualitative and quantitative, are sufficient to explain most of its phenomena. The prosecution of this department of knowledge is beset with even more difficulty than that of physiology, but in the last few years such great progress has been made that it is no longer unreasonable to hope that, although it must always wait on advancing physiology, it will soon do so as a very close attendant and companion. I regret that in none of our schools have systematic and independent arrangements for teaching this science been made, but as not long ago in all of them, and even now in some, a single teacher taught both anatomy and physiology, we may confidently anticipate in no very remote future a division of labour among those whose duty it is now to teach not only the facts of diseased structure, but also the causes, consequences, laws, and conditions of those alterations. Until this takes place, medical education will still leave a great desideratum.

And now, gentlemen, I must take leave of the scientific division of our studies—those bases on which the principles of medicine and surgery are founded, and shall refer to the *art* or practice of our profession. We must always remember that curing a patient of any disease or warding it off is a practical art, and not necessarily dependent on any theoretical science. As an engineer builds a bridge by the *art* of engineering, so do we cure an attack of gout by the *art* of therapeutics. As the stability of his work will depend on its being in accordance with the laws of mechanical and physical science, so must we be familiar with the sciences on which our practice is based; but as those laws will not enable him to span a river, or construct a railway, *per se* and without the necessary details of practical experience, so neither can we become proficient practitioners unless we possess an everyday acquaintance with the differences displayed by individuals, even when suffering from the same disease, and with the reactions of our various medicinal agents on different persons, or on the same person at different times and under varying conditions. Such uncertainties must always leave great scope for individual skill and dexterity. Most praiseworthy and excellent attempts are now being made to reduce the effects and actions of our drugs to a scientific system, and one shudders to think what vast harm may be done if this be checked by any legislative interference. It is my duty, however, to warn you that even the most sanguine of us must refer to a far distant date the time when this science of pharmacology, as it is called, and the science of pathology, will rest on such full and necessary data, that we shall be able to grasp, not only all the factors concerned in the production of a diseased state, but have within our power certain and reliable means of combating that condition. Every step in this direction is an unalloyed gain, but the complete fulfilment of such ideas seems to me quite Utopian, though who would pretend to limit the knowable? We must trust the perfection of creation so far as to believe that whatever curiosity the order of things has awakened in our minds the order of things can satisfy. "Tout est permis au philosophe," says Maupertuis, "pourvu qu'il traite tout avec l'esprit philosophique."

As our goal is not to be anatomists, chemists, physiologists, or pathologists only, but to be practical physicians and surgeons, we must be careful to supplement and to diligently carry on our education by the observation of disease and the effect of remedies thereon at the bedside, for here alone can we make ourselves proficient in the great essential of testing our principles by the results of practice.

Here, too, we shall discover the full benefits of that habit of close observation, that capacity for understanding the results of experimental inquiry, and that exercise of judgment, which I have so strongly insisted on as the fruits of perseverance in following and grasping the methods of our antecedent scientific studies. Every case of disease necessitates careful observation, and every dose of medicine which is given constitutes a great and momentous experiment.

The physiological and pathological inquiries by which we have been taught the complexities and contingencies that surround the study of living organisms, particularly of their origin, growth, development, and final degeneration, are now of special value. The exactitude and definiteness of the mathematical and physical sciences cannot be obtained by clinical experiments, and the necessity of an acquaintance with biological laws and methods is at once apparent. Even now I fear that the physico-chemical tendencies of most modern physiologists, by drawing particular attention to those phenomena of the living body which are capable of elucidation by physical means, are leading us to expect definite instead of approximate results, and so may endanger the advantages that a judicious medical training would necessarily derive from the investigation of the subtler problems of life. In all medical and vegetable forms the physiologist is reluctantly obliged to acknowledge that no chemistry, no mechanics, can as yet account for these phenomena.

Clinical medicine and surgery have their scientific and their practical sides, and both must be assiduously cultivated. Do not for one moment believe that the one is antagonistic to and subversive of the other; they are mutually complementary, and the only disadvantage is that we are sometimes tempted to strive after an exclusive proficiency in the one, and so by our own neglect entail a failure when we have to deal with the other. The Hindoos write in their sacred books, "Children only, and not the learned, speak of the speculative and the practical faculties as two." Just as the child begins the use of his fingers at the earliest age by moving them idly through mid-air or in endeavouring to grasp the first object within his reach, so you cannot begin the simpler manipulations of every-day practice too soon, and a regular attendance in the out-patient rooms will give you the necessary familiarity with the rudiments of our art, so that when you pass on to the clinical appointments and to your after-duties in the profession, it may not be remarked of you, as I once heard a late surgeon say of one of his dressers: "He has learnt everything; he can do nothing." He alone is learned who reduces his learning to practice, and practical skill without learning degrades our profession to the level of the days of barber-surgery and mediæval medicine. "If knowledge," said Ali the Caliph, "calleth unto practice, well; if not, it goeth away."

The history of our profession has been so often introduced into these addresses that I must ask your forbearance whilst I treat of it in its connexion with this subject. I shall endeavour to show that as medicine is two-sided, so its position has always been due to two factors, one dependent on the condition of science in general and the tendencies of speculative thought at a given period, the other due to tradition merely. On the former element depend its theories and that part of its practice which rests on a scientific basis; from the latter is derived the empirical portion of our art and knowledge. Sufficient attention has scarcely been given to the consideration that the theories and practice of the chief physicians in different ages were a reflex of the prevailing scientific ideas of those ages, and were mainly determined by the habits of thought engendered by the methods of investigation made use of in the cultivation of such sciences as were then most in vogue. A few typical examples will suffice to prove this.

In the first place, when we carefully examine the writings of the illustrious "father of medicine," we find them teeming with careful observations and faithful records—the necessary result of a consistent application to medicine of the scientific method of his immediate predecessors and contemporaries who devoted themselves to geometry, astronomy, and the simpler physics,—sciences of observation and simple relation. Medicine was pursued for a short time on the lines thus laid down; but, soon after the time of Galen, it became involved in the universal obscurity and ignorance, which swamped, not only science, but letters also. The historian of the middle ages thus describes the state of learning at that epoch:—"Law neglected; philosophy perverted till it became contemptible; history nearly silent; poetry rarely and feebly attempted; art more and more vitiated." As a consequence, we find ecclesiasticism occupying the place of medicine, and superstitions of the grossest kind flourishing. The curative agents of older times were displaced by the invariable mediæval resort to prayers, relics of martyrs, and holy water; thus paving the way for that greatest and most monstrous imposture, "the royal touch," which was extensively practised in France, England, and probably Scandinavia for several centuries, and which remains for all time an historical proof of the extreme credulity of even the best informed of the laity in matters affecting their bodily welfare. The materia medica of the Abbess Hildegarde, in the 12th century, contained the herring for curing the itch, the ashes of flies for affections of the skin, &c. As if to illustrate "The Perennials of History," and to demonstrate the persistence and perversity of that mental condition which believes, but does not judge, we find, even in the last century, one eminent divine extolling tar-water as a panacea, and another writing a long book of absurd recipes, in utter ignorance of the claims, position, and methods of medicine as a science. The last-mentioned authority recommends water in which a white onion, steeped in oil, had been boiled, as a means for procuring an easy delivery; three months' living on apples and apple-water, for curing cancer; the application of July wall-flowers, mixed with salt, to the sutures of the head, for the relief of a quartan ague; and water in which quicksilver had been digested for twenty-four hours as an infallible remedy for vomiting. He also gravely relates that a month's cold-bathing and water-drinking cured a Mrs. Bates, of Leicestershire, of a cancer in her breast, a consumption, a sciatica, and rheumatism which she had had for nearly twenty years.[*] We need not wonder that he attributed his own recovery from a chest affection to "sulphur and supplication," and lost sight of the curative effect of his physician's prescription which he carried out for four months. "If anything does thee good, it must be the country air, with rest, asses' milk, and riding daily."[†]

The revival of anatomy by Mundinus in 1315 did not at once benefit medicine, for it was then and for the next two centuries largely under the dominion of the twin visionaries, alchemy and astrology.

The desire for longevity and everlasting youth led to the administration of the nobler metals, but without any regard to the disease, the patient, or the power of the remedy. One of these elixirs is of considerable interest as having been recommended by Roger Bacon to Pope Clement the Tenth "to prevent the corruption of any constitution and the infirmities of age for many years." It is a good example of the jargon of these so-called sciences. "For the preparation of this elixir," says the inventor, Petro de Maharncourt, a Picard, "you must take that which is temperate in the fourth degree, that which swims in the sea, that which vegetates in the air, that which is cast out by the sea, that which is found in the bowels of a long-lived animal, a plant of India, and two creeping things which are the food of Tyrians and Egyptians, and let them all be properly prepared." These were interpreted by Roger Bacon to be "gold, pearl, rosemary, spermaceti, the bone found in a stag's heart, lignum aloës, and serpents." But, unfortunately for the reputation of the compound, Clement the Tenth died soon after. In the latter part of the fifteenth and throughout the sixteenth century, the great revival of letters and of science was taking place; individualism asserted itself against authority; intellectual energy displaced stupor; and so we find in the practice of medicine startling innovators, like Paracelsus, Basil Valentine, and Van Helmont, side by side with careful observers, as Fernel, Fracastor, and Linacre.

In 1415 Leonardo Da Vinci proclaimed the fundamental principle that experiment and observation are the only reliable foundations of reasoning in science; that experiment is the only trustworthy interpreter of nature, and is essential to the ascertainment of laws. Galileo and Descartes speedily applied this principle to the investigation of physical phenomena, and Harvey by following the same plan discovered the circulation of the blood. At this time the atmosphere was heavy with ideas derived from physical science, and its conceptions were for the first time introduced into medicine. The chemical physicians were gradually separating themselves from the alchemists, and contesting for superiority against the mathematical sect, and between them the old Galenists—the pure observers—were almost extinguished. In the middle of the seventeenth century, whilst Locke introduced the Baconian method of induction into metaphysics, his friend Sydenham raised English medicine from the lowest empiricism to a science of observation, and again brought into fashion "bedside study," accommodating his theories to his facts, instead of his facts to his theories. The next most noticeable feature in intellectual progress was the tendency to generalise, and to Newton physical science is indebted for the establishment of the great conception of causation which now supplanted those of mere sequence and concurrence. Here, again, we find a similar idea extending itself throughout the medical world. The vital principle or "anima" of Stahl, a necessary and unintelligent agent superintending and directing every part of the economy from its first foundation, assumed great prominence until it was assailed by Hoffmann, who referred such operations to nervous influence. Passing over the eclecticism of Boerhaave and Van Swieten, we find generalisation and induction pursued in the most philosophical spirit by Cullen, and giving rise to a rational empiricism, evidently reflected from the physiological teachings and methods of Haller.

The experimental investigations with which this century started were calculated to rouse even the most apathetic, and the philosophers of the next few years (1820–50) set themselves to arrange, classify, and methodise the results of previous inquirers, rather than to strike out into new directions. "Uniformity of the course of nature," and "conservation of force," became the scientific watchwords. Medicine passed through two new phases, the "statistical" and the "expectant." The latter was, in part, due to the influence of the doctrines of Hahnemann on medical practice, and in part to the necessary but involuntary assimilation of the methods of "natural history," now for the first time coming to the front in the rank of sciences, and insisting especially on accurate description and consequent specialisation.

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[*] Primitive Physick, 1747, p. 28 et seq.

[†] The Journal of the Rev. J. Wesley, vol. ii., p. 262-264.

In our own time the greatest philosophic generalisation is undoubtedly due to Lamarck, Darwin, and Spencer, and the immense effects ascribed by us to hereditariness, the law of the transference of neuroses, and some of the modern views of adventitious growths—tubercle and cancer—are all clearly marked by a contact with the "hypothesis of evolution." But even this law is only a particular fact of some wider generalisation presently to disclose itself, and every new step we take in thought only reconciles various seemingly discordant facts, as expressions of a more general law. "Men walk as prophecies of the next age." Thus we see our science following in the same track as science in general, and gradually spreading in ever-widening circles—observation of facts, experimental research, inductive reasoning, simple generalisations, classification, description, and specialisation, and then an endeavour at wider and all-embracing generalisations. Science is a "self-evolving circle, which, from a ring imperceptibly small, rushes on all sides outwards to new and larger circles, and that without end. Our life is an apprenticeship to the truth that around every circle another can be drawn, that there is no end in nature (or in science), but every end is a beginning."

The study of medical science in this juxtaposition with the other sciences will explain most of the vagaries which have marked its progress.

To insist on the traditional side of our professional history will not occupy long. We must not forget that some of its traditions are now engrafted into scientific medicine, and stand on a foundation from which they cannot be displaced—e.g., the employment of diluents in fever, and of blood-letting in some forms of acute dropsy in young and strong persons by Hippocrates, of cold affusion in fever by Currie, &c. Still many remedies whose action we can in no way explain, and whose employment depends on tradition merely, do incalculable benefit, and we dare not deprive ourselves of the advantages of using them because we have not yet been favoured with a satisfactory explanation of their *modus operandi*. I need only recall to your memories such familiar drugs as iodide of potassium, colchicum, mercury, and quinine.

Partly from a daily increasing want of classical training, and partly from the necessity of paying some attention to the huge mass of modern literature, an acquaintance with the works of our predecessors is not so common in our profession as it used to be. I would therefore try to impress on you the vast importance of not neglecting this non-scientific element in our knowledge, and two or three instructive instances will not be out of place.

"Ipecacuanha, as a remedy for dysentery, was introduced into European practice in 1640, and its merits were then pointed out by the Brazilian traveller Marcgrav and the physician Piso; only in 1813 was it used in our Indian Medical Service, and it was again neglected. The Madras Medical Board in 1831 recommended it, and once more it was overlooked[*]; but now every army medical officer is taught to regard it as the most useful remedy—if not the only reliable one—in the treatment of a disease which, from 1842 to 1848 affected 1 in 8 of our troops in the Presidency of Madras, without mentioning its ravages in the rest of India, in China, and in West Africa. Peruvian bark even has been theoretically condemned, and so, according to Morton, "Oliver Cromwell died of an intermittent, because his physicians were too timid to make a trial of the bark, and although at first sold by the Jesuits for its weight of silver, yet about thirty years afterwards several thousand pounds of it lay at Piura and Payta without a purchaser."[†]

Again, Galen administered the root of the male fern in cases of tapeworm, and although for many centuries his doctrines and opinions held such universal sway over the medical world, that Massaria, a learned Professor of Pavia, as late as the sixteenth century, absolutely declared "that he would sooner err with Galen than be in the right with any other physician"; yet this useful remedy was lost sight of until Louis XV. purchased the knowledge thereof from Madame Nouffleur, a French empiric, who was retailing it as a secret nostrum for the cure of this disease.[*]

In this traditional element of our professional success every generation starts from a common platform, as far as the older drugs are concerned, and the later ones have a superiority only when new remedies are introduced, such as bromide of potassium or chloral hydrate. The importance of a teacher skilled in the *art* of therapeutics is here most manifest—one who does not slip into the easy groove of a routine practice, but who uses his drugs as Opie mixed his colours, "with brains, Sir." Herein also lies the advantage of a careful study of the works of the great masters of clinical medicine in all ages, from Hippocrates, Boerhaave, and Sydenham, down to Graves, Todd, Stokes, and Trousseau. They added a rational empiricism to careful observation, and allowed no foregone theoretic conclusions to prevent their employing any remedy whose merits had been proved by themselves or by their predecessors. "'Tis opportune to look back on old times and contemplate our forefathers. Great examples grow thin, and to be fetched from the passed world." As for ourselves, we may be sure that the new position of the advancing man has all the powers of the old.

I shall occupy your attention for a few minutes longer, whilst I point out, by way of contrast, the education that was considered necessary for an accomplished physician two centuries ago — such an education as a contemporary of Sydenham's would have had,—in order that we may appreciate at a glance the great care bestowed on it even at that time. We shall see, however, that it was entirely devoted to the cultivation of the observation, and that experimental investigations, morbid anatomy, and reasoning therefrom, were not then dreamt of.

"If now I describe, by way of advice to those that are entering upon the study of this Divine Art, the method of attaining to a point of excellency in it, that may serve our vulgar for a better rule, to distinguish their attainments by the course they have passed through. First, it's most necessarily requisite our young student should be perfectly instructed in the *Latin* and *Greek* tongues, being the universal keys to unlock all those Arts and Sciences, and no less a grace to the future physician. Secondly, being thus qualified for a student, he ought to apply himself close to the study of *Philosophy*, for which *Oxford* and *Cambridge* may justly challenge a præeminence above other Universities. But because according to the first Master, *Hippocrates, Art is long* and *Life is short*, he ought to ingage his Diligence, to absolve his philosophical course in two years at longest, and in the interim for his Recreations and Divertisements enter himself Scholar to the Gardener of the Physick Garden, to be acquainted with the fætures of Plants; but particularly with those that are familiarly præscribed by Practitioners, to prævent being outwitted by the Herb-women in the markets, and to enable him to give a better answer than it is storied once a Physician did, who having præscribed *Maiden-hair* in his bill, the Apothecary asked him which sort he meant; t'other replyed, some of the locks of a Virgin. Thirdly, supposing our Student to have made a sufficient progress in Philosophy, he may now pass to *Leyden*, and enter himself into a *Collegium Anatomicum*. A proficiency in that part fits him for a *Collegium Medicum Institutionum*, and afterwards for a *Collegium Practicum*, and then it's requisite he should embrace the opportunity of visiting the Sick in the Hospital twice a week with the Physick Professor, where he shall hear him examine those Patients, with all the exactness imaginable, and point at every Disease and its Symptoms as it were with his finger, and afterwards propose several cases upon those distempers, demanding from every Young Student his Opinion, and his grounds and reasons for it; withall requiring of him, what course of Physick ought to be præscribed. I must likewise advise our Student to take his lodgings there at an able Apothecaries' house, to contract the Knowledge of Drugs, and of preparing, dispensing, and mixing them into Compositions. In this course of Study, it would contribute to his future qualification, in sojourning a year with an experienced Manual Operator, without any hindrance to his other affair, and there by an Ocular inspection, and handling of all his Instruments, demanding their names, uses, and manner of using, withall by insinuations to visit his Chyrurgical patients, and see him dress them, and therefore would render his study in Chyrurgery plain and easier. These two years having given occasion to our Student to acquire a system and a brief compræhension of the Theory of Physick, and of the Practice likewise; nothing more remains than to amplifie his commenced Knowledge and Experience by his further Travails, to which end he takes his Journey to *Paris*, to be acquainted with the most famed Physicians, and informed in their way of Practice. The art of præparing Medicines Chymically, having merited a great esteem for its stupendious and admirable effects in the most despair'd Diseases, shews a necessity of being instructed in it, and therefore a Student may for the price of 3 pistols, purchase a most exact Skil in it, of one Mounsieur *Barlet*, if surviving. He must then go to *Montpelier*, and is supposed to merit the title of an able, experienced Physician, and to be raised far above those vulgar ones, that never felt the cold beyond the Chimneys of their homes. Six months at *Padua*, where he may justly aspire to a degree of *Doctor in Physick*, are to be succeeded by 3 months at *Bolongne*, six months at *Rome*, and then he should finally adorn the Intellectuals of the Physician by his Travails through several Countreys homewards. The vulgar will then be able to discern the difference between him and the ordinary Churchyard Physicians, who by their sordid deports and dangerous practice make it their business to ease the blind people of the weight in their pockets, and plunge 'em into worse diseases."*

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[*] Report on the Progress and Condition of the Royal Gardens at Kew, 1870, p. 5.

[†] Paris, Pharmacologia, ed. ix.

[*] Paris, *vide supra*, p. 84.

Finally, gentlemen, if I have shadowed forth too high an ideal for our attainment, my excuse must be the lifelong nature of our education, the advantages of order, method, and a proper spirit in its pursuit, and the necessity of a never-ending patience for its consummation, remembering that he who never despairs seldom completely fails. "It is not proper," says Zoroaster, "to understand the intelligible with vehemence, but if you incline your mind you will apprehend it, not too earnestly, but by bringing a pure and inquiring eye." In the words of an ancient sage, you are "benefactors sent by the gods for the salvation of men; inattentive you will become their scourge"; and these words are, if possible, even more applicable now than in his days.

Abstracts
OF THE
INTRODUCTORY LECTURES
DELIVERED AT THE
MEDICAL SCHOOLS OF LONDON
AT THE
Opening of the Session 1875-76.

GUY'S HOSPITAL.

INTRODUCTORY LECTURE BY DR. STEVENSON.

THE lecturer took as his topic the study of medicine. He made reference to the varying esteem in which the profession had been regarded in different ages, and showed that it had not been invariably in periods of the greatest culture and enlightenment that its professors had been most honoured. Taking a hopeful view of the future, he combated the assertion of Dr. Gregory, which has recently been publicly referred to, that medicine will soon cease to be considered a liberal profession; and asserted that on the members of the profession it depends whether medicine shall be regarded as a liberal profession or not. Should gain, greed, and applause be the aims of our profession, the worst anticipations may be expected to be fulfilled; whilst if knowledge of disease, culture, and an honourable professional spirit be dominant the medical profession need not fear adverse criticism.

The qualifications necessary for the study of medicine were next touched upon, and thoroughness of study inculcated—the acquisition of accurate knowledge, and a sound judgment. In the acquisition of these the teacher can but assist, and the requisite opportunities being given it rests with the student to make right use of them.

In the more detailed exposition of his subject, Dr. Stevenson drew a distinction between the preliminary, and more scientific studies which first engage the attention of the student—the basis of medicine and the study of medicine proper (in which term are included medicine and surgery in all their branches).

When natural science first began to make rapid strides, too much was expected to be the immediate and direct result of scientific study; all our old notions were to be overturned and superseded. Such, however, has not been entirely the case; and now the mutual relations of science and medicine are perhaps better understood.

Anatomy, chemistry, and physiology were next considered, and then it was pointed out that these are ancillary to the study of clinical medicine, which, indeed, is to be the central object of the student. The mutual relations of patients and students were also dealt with.

The desirability of making a study of preventive medicine, and the use of statistics in determining the healthiness or unhealthiness of communities received notice, and it was urged that it should no longer be possible to say that medical men, as a rule, care nothing for sanitary science, and even view it with suspicion.

The system of stimulating students by prizes was also defended where not carried to excess; as also the moderate indulgence in manly sports. The lecturer concluded with an exhortation to the students manfully and at all times to do their duty to the profession and to their patients, and not to cease the study of medicine when a qualification to practise it had been obtained, but to make it a lifelong study.

ST. MARY'S HOSPITAL.

DR. RANDALL'S ADDRESS.

DR. RANDALL began by stating that as the advice given to those entering the profession had been wellnigh worn out, and addresses on medical education had been often published, he should venture to begin by touching on a hygienic subject, as a part of State medicine, before dealing with the ethics and mental discipline of student life: not on the air we breathe, the water we drink, nor the food we eat, but upon the productive earth, as health-giving and health-destroying, also as a purifier and preserver or antiseptic; more especially upon these last two qualities, in their sanitary relations to the burial of the dead.

Turning from grave to gay, Dr. Randall then addressed himself to those who were studying their profession, and more especially to those who were commencing. He exhorted them to consider well and reflect upon the exertions which would be required of them, and the amount of labour which was before them. They ought with a determined mind to fix their line of conduct, and to repeat "To be, or not to be; that is the question." Their answer should be a ready and quick one: To be what those who have brought them up and matured them expect them to be; what their teachers desire them to be; what their school for its honour and reputation demands them to be; and what their conscience tells them to be—diligent, hardworking, attentive, and determined students. He reminded them that they had passed the school of their boyhood, and were now entering that of their manhood, and that, the strict discipline of the school of their youth having ceased, they were now comparatively free agents, and their moral and mental discipline, regularity, and orderly conduct rested with themselves. Lecturers and tutors had been appointed to teach them, to assist, guide, advise, and encourage them; provision for studying and becoming acquainted with disease had been made for them. He said the trench had been mapped out and dug; "it is for you to lay the foundation, to lay a substantial and lasting one, to fill up this trench and raise it by degrees to a superstructure—a temple of knowledge, which it is true will take a period of four years to build, an apparently long time, therefore the more likely to be well and firmly built, and well furnished."

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* The accomplisht Physician, the honest Apothecary, and the skilful Chyrurgeon, 1670, pp. 17 et seq.

He pointed out to young beginners the necessity of making a good start with anatomy, histology, and chemistry, and the advantages of thorough knowledge of each subject. He exhorted them in their moments of despondency and anxiety—for the most conscientious students were often the most anxious—to remember that determination and perseverance were more necessary for success that great talent or ability.

After strongly recommending the study of anatomy, which he said required attention, observation, and memory, he reverted to chemistry and natural philosophy. He believed that chemistry had of late years been neglected, and he said: "Chemistry has now become a most important element in your education; pray do not neglect it; without it you cannot study physiology advantageously, nor pathology, nor the principles upon which the treatment of many diseases is based. Under the present system of appointments, many or most of you may become sanitary officers, or have something to do with sanitation. Without you assiduously go through a regular course of the elements and theories of that science you will not comprehend its complications or be able to cope with future difficulties."

He advised the study of the laws of light, heat, and electricity, as this branch of physics had become a powerful factor in the treatment, diagnosis, and prognosis of disease. He illustrated this by different instruments now so much used, including the microscope, and clinical thermometer, which was an instrument as replete with safe diagnosis and prognosis as the stethoscope. Again, electricity and galvanism, which, as therapeutical agents, have made such rapid strides in the last few years, the beneficial effects of which as remedies for the relief of pain, and the restoring of a paralysed limb to use and feeling, or as stimulants, tonics, and sedatives, yes, even to the arresting of hæmorrhage and saving life, are now fully recognised.

"In the study of chemistry and physics the reasoning and calculating faculties will be brought out; you will have scratch and slate work; and thus, combined with those already mentioned in the study of anatomy, a training of the mind will be formed, a necessary training, and as good and efficacious as could be found in the mental training of the best of our educational bodies. Soon you will reach the wards of your hospital, there to learn and diligently watch the symptoms and signs of disease, the action of remedies, and the means adopted to relieve pain and to cure.

"You may rest assured that if you begin well and learn slowly and gradually and effectually, and are well grounded, you will attain your end, and enter life as an honest, efficient, and faithful practitioner. He who sows ought to reap; but if you have been idle and careless and inattentive, you will deeply repent of your conduct; you will have no confidence in yourself, nor be trusted by those who employ you:—

"'He that trusts you,
Where he should find you lions finds you hares;
Where foxes, geese. You are no surer, no!
Than is the coal of fire upon the ice,
Or hailstone in the sun.'

You will not have the boldness of the lion—that is, commendable assurance and reliance; nor the cunning of the fox—that is, wisdom, and aptness gained from knowledge; but truly you will be as timid as hares, and feel as foolish as geese; your reputation will be extinguished like the coal of fire upon the ice, or melt away like the hailstones in the sun."

He believed that there was a want of perfection in learning, and reminded them that the secret of being successful and accurate as students, next to perseverance, was the constant habit of reviewing the same subjects daily, weekly, and monthly.

In reviewing, he advised them to try to write what they remembered, "for the habit of writing, by which you attain a facility of describing accurately, is of paramount importance, not only for the sake of learning well, but also with the object of attaining that art for particular occasions, when your knowledge will have to be tested at the different examining boards and for competitive appointments. Remember that if Bacon said that 'reading makes a full man,' he also said that 'writing makes an exact man.'" The lecturer then earnestly recommended them not to enter into sports or games which would interfere with their attendance at lectures or more important instruction in the wards.

After some further remarks upon the line of conduct which the students ought to pursue during their studies, he in conclusion said: "Educate your mind to thoughtful and careful study; the training which you will thus acquire will render you more fit to gain that most important knowledge to be acquired at the bedside, it will tend to make you expert clinical observers and practitioners, the object of all your learning. Do not let this opportunity of acquiring knowledge pass by; do not let this vast field of information run to waste; store and husband it as you would the best riches of your professional life, and be assured it will form the backbone of a successful career in after days. And thus, session after session, if you feel that you have been a real worker, that you have employed your time diligently and assiduously, that you have used the abilities with which God has endowed you to the best advantage, to the satisfaction of your own conscience and to that of your teachers, you will possess such an inward feeling of comfort and of pleasant reflection, that you will be able to exclaim, with the French poet Lamartine:

"'Le jour s'est écoulé, comme fond dans la bouche
Un fruit délicieux sous le dent qui le touche,
Ne laissant après lui que parfum et saveur.
Oh, mon Dieu! que la terre est pleine de bonheur.'"

ST. THOMAS'S HOSPITAL.

INTRODUCTORY LECTURE BY J. F. PAYNE, M.B.

The lecturer commenced by stating that he should confine his remarks chiefly to the period of student life. This period involved interests quite sufficiently important to occupy the attention for at least one introductory lecture. The profession of a student ought not to be regarded as simply the commencement of a practical life; it had its own duties and its own dignities. Medical students did not always take an adequate view of their own position, and a little more of the *esprit de corps* which belongs to the students of English and foreign universities might be of considerable service. Indeed, the profession generally was not sufficiently alive to the relations which medical education ought to hold to the higher education of the country. It was unfortunate that local and historical circumstances had placed a gap between the old universities and the profession of medicine, which in other European countries did not exist. This gap could not be at once bridged over, but it was for students to remember that even if they did not form part of an academic body, they might cherish an academic spirit. One of the things that distinguished a true student from a mere craftsman was the endeavour to cultivate his mind. He should propose to himself to become not only well-informed in his profession, but a well-educated man. There were several means to this end—reading, conversation, travel; but, above all, proper use of professional training itself. It was a mistake to make too sharp a contrast between liberal and professional education. Really, the difference depended far less upon what was learnt than on the manner of learning it. Medical studies, properly understood, contained many of the elements of a true liberal education. The value of medical training as a liberal education depended chiefly upon its conneixon with the physical sciences. This was an enormous benefit to the medical student, and for the medical profession also it was of great importance to be allied with physical sciences. This would give it in the end the same kind of influence in society as the clerical and legal professions attained after the revival of learning by their possession of clerical scholarship. But medicine was not only allied with medical science. It had itself become embued with the scientific spirit, and was gradually, though not yet completely, brought up to the standard of the physical sciences proper. This scientific spirit, which it was the great merit of modern medicine to have adopted as its guide, was something not easily defined in words, but what it was could be clearly shown by contrasts in tracing the history of any branch of human knowledge. Nowhere was this more clear than in the history of medicine, which, as one of the most ancient of human pursuits, had survived many phases of intellectual development. Examples were quoted to show how in former times medical science was deficient in true scientific method; and how greatly modern physicians—though yet far from perfection—had improved in this respect. The sciences which medical students have to learn were then spoken of in more detail. It was shown that in anatomy and chemistry the student has types of the two chief divisions of science—the sciences of observation and those of experiment; while physiology, at present in a transitional state, was an example of the immense advantage of adding to pure observation experimental methods. It could not be too continually borne in mind that the subject matters of science consisted of material things, not of names or books. Yet books are quite indispensable in the present state of science to gain a knowledge of things, and their right use requires much discretion. For the beginner the best type of text-book is that which refers the student to the objects, and is useless without them. Fears are sometimes expressed lest the student of the present day should learn too much science, and become, as it is said, too scientific to be practical. But of true science it is impossible to have too much, and it is the most practical kind of knowledge that can be had. Too little science, or science of the wrong kind, is what makes men fail in practice. Equally mistaken is the notion that there is some kind of practical science less rigorous and difficult than genuine knowledge, which may be a chief substitute for it; but nothing of this can be of any use in the long run. Finally a word must be said about examinations. The present system had many evils, but in a practical profession, from which the public demand a guarantee of knowledge and capacity, some system was essential. The important thing for the student to remember was that examinations exist primarily for the benefit of those examined; and it was in a higher sense most important to the candidate himself to know whether he was fit to undertake the responsible duties of a medical practitioner.

DETAILS OF ELECTRICAL EXAMINATION AND TREATMENT IN A CASE OF PERIPHERAL PARALYSIS OF THE FACIAL AND OCULO-MOTOR NERVES.

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How far the application of electricity is available in paralysis of the external muscles of the eyeball is a point upon which some doubt is still entertained. In the case which is here related, an unusual method of applying voltaism to these muscles was employed with success. Incidentally various points of great interest in reference to diagnosis as well as treatment arose in the course of the patient's illness, and the value of electrical tests was shown no less strikingly than the useful effects of voltaism in bringing back paralysed muscles to the influence of the will.

I was called in December, 1872, into the country by Dr. Playne, of Maidenhead, to see a gentleman sixty-two years of age under the following circumstances:—The patient looked somewhat older than his age, and had been more or less ailing for some years. A year previously he had suffered from some obscure mental symptoms, which had followed prolonged sleeplessness. He was usually dyspeptic, and had experienced pains of rheumatic character. On December 13th he found in the morning that on cleaning his teeth the water ran out of the right side of his mouth, and his face was observed to be drawn over to the left. Next day he could not close his right eye. When I saw him on December 17th, there was pronounced paralysis of the right portio dura. There was complete inability to close the right eye; the angle of the mouth dropped on the right side; in smiling the face was drawn over to the left; and when asked to show his teeth, the lips were scarcely separated on the right side, whilst on the left the teeth were exposed in the usual manner. The aperture of the mouth, under these circumstances, formed an irregular triangle with its base disposed vertically on the left side. The right eye was painful, and watering from exposure. If there was any impairment of sensibility to touch over the right side of the face it was very slight indeed. When the conjunctiva of the right eye was touched with the finger-point, avoiding the margin of the lid, although the pressure was perfectly well felt, there was no reflex closure of the lids.

Here, then, were the ordinary symptoms of a peripheral paralysis of the portio dura, and the fact that the patient had been out in his garden on the evening before his attack rather later than usual, and that the weather was cold and damp, combined towards the probability of his suffering from a rheumatic affection of the nerve, or at least from a condition referable to the influence of cold. The evidence so far appeared to point very strongly to a lesion which was peripheral, and comparatively free, therefore, from cause for anxiety. So, again, although there was some arcus senilis, there was no marked rigidity of the radial or temporal arteries, and no cardiac bruit; but, on the other hand, the patient had complained of some numbness in the left forefinger and thumb and a stinging sensation under one of his toes. (The description of this subjective symptom was vague, and it was impossible to make much of it.) The family history, too, was bad, and it was this which caused Dr. Playne some very natural anxiety when taken in connexion with the patient's symptoms. One brother, it seemed, had died of diabetes, and another had sugar in his urine at that very time. Now, the deep origin of the facial nerve is known to be situated in the floor of the fourth ventricle, and disease or injury of this region, as has been shown by Claude Bernard, is attended with the presence of sugar in the urine. Diabetes is a disease which is apt to show itself in several members of a family. The patient's two brothers were so affected, and he himself was suffering from a paralytic affection of a nerve which takes its rise in that portion of the central nervous system in which lesions are apt to be attended by the presence of sugar in the urine. These circumstances, as may be imagined, tended to throw a doubt upon the diagnosis which would not otherwise have been experienced. On the whole, however, taking into consideration the character of the affection, especially the completeness of the paralysis, my opinion was that the lesion was peripheral in situation. At that time I had not the opportunity, unfortunately, of applying any electric current, and was, therefore, without the most important means of diagnosis. It was agreed that the eye should be covered with a shade, that Dr. Playne should apply faradaism to the affected muscles and let me know the result, and that he should examine the urine for sugar.

On the 25th of January I learnt that there was no improvement in the power of the facial muscles, and that the current was felt much more strongly on the left than on the affected side. I was informed, too, that the urine, although its specific gravity was only from 1010 to 1015, contained traces of sugar when tested by Trommer's process. The general health remained as before; the patient was dyspeptic, and suffered from occasional vomiting. These details appeared to give a more serious complexion to the case, when taken in conjunction with the patient's history, and I felt disposed to doubt the correctness of the opinion I had given. The presence of sugar might point to disease of the medulla oblongata, and the impairment of sensibility of the skin on the right side of the face might signify a spread of the lesion to the sensory root of the fifth nerve.

On the 4th of March the patient came to London on a visit, and I saw him in consultation with Dr. Playne, who then left him in my hands. At that time the paralytic condition was more confirmed than ever; the right cheek was baggy and drooping; the saliva constantly ran out of the right angle of the mouth; the eyelids of the same side by a great effort could nearly be closed one-half, but that was all. In smiling, the face was greatly distorted, the mouth being rapidly carried away to the left; and the patient suffered much annoyance from inability to retain food and saliva in the right side of the mouth. Dr. Playne informed me that he had several times tested the urine for sugar, and had only once, about a month previously, failed to detect any. The test, he said, never indicated any large quantity. The volume of urine had been usually above the normal, on one occasion amounting to 96 oz.

I had now the desired opportunity of applying electrical tests. I found that neither faradaism nor the interrupted voltaic current would excite the right facial *nerve*. As regards the facial *muscles* of the right side there was no reaction to the strongest faradaic current which could be borne, but when I applied to them the rheophores connected with a Stöhrer's constant battery, using four cells only, and slowly intermitting the current, I obtained marked contraction of those situated about the angle of the mouth. A similar power applied in like manner to the muscles of the sound side of the face produced no reaction. The sensibility of the skin of the face was decidedly lowered on the right side, especially below the eye, both to touch and to the pain of faradaism. The latter fact was peculiarly well marked. The grasp of both hands was weak, but not definitely unequal, and the patient could raise either leg against pressure equally well. There was no marked impairment of sensibility in his hands, but on inquiry he said that there was slight numbness of the finger-points on both sides. There was no diminution in the power of tasting on the right side of the tongue. There was not then, and there had never been, any weakness in the external rectus muscle of the right eye. I examined the urine, which was pale, clear, acid, and of specific gravity 1013. It contained no trace of sugar nor of albumen. There was general derangement of the digestive functions, with a furred tongue and some diarrhœa. The patient was ordered a quarter of a grain of nitrate of silver, with one-fifth of a grain of opium, twice a day, and an effervescing mixture of citrate of potash and soda, with grain doses of iodide of potassium.

As regards the diagnosis, I thought there were sufficient grounds for believing that the lesion lay in some part of the course of the portio dura. Had it been at the deep origin of the nerve, it was unlikely that the sixth nerve, which (according to Lockhart Clarke) arises from the same nucleus as the facial in the floor of the fourth ventricle, would have remained unaffected. Moreover, and this was the most important feature, the electric reaction was distinctly that indicating peripheral paralysis. When the facial nerve is paralysed from central disease, it is, according to my experience, always the case that the facial muscles retain, either entirely or in great part, their power of being excited by faradaism. On the other hand, the absence of excitability by faradaism and the exaggerated influence of interrupted voltaism were completely characteristic of facial paralysis *à frigore*. I advised, and it was agreed, that treatment by interrupted voltaism should be employed.

On the 7th March, then, nearly three months after the seizure, this treatment was commenced, and afterwards continued almost daily for three weeks. Stöhrer's constant current battery was employed, at first four cells being engaged, then six, and finally eight. One rheophore was placed on the cheek at the point where the facial nerve breaks into its two great divisions, and the other at various parts of the face; but especially often near the ala of the nostril. The current thus employed caused vigorous contractions of many muscles affecting the nostril and mouth. At other times one rheophore was applied near the outer canthus, and then the current caused contractions of the orbicularis palpebrarum muscle. Each sitting occupied about twenty minutes. One rheophore was lifted and reapplied at tolerably regular intervals of about 30 or 40 in the minute. During the first week the change effected by this treatment, although at once apparent, was not very marked; but afterwards improvement was noticed daily. On March 28th, when the patient returned into the country, the cheek no longer bagged; the lower lip kept closed, instead of falling and showing, as it had done, the lining membrane, over which saliva trickled; the eye could be very nearly closed. Nor was this improvement altogether the result of a secondary contraction equivalent to that so often seen in the paralysed muscles in a case of hemiplegia, for a very considerable power of moving the mouth by voluntary effort returned. The nerve-twigs to the occipito-frontalis muscle must, I think, have escaped injury. At all events, when I tested the frontal part of this muscle a few days after beginning the treatment described, I found that it responded readily to the faradaic current when one rheophore was placed over the emergence of the portio dura and the other on the muscle. It was also capable of being contracted by voluntary effort.

On June 3rd I saw the patient again, and at that time a casual observer would have noticed but little deformity in his face. But I remarked a slight spasmodic jerking of the muscles of the affected side during facial movements, much as though the muscles, capable of being excited by volition, were not quite under control. At request he could close his eye, leaving only a very narrow aperture between the lids. Asked to show his teeth, the opening of the mouth was still triangular, instead of being more or less quadrilateral. During respiratory movements, little or no difference was perceptible in the action of the alæ nasi. Electrical testing now showed that neither interrupted voltaism nor faradaism produced contractions of the facial muscles.

In September I found that there was still some spasmodic jerking of the affected muscles. But, except when he laughed, it was difficult for an observer to believe that there was any great difference in power between the two sides of the face. Indeed the tendency, in consequence of the occasional jerking I have described, was to cause the idea that it was the left, not the right side of the face which was weakened.

Nearly two years had elapsed when I was again, on May 28th, 1875, summoned to see this patient. I found him in his bedroom, sitting up, with his back to the light, which his left eye was quite unable to tolerate. So much photophobia was there that I had to refrain from turning his face to the window whilst I examined him. The left eye was closed by ptosis of the upper lid, but the patient could, by a strong voluntary effort, open it, though the lid immediately afterwards fell. There was intense pain, referred to the ball of the eye, and also pain, together with tenderness on pressure, upon the left parietal bone, near its junction with the frontal. He had double vision, the images being crossed—that to his right belonging to his left eye. In order to avoid the confusion and giddiness caused by this diplopia, he was wearing a shade over the left eye. I found that there was partial paralysis of the branches of the left oculo-motor nerve, going to the levator palpebræ superioris, the internal, superior, and inferior rectus muscles. It seemed that the patient had been exposed to a great deal of domestic trouble and anxiety, with the result that his appetite and digestion had failed, and a few days before I saw him he had complained of double vision. It appeared also that several decayed teeth, which had been troubling him for some time, had interfered with his power of taking sufficient nourishment. I advised some chloride of ammonium, which seemed to have a good result as far as the pain in the eyeball was concerned. A fortnight later, however, I found that whilst he had ceased to feel pain in the globe of the eye, the paralysis of the muscles before referred to as partial had become complete. There was complete ptosis, and absolute inability to turn the left eye either upwards, downwards, or towards the nose. The symptoms indicating an affection of the left third nerve, which might be accompanied or caused by some effusion in its sheath, I advised a trial of iodide of potassium, although very doubtful whether it would be tolerated. In effect, the first dose so upset the patient's stomach that he could not be induced to try another, and Dr. Playne then prescribed some quinine, ammonia, and gentian. This answered very well; the appetite and general health improved, and when the patient came to town on July 7th, I found him looking much better than he had been. There was still, however, ptosis of the left eyelid. He could, when requested, lift the lid to a certain extent by a manifest effort, but it was immediately dropped. The vision of this eye not being absolutely occluded by the state of the lid, he was forced to cover it with a shade, as otherwise he was so embarrassed by diplopia that he could not walk without staggering. I found the recti muscles greatly wanting in power, but not, I think, quite so incapable as when I had last seen him. However, the eye was turned outwards constantly, and although by a strong voluntary effort it could be carried a very little way towards the nose, and a still less distance upwards and downwards, it was practically fixed in a condition of external strabismus, and was useless for optical purposes.

Guided by my experience of the result of interrupted voltaism in the facial paralysis of the opposite side of his face more than two years previously, I thought it likely, now that acute symptoms had subsided, that a similar mode of treatment might lead to good results in restoring the action of the muscles of the eyeball which were paralysed. Instructed, too, by former experience, I felt that faradaism was not the treatment proper for the condition. The muscles of the right side of the face had quite failed to respond to faradaism, but they were excited by a very mild voltaic current when it was slowly interrupted. So it seemed likely that a mild and interrupted voltaic current was indicated in the present condition. The best mode of applying this was not so evident. When metal rheophores covered with wetted kid were applied to the closed lids, and a current of varying strength employed, either the electric influence was unfelt or it was painful to the skin. There was difficulty, too, both with these rheophores and also with sponges in applying the stimulus exactly where I wished it. I now bethought me of using the finger as a rheophore, and tried it in the following manner. An assistant having applied to the patient's left temple a sponge rheophore connected with one (it was not material which) pole of a Stöhrer's constant current battery, I grasped in my left hand another sponge rheophore coming from the other pole, and then applied the forefinger of my right hand, covered with a single thickness of muslin wetted with pure water, to the right upper eyelid of the patient. The battery was Weiss's (Foveaux's), which had considerably run down, so that it was perhaps only half-strength. Cautiously increasing the number of cells (it was long before any electric sensation was felt), I found that the current from between 30 and 40 cells could be employed in this manner, my body, through which it was bound to pass, offering a great resistance, and serving indeed as a rheostat. The application was made through the closed lids. The finger proved an exceedingly convenient rheophore. I could apply exactly the amount of pressure desirable, and could reach portions of the globe which it would have been exceedingly difficult to act upon in any other manner. Moreover the strength of the current could be gauged at every instant. That which was employed was just sufficient to cause me to feel a distinct shock in the knuckle of my right forefinger every time the current was interrupted. Occasional flashes of light were observed by the patient, but he felt no pain. We thought we could see a little improvement in power after the first day's application, but there was no doubt of this at all at the close of the second sitting. Not to weary with a daily record, I may say that this treatment was applied on fifteen occasions in all, the applications extending over a period of three weeks. The time occupied at each sitting was from twenty to thirty minutes. A daily increase in power of the muscles was noted; and when the patient returned home, after the last application, he was absolutely well. The lid was entirely under control, and the movements of the left eye were in every respect perfect. Of course, therefore, there was no longer any double vision, and the use of the shade was discarded. The patient has since remained quite well.

Remarks.—I need scarcely say that it is a matter of the gravest import, as regards the prognosis, whether a paralysis of the facial muscles is diagnosed as peripheral or as depending on a lesion of the central nervous system. The importance of this is increased when the patient, as in this case, is a man who has passed the middle period of life; and becomes intensified when, as occurred in the instance which I have described, paralysis of one side of the face is followed by loss of power in certain muscles of the eye on the opposite side. The general conditions, the patient's age, his weak state of health, his family history,—all combine to give a very serious aspect to his case, which even his complete recovery would not of itself suffice to counterbalance. For it is quite conceivable that a man of this age, and with such a history, might suffer from a central nervous lesion, possibly involving small hæmorrhages, which could be repaired, and the paralytic symptoms be *ipso facto* removed, and yet that he might be left in a state peculiarly prone to the repetition of attacks which might at any moment involve districts where the occurrence of lesion would have a serious influence upon life. The mere fact, therefore, of this patient's complete recovery does not of itself bear conclusive testimony to the peripheral character of the affections from which he suffered. The electric reaction, however, of the facial muscles paralysed in the first attack, lends complementary evidence of a kind sufficient, I believe, to enable us to say that not only was that attack certainly dependent upon a lesion of some part of the facial nerve, not of the nervous centre, but that in all probability the second attack was of similar character. Experience, which by this time has been sufficiently universal to make its results positive, teaches us that when there is paralysis of facial muscles, and these a few hours after the attack show a diminution, rapidly going on to an entire abolition of contractility on exposure to induced currents, whilst contractility is effected with abnormal facility by the interrupted voltaic current, the lesion is not a central one, but involves some portion of the portio dura nerve. I have seen no exception to this rule. The lesion may result from cold, from wound of the nerve, or from compression, but it is always a lesion of the nerve, and not of the nervous centre. It was with great confidence, therefore, that when the test applications of the induced and voltaic currents in this case were followed by the results described, I pronounced the facial paralysis to be of peripheral origin. When, in process of time, the second attack occurred, involving on this occasion the oculo-motor nerve of the opposite side, although in the nature of things the application of electrical testing was not practicable, it was not unreasonable to infer that this also depended upon a similar cause to that which had caused facial paralysis two years previously, especially as isolated paralysis of one oculo-motor nerve is almost always peripheral. I ought especially to say that there was good reason to exclude the probability of syphilis in this case, and that there has not been any sign of gout. My prognosis was accordingly favourable, as regards the question of the site of the lesion, although I could not properly give any decided opinion upon the question whether the paralysis would be recovered from or remain permanent. I inclined, however, to the more favourable view, and thought that electrical treatment would be likely to assist recovery.

The voltaic instead of the faradaic current was chosen then, because the paralysis of the eye muscles, like that of the facial muscles, was deemed to be of peripheral character. It seems likely, especially from the researches of Schiff, that induced currents do not determine directly the contraction of muscles, but only act through the medium of the intra-muscular nerves. When these are damaged, as by the influence of cold, the power of causing contraction of the muscles by faradaism ceases. Not so, however, as regards the interrupted voltaic current, the influence of which is now much more marked than it is in healthy striated muscle. Dr. Onimus, of Paris, in some interesting papers which have lately appeared*, expresses the opinion that in cases of paralysis of the facial nerve the muscles, although they do not atrophy, pass into a condition in which the contractile substance resembles rather smooth muscular fibre or protoplasm than normal striated muscle. He reminds us that continuous currents have a much more marked action upon smooth fibres than induced currents, and to provoke the contraction of the unstriated fibres a current of much less intensity is required than for striated muscles. And as with normal smooth fibres so also with those striated fibres which, from an injury to the intra-muscular nerves, have acquired much of the character of smooth muscular fibre. In this mode Dr. Onimus explains the remarkable difference between the action of the induced current and that of voltaism in cases of facial paralysis, as well as the curious fact that the voltaic current acts much more energetically in such cases than in the healthy condition. In the case above related it seems probable that the branches of the portio dura distributed to the muscles, and not the trunk of the nerve itself, were affected. For the occipito-frontalis muscle escaped, and this omission, which is easily explained if the lesion be supposed to be located in a number of nervous twigs, some of which elude the hurtful influence, presents considerable difficulty if we imagine an injury to the trunk itself. Moreover, the sense of taste was preserved on the affected side, which suggests that the lesion was at least beyond the point where the chorda tympani is given off. The impairment of the cutaneous sensibility, which was certainly more marked than I am in the habit of finding it in such cases (there is often a little numbness), is probably to be explained by a localised influence upon the branches of the sensory nerve (fifth) similar to that exerted upon those of the portio dura. The exact effect upon the muscles, which was brought about rapidly by the influence of voltaism I do not find it easy to explain. It would seem—and this point is extremely interesting—that if we cut off the influence of the will from striated muscular fibre the structure tends to degrade, and, as regards its function, passes into a state closely resembling that which is characteristic of involuntary muscular fibre. The resemblance is threefold: the fibre is no longer contracted by the influence of the will, it is acted upon by voltaism when faradaism fails to affect it, and the action of voltaism upon it is much more marked than upon healthy striated muscle. Apparently the effect of applying voltaic currents to muscular fibre so degraded is to lead it back to its normal condition. It often happens, as it did in this case, that the will acquires its power to cause contraction of the recovering muscles before they will respond to the influence of the induced current, but after they have ceased to be abnormally excited by voltaism. When this occurs it is probably only a question of time as to when faradaism will be able to exert its ordinary stimulating power once more. When I last tested this gentleman's facial muscles, a few weeks ago, I found that voluntary power over them was restored perhaps to three-quarters of the normal extent, that interrupted voltaism affected the injured in no higher degree than the uninjured side, and that the influence of the induced current had again become manifest, though not quite perfectly. I suppose that voltaism replaced the action of the will, as far as concerned the preservation of the muscular fibres, till such time as the intra-muscular nerves had recovered and allowed the passage of the volitional influence. The circumstance that the face has not entirely recovered is, doubtless, owing to the injury to some of the muscular nerves having been irreparable. There is nothing, it seems to me, in such examples as this, which requires one to fall back upon an electrolytic action of voltaism upon the constituents of the nerve-trunk to account for phenomena which are to be explained more easily in the manner described. I think that the very rapid clearing up of the oculo-motor palsy (in the second attack) under the influence of voltaism goes far to prove that the lesion in this, as in the other paralytic seizure was of a superficial character. The injury at the time electrical treatment was commenced was probably to a great extent repaired, but the muscles which had been cut off for a long time from the stimulating influence of the will had degraded into a state approaching that of involuntary muscular fibre, and were incapable therefore of being acted upon by volition to any effective purpose. The few applications of voltaism restored the muscular fibres to their natural condition, and they became both physically and metaphysically "voluntary."

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* Practitioner, September, 1874, June and August, 1875.

The use of the hand as a rheophore is not new. It has been employed by many for the application of faradaism, especially to the spinal column. But, as far as I am aware, the use of the finger in the manner described for applying interrupted voltaism to the eye muscles is novel. It is certainly very convenient. What we want in such a case is a large quantity of electricity of low tension, and this is, I think, especially well arrived at by interposing the operator's body in the course of the current, and employing a considerable number of cells.

ON THE NEGLECT OF MINOR SURGICAL OPERATIONS.

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The inclination, natural to many men, to defer matters which are not urgent, and to pride themselves on inaction as evidence of caution, is the cause of a great deal of mental anxiety and physical trouble in all walks of life—in surgery especially. It is open to question whether more mischief is done by men who are always ready for prompt and decisive action, regardless of risk, or by those who never tire of discussing probabilities, and shrink from coming to any decision at all if in doing so their reputation be in any degree imperilled. Certain it is, in the matter of surgical operations, that if a good deal of harm result from their unnecessary performance, much pain and distressing inconvenience might be spared, to say nothing of life prolonged, if some minor surgical operation had been timely performed.

These reflections have been recalled by a study of Sir James Paget's chapter on the Calamities of Surgery, in his recently published Clinical Lectures and Essays. He lays down the rule (p. 68), "Never do an operation if you can cure the patient by any reasonable method or other means." This proposition seems to command obvious assent, independently of the high claims to respect derived from its authorship. But when Sir James proceeds to illustrate his rule, I fear he is supplying the unreasoning opponents of operations with instances and arguments which, under cover of his influence, may be productive of unforeseen results. The fact is that in a very large number of cases in which so-called palliatives are resorted to, an operation is not only the most reasonable method of cure, but the least painful; at once the most creditable to the surgeon, and to the patient the most economical in the broad sense of that term.

When a varicocele is large, oppressing by its dragging weight, and causing, as it sometimes does, atrophy of the testicle, trusses, rings, and all such expedients are of little or no practical use; whereas the radical cure, now that the efficiency and simplicity of the elastic ligature are understood, can be carried out with very little pain, with scarcely any confinement, and with perfect success.

A stricture of the urethra is the only ailment of many men, who are either for years unconscious of its existence, or are the patient objects of palliative measures, in spite of which the stream becomes smaller and more twisted. How easy and effectual is timely dilatation; how little trouble is it for the patient himself to maintain the freedom of the passage by passing at intervals a good-sized elastic bougie. A neglected stricture is the source of infinite trouble to many men, and is one of the most frequent causes of premature decay and death, which timely and well-executed catheterism is practically all-powerful in preventing.

A tendency to hæmorrhoids and their actual existence, doubtless, admits of relief by strict observance of dietetic rules, proper exercise, and ablutions. But when the piles have acquired shape and the solidity of age, the radical cure is the only effectual relief. Take the simple and not unfrequent case of a solitary external pile, sometimes causing little, often much, trouble. Its excision, under the ether spray, is absolutely painless; and if the bleeding spot be touched with a little styptic colloid, the patient may go about his business at once without fear of consequences.

The elongated uvula, which troubles many orators and vocal artists, grows longer and more troublesome in spite of astringent lozenges and gargles. Its removal at just length with a pair of scissors is as nearly painless as can be possibly conceived, and is a lasting source of comfort. But of all conditions in which the superior economy of operative interference over miscalled palliatives is demonstrable, none is so striking as chronic enlargement of the tonsils. Many children with pale faces and depressed chests, who speak thickly and snore in their sleep, have big solid tonsils, which nearly touch in the middle line. It is beautiful to watch, in the course of a very few days, the cheeks becoming rosy and plump, and the chest expanding, after excision of the tonsils with the simple throat-guillotine,* which, in children and adults, is one of the most useful, yet insufficiently practised, operations. Doubtless the great question is when to interfere and when to abstain. That can only be solved by well-balanced judgment based on ample information, neither stimulated by ambition for dexterous display, nor checked by diffidence, which so frequently proclaims itself as the laboured outcome of philosophical caution, when it is in reality the natural offspring of constitutional indecision.

Birmingham.

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* Two very striking cyrtometrical observations in point are given by Dr. Norman Moore in St. Bartholomew's Hospital Reports (London, 1874, p. 129).

ON THE

TREATMENT OF SOME CHRONIC UTERINE DISEASES BY MINERAL WATERS AND OTHER REMEDIES.

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Almost all chronic diseases from which women suffer are now commonly ascribed to the uterus, and supposed to require only uterine treatment. I have elsewhere shown the constitutional nature of many of these complaints. But as this is practically ignored, I again venture to urge the importance of constitutional remedies in such cases, and also propose to describe some mineral waters especially applicable for their cure.

Every age has its prevailing fashions in medicine as certainly as in dress or in manners; and in many instances, after long periods of oblivion, the theories and practices of our predecessors are revived as new discoveries. Thus at present the diseases and displacements of the uterus occupy the most prominent place in the supposed causation of all the diseases of women. For modern gynæcologists, having re-discovered the use of the ancient διοπτρα, and disinterred the old aphorism, "*Propter uterum est mulier,*" now employ that instrument in all possible cases, and reiterate or expound this text, in accordance with their own views, with all the enthusiasm of recent conversion.

The apparent increase of uterine maladies may in some measure be accounted for by the improved methods of diagnosis now resorted to in such cases. Nor, in considering the causes of the sudden prevalence of the novel complaints which fill the pages of some gynæcological writers, should it be forgotten that the symptoms of diseases formerly as well known and treated under more homely names are frequently re-described in modern pseudo-scientific terms as something new. Some of the polysyllabic words thus employed remind one irresistibly of that "patched and piebald language" of which Hudibras

> "——— had supplies so vast and large.
> For he could coin or counterfit
> New words with little or no wit;
> Words so debased and hard, no stone
> Was hard enough to touch them on:
> And when with hasty noise he spoke 'em
> The ignorant for current took 'em."

Irrespective, however, of their being in vogue and better diagnosed than formerly, uterine diseases must be admitted to be more prevalent. This is chiefly due to the increasing luxury of the age and the more artificial habits and conditions of modern life, producing gout and, indirectly, scrofula —the most common, although generally unrecognised, causes of disease affecting the female reproductive system.

The chronic character of many of the diseases peculiar to women and their proneness to recur after their supposed cure is the result of the general reliance on local remedies, by which their symptoms are mitigated whilst their causes are neglected. Thus congestion or ulceration of the cervix uteri is usually treated only by astringent injections and caustics. In like manner, the various displacements and flexions of the uterus are by many supposed to require nothing beyond the mechanical support of a properly adjusted pessary for their cure. But congestion of the cervix leading to ulceration, and hypertrophy of the fundus uteri occasioning displacements, usually result from chronic inflammation of constitutional origin; and hence caustics and astringents in the former or pessaries in the latter are *per se* mere palliatives, although in appropriate cases both are invaluable and indispensable adjuvants. The vaginal speculum, however necessary in the treatment of many uterine diseases, is far too indiscriminately resorted to in complaints on which its use can throw no light, and in others the cure of which is retarded by its employment. When unnecessary, this must increase any existing irritation of the parts and also keep up that morbid concentration of the patient's mind on the imagined seat of her malady by which a nervous woman can create for herself all the subjective symptoms of any disease. I have had occasion to use the speculum extensively and daily for many years; but I have never thought its employment justifiable as a matter of routine practice, nor, especially in the case of unmarried women, without absolute and well-proved necessity.

The majority of uterine specialists may be considered as followers of one or other of three distinct schools of gynæcology. A few years ago most of the diseases peculiar to women were commonly attributed to inflammation of the cervix uteri; then newer views as to the frequency and pathological importance of ovarian disease in such cases prevailed; and, lastly, the doctrine that these complaints are the result of displacements and flexions of the uterus has come to be adopted as the only sure foundation of uterine therapeutics;

> "For in physic, as in fashion, we find
> The newest has always the run of mankind."

Each of these theories is undoubtedly applicable in many instances, but neither of them holds that exclusive and primary place in the causation of the diseases peculiar to women which some writers insist on.

As far as my own experience allows me to form an opinion, I would say that the most frequent uterine or periuterine cause of impaired health is chronic inflammation of the uterus and its appendages. At the Dispensary for Diseases of Women rather more than one-tenth of the patients under my care suffered from chronic endometritis or cervicitis. In some cases chronic metritis occasions congestion of the cervix; in others it results in hypertrophy of the fundus, eventually causing flexions or displacements; in others, again, it extends to the ovaries, producing menstrual derangements, hysteria, and sterility.

It is surely obvious that a part so intimately connected by structural and sympathetic relations with the other great organs as the uterus cannot possibly suffer any serious interference with its sanitary integrity without affecting the general health. Hence, even if uterine disorders did not originate from constitutional predisposing causes, they must produce constitutional effects and be under the influence of constitutional treatment.

Of the predisposing causes of chronic inflammation of the uterus, by far the most frequent is the scrofulous diathesis. Some years ago I observed, and called attention to the fact, that a large proportion of the patients attending the Dispensary for Diseases of Women were of a well-marked strumous habit of body, or actually suffered from glandular or cutaneous scrofulous affections. In such cases uterine complaints are necessarily impressed with the constitutional taint. Thus, for instance, scrofulous endometritis bears the closest resemblance, in its course, in the peculiar glairy discharge, and other symptoms, to chronic nasal catarrh of scrofulous patients. The granular condition of the uterine mucous membrane is precisely similar to that observed in the conjunctiva in scrofulous phlyctenular ophthalmia. In most cases abrasions and ulcerations of the os and cervix uteri, like other scrofulous sores, are superficial, circular, pale, and indolent, possessing little sensibility, although occasionally irritable; chronic to a degree when either maltreated or neglected, but readily curable when suitable local applications are used conjointly with the constitutional remedies indicated in all scrofulous diseases.

Secondary syphilis is the least common of the constitutional causes of subacute metritis and its effects. In cases of chronic uterine catarrh and abrasion of the os uteri of this kind, the diagnosis is by no means easy; nor is the peculiar vitreous or mottled appearance of the cervix described by some at all pathognomonic of syphilitic cachexia.

Women are supposed to be in a great measure exempt from gout. This opinion, although it may be correct with regard to podagra, is certainly unfounded with regard to anomalous gout, which attacks women quite as much as men; and, in the former, affects the uterus as commonly as regular gout does the joints in the latter. There is no reason why the gouty diathesis should be confined to men. Gouty parents generate female as well as male children: any hereditary disposition must be shared in by both alike, and the exciting causes of the disease are obviously not limited to either sex.

Many of the symptoms which Gooch described under the name of irritable uterus, and which modern gynæcologists have transferred to the account of displacements of that organ, are oftentimes produced by gout, and may occur independently of any mechanical cause, though they may also coexist with it. I have at present under my care a widow lady, aged about thirty, who had for years been suffering from lumbar and pelvic pain extending down the left thigh, and accompanied with lameness, dysuria, and slight uterine catarrh. The cervix uteri was congested and the os patulous, the sound penetrated five inches, and the fundus was tilted backwards. Before she consulted me she had been treated by others for retroversion by mechanical expedients only, and for a long time I did the same. Every pessary—and the number was almost countless that I tried,—however well it might fit, was practically useless: before a week's time she would limp into my study in as bad a plight as ever. I need not go through the details of the case further than to add that I learned at last that she inherited gout, and, on examining, found her urine laden with uric acid. She was then treated by alkaline remedies and colchicum, sent to Vichy, and has returned with all the symptoms relieved, and, though yet necessitated to wear a Hodge's pessary, is practically free from any discomfort.

With regard to active local treatment in ordinary cases of chronic inflammation and simple ulceration of the os and cervix uteri, Talleyrand's advice to a young diplomatist might be advantageously adopted by gynæcologists—"Surtout point de zèle." If we trusted more to nature in such cases, I verily believe that in most instances our patients would get well sooner than if the local irritation be increased *secundum artem* by almost daily examinations and the repeated application of escharotics. I have, again and again, seen simple abrasions or ulcerations of the cervix uteri cured without any topical treatment whatever; and in other instances cervical ulcerations of long standing were healed, and hypertrophies of the cervix which had resisted the use of the potassa fusa, potassa cum calce, and other violent remedies which had been previously employed by bolder practitioners, were reduced by the use of a strong solution of iodine in glycerine or spirit, or nitrate of silver, combined, of course, with constitutional treatment. In such cases, too, I always rely in great measure on the effects of emollient or medicated tepid vaginal irrigations. For this purpose the ordinary vaginal syringe is always an imperfect and useless, nay, in some cases even a dangerous instrument. I therefore always recommend the use of an irrigator such as that which I exhibited to the Obstetrical Society some time since. The instrument is very portable, can be readily used, and is capable of impelling a gentle continuous stream of plain or medicated water into the vagina for any length of time, and in any position the patient desires, without causing the least fatigue.

Before considering the uses of mineral waters in cases of impaired health connected with chronic inflammation of the uterus and its appendages, we should in the first place recognise the fact that in such cases local treatment, although not to be neglected, should be subordinate to the cure of the constitutional disease which is the remote, and too commonly the undetected, cause of the local complaint. Thus, in cases of scrofulous disease of the cervix uteri, in addition to the obvious hygienic and dietetic means required by all strumous patients, the faulty state of the blood must be corrected by alteratives and tonics—cod-liver oil, small doses of metallic iodine, Blancard's pills, and the syrup of the iodide of iron, and, above all, by the natural chalybeate and iodated mineral waters. In like manner, in instances of uterine irritation occurring in gouty patients our treatment should be primarily directed to the diathetic predisposing cause, and not, as is too generally the case, merely to the predominant local symptoms. It is utterly impossible to cure gouty inflammation of the uterus without constitutional treatment. There is never any difficulty in inducing valetudinarian ladies to take any quantity of medicine, and, as a rule, women bear colchicum and other remedies for gout fully as well as men. But it is by no means so easy to persuade a patient suffering from gouty endometritis, who has long been treated by local measures only, conjoined with a stimulating and nutritious regimen to keep up her strength, that her disease is the result of long indulgence in a diet beyond all proportion to the wants of her system, late hours, and little active open-air exercise. Nor in such cases is the patient always disposed to thank the physician who honestly tells her—

> "Si tibi deficiant medici, medici tibi fiant
> Hæc tria: mens læta, requies, moderata dieta."

Hysteria in some form is generally associated with chronic uterine disease, and this underlies and complicates most of the symptoms for which gynæcologists are consulted. Counterfeiting every malady, acting through and upon the nervous system, attended with groundless apprehension, depression of spirits, and morbid irritability of temper, oftentimes rendering the patient herself as miserable as she renders those about her, this disease is closely allied to that graver nervous lesion which constitutes insanity, and, if unchecked, may pass into it. Local treatment, except to rectify some displacement or subdue some well-marked ovarian or uterine inflammation, is of little utility in such cases; nor are the tonics and antispasmodics usually relied on comparable, in their therapeutical effects in restoring a hysterical woman to the *mens sana in corpore sano*, to the saline chalybeate water, such as Ems, Schwalbach, or Spa, provided these be used at their source.

"There is," says Burton, "no better physic for a melancholy man than change of air and variety of places." And this physic we prescribe when we order our hysterical patients to any continental watering place. The use of some remote spa is something beyond the effect of the medicated water we have recommended. It necessitates what is of far greater service than any physical remedy in such cases—namely, the moral benefit of change of scene, of occupation, and mode of living. The functions of the liver and bowels, commonly torpid in hysterical women, are stimulated by the change of living, and a sedative effect is generally produced on the hyperæsthetic condition of the patient. The changes and incidents of the journey suggest new thought, by which the patient's mind is diverted from that morbid concentration on her ailment which characterises utero-hysteric disease, and ceasing to dwell on her symptoms, they cease to exist; in other words, she is cured.

The benefits derived from the use of mineral waters in the chronic diseases peculiar to women are by no means limited to the moral effects just referred to. In many of these spas we have medico-chemical agents of extraordinary therapeutic power, and in the next paper I propose to point out the special application of some of these in the constitutional treatment of chronic inflammation of the uterus and its complications.

(*To be continued.*)

INTRA-CRANIAL ANEURISM.

BY WILLIAM E. HUMBLE, M.D. LOND.

THE rarity of cases of intra-cranial aneurism diagnosed during life induces me to forward an account of a case now under my care. And I do so at the present time, rather than wait for the ultimate issue of the case, in order to draw attention to the importance of practising auscultation of the head more frequently than we are in the habit of doing.

So far as I can find, there are but two cases on record in which intra-cranial aneurism has been diagnosed during life—one by Mr. Coe, of Bristol, in which the carotid artery was tied successfully; and the other by Mr. Jonathan Hutchinson, who related the case at the Clinical Society on the 9th of April, 1875, and in which a spontaneous cure occurred by consolidation of the aneurism, as demonstrated by examination after death from another cause. Mr. Holmes in his lectures on Aneurism refers to Mr. Coe's case, and in the same lecture relates another case of intra-cranial aneurism which was for a long time under observation, but in which auscultation was unfortunately not practised, and the disease not diagnosed during life.

Mr. Holmes says:—"We know nothing at present of the diagnosis of intra-cranial aneurism, so that no treatment can as yet be directed specially to it. And, looking at the very free intercommunication of the four large trunks which nourish the brain, it seems unlikely that surgical measures directed to any one of them would procure the consolidation of an aneurism situated on one of its main branches." I think that a careful consideration of Mr. Coe's and Mr. Hutchinson's cases together with that I am about to relate, and the clearly defined symptoms in each of them, may perhaps lead us to look more favourably upon the possibility of diagnosing this disease within the head.

Mrs. ——, a lady aged forty, has had a family of several children, the youngest is seven and a half years old. During the last two or three years she has been getting much stouter, having previously been rather thin. Her habits of life have been active and regular. Has been subject for several years to severe attacks of hysteria, so severe as even to threaten the intellectual faculties, and was the subject of one of these attacks about a year and a half ago, since which time she has been quite free from them and her mind tranquil. Her parents are both alive and there does not appear to be any hereditary predisposition beyond gout, to which her father is subject; has not herself suffered from gout or rheumatic fever, or other constitutional affection. Has not received any injury to the head, except that about ten years ago she struck her head rather severely with the bough of a tree.

In March, 1875, she suffered, as did also the children, from an attack of epidemic febricula, and while labouring under it was seized with severe neuralgia of the right brow and adjacent region. The pain was constant, but with severe exacerbations. She also complained of some indistinctness of vision, with slight diplopia, but without perceptible squint. The neuralgia was much relieved by local application of aconite and chloroform, and after a short time disappeared. She never, however, lost the double vision. About the middle of May she told me she was still suffering from the disturbance of sight, and there was also some amount of photophobia, with slight contraction of pupil, especially of the right eye. There was also observed a decided though slight squint inwards of the right eye. Under the use of belladonna collyrium she was much relieved as regarded the photophobia, but the squint continued to increase, and became very decided. The power of the external rectus muscle was not quite lost, and she could by an effort of the will still direct the eye to some extent outwards. She also complained of a constant loud noise in the head. I ventured now to state to the patient that I had reason to fear that a tumour of some kind existed at the base of the brain, and recommended the occasional application of leeches to the temple, blistering behind the ear, &c. This plan was adopted, and she was also put gently under the influence of mercury, keeping the gums just tender for a week or two. The squint continued, although it certainly became less, and on the whole she thought herself better; but the noise in the head continued as loud as ever, and was a serious inconvenience to her, and not at all relieved by the bleeding from the leeches. Her indistinctness of vision also continued, though rather lessened in degree.

About this time she mentioned to me, as a curious circumstance, that her children said they could hear the noise in her head when they placed their heads against hers. On applying the stethoscope to the head I at once heard a rather loud systolic bruit accompanying each pulsation of the heart. The sound was of a blowing character, and was heard loudest over the right temple just above the anterior inferior angle of the parietal bone, thence diminishing in loudness to the vertex, and again louder at the corresponding part of the left side of the head, where it was nearly as loud as on the right side, though to my ear it seemed rather more distant. The sound is heard by the patient loud in the right ear and not in the left. The rapidity and loudness of the murmur are increased both to the patient and the auscultator by exertion or whatever excites the circulation. I was now convinced I had to do with a case of intra-cranial aneurism, probably of the internal carotid artery at the cavernous sinus, which by its pressure on the sixth nerve caused the strabismus, and had caused the neuralgic pains connected with the fifth. The convection of the sound so clearly to the two sides of the head was at once accounted for. I explained the nature of the case generally to my patient, and told her that I was of opinion that the operation of ligature of the carotid should be performed. On the 25th of June I had the pleasure of meeting in consultation Dr. Lush, of Weymouth, who, after a careful examination of the patient, agreed with me in every respect as to the diagnosis and treatment proposed.

My notes at that time state that her health is, except as regards the local symptoms, generally good. She says she has occasional feelings of sickness. Appetite good; bowels regular. There is no valvular murmur heard over the base of the heart, nor any systolic bruit in the neck. A musical venous murmur is heard at the base of the neck, but only produced by a certain amount of pressure with the stethoscope. An attempt was made to stop the noise in the head by pressure on the common carotid, but in consequence of the shortness and stoutness of the patient's neck it was not found possible with any moderate amount of pressure to compress the artery sufficiently effectually to stop the pulsations or the aneurismal sound in the head. She sleeps well, and in fact is more inclined to sleep than usual, at times almost falling asleep in the daytime. The special senses are not affected, except vision slightly. There is no paralysis of either of the extremities, though she has been subject to occasional numbness of the fingers. Catamenia regular.

Ligation of the carotid has been declined by the patient, at least for the present. Mr. Tufnell's plan, by absolute recumbency and restricted diet, was then urged strongly, but with no better success, so far as concerned a fair and full trial of the plan; and I then determined on adopting the means so strongly advocated by Dr. Balfour for thoracic aneurisms. That plan is now being carried out, and I propose at a future time supplementing this communication by another recording the treatment and its results, with such further information as may be obtained in the progress of the case.

Corfe Castle, Dorset.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

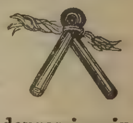
LONDON HOSPITAL.

CASES OF FISTULA IN ANO.

(Under the care of Mr. MAUNDER.)

WE are indebted to Mr. J. Job, house-surgeon, for this report of some severe cases of fistula in ano.

CASE 1.—M. A. W——, about twenty-four years of age, a married woman in fair health, was found, on examination, to be affected with a fistula in ano on both sides of the anus. Mr. Maunder treated one fistula in the usual way by incision with the knife, and to the other he applied the elastic ligature. The operations were performed on March 10th, 1875. On the twenty-third day after the operation the knife wound was found to be healed; but not until the sixty-first day subsequent to operation was the ligature wound cicatrised. During the first few days a good deal of pain was felt at the seat of ligature, which came away, as it is shown in the drawing, on the tenth day. The little rounded head with a depression in the centre originally enclosed the tissues to be divided.



CASE 2.—J. H——, aged thirty-three, admitted May 3rd, 1875, with a fistula on the right side of the anus. On examination it was found to be about five inches in length, but with an intervening opening just within the sphincter. The most accessible portion of the fistula was laid open with a bistoury, while the rest of it was cut up with a pair of common scissors, the pointed blade of which traversed the canal, guided by a director, the bowel being protected from the second blade, and the progress of the operation ascertained by the left forefinger introduced into the rectum.

During the progress of the case a small abscess formed in the buttock, towards the perineum, which required evacuation. Notwithstanding this complication, and the great length of the sinus, the patient made a good recovery, and has remained well.

CASE 3.—E. M——, sixty-five years of age, admitted May 21st, 1875, was also the subject of a fistulous opening on the right side of the anus. On examination, a very long fistula was found, passing to the left of the vagina, and apparently terminating behind and on the left side of the symphysis pubis. No bare bone could be detected. An intervening opening into the rectum just within the sphincter existed.

Mr. Maunder declined to lay open so extensive a fistula, and explained to the patient that he could not undertake to cure her absolutely, but might be able by operation to prevent the constant discharge at the external orifice of the fistula, which was in itself a great source of annoyance and discomfort. He proposed to lay open that portion of the sinus which existed between the external orifice and the opening just within the sphincter; leaving the rest of the sinus to empty its secretion into the bowel, to be discharged at stool.

The desired object was attained by the operation.

SOUTH LONDON OPHTHALMIC HOSPITAL.

EMBOLISM OF BRANCHES OF THE ARTERIA CENTRALIS RETINÆ WITHIN THE EYE; WITH REMARKS.

(Under the care of Mr. Edward Nettleship.)

Several cases of embolism of one or more intraocular branches of the central artery of the retina have been recorded (Sämisch, Hirschmann, Barkar, and Knapp, and others). They are still, however, among the uncommon cases in ophthalmic literature, and additional instances still have interest enough to justify a record, while the case given below admits of useful comparison in several points with those already published, notwithstanding Knapp's able *résumé* of the subject.*

Bessie T——, a very intelligent girl of sixteen, whilst dressing one morning about June, 1874, suddenly found that her sight was becoming defective. On trying each eye separately she found that when she covered the right the left was "quite blind"—i. e., she was "in total darkness." In a short time the sight began to return, and before long, she thinks within twenty-four hours of the failure, she could see as well as when Mr. Nettleship first saw her six weeks later. She described the sight as returning first in the middle of the visual field; a small point of light "like a pea," which gradually enlarged. She came to the hospital on August 5th, 1874, complaining of defect of the left eye, when Mr. Nettleship found that she could see nothing in the outer, upper, and upper-inner parts of the visual field; but that sight was good elsewhere, and direct vision perfect, so that she read No. 1 Jaeger and 20 Snellen at 20 ft. The sight and visual field of the other eye were perfect.

Ophthalmoscopic examination of the defective eye disclosed a slight milky haziness of the (real) lower part of the retina, the upper boundary of which on the yellow-spot side of the disc formed an abrupt horizontal line running outwards from the lower edge of the disc below the yellow spot itself, which was thus intact; on the nasal side of the disc no such abrupt distinction between healthy and diseased parts was discernible. The disc was considerably paler than that of the other eye, and the retinal arteries, especially the (real) lower branches, were considerably diminished in size. There were two small round spots of black pigment in the lower part of the fundus at some distance from the optic disc.

The true nature of the case did not occur to Mr. Nettleship until he had examined the case several times, and it was treated for some months as an obscure retino-choroiditis, there being nothing in the girl's appearance or family history to suggest any probable explanation.

Three months later (Oct. 31st) she considered that the field of vision had enlarged somewhat, but, on measurement, this was very doubtful. There was still slight milkiness of the retina, and the other appearances were the same as at the first examination. On July 6th, 1875, about thirteen months after the failure of sight, the visual field, taken at a foot from the patient's eye, measured only an inch upwards, and three or four inches to the temporal side of the centre, while below and to the nasal side it was of full size. She had no perception of objects whatever in the defective parts of the field, but suddenly saw them quite distinctly as soon as they came within the above limits. Ophthalmoscopic examination (both of the erect and inverted image) showed the same marked pallor of the optic disc as before, while on careful inspection of the vessels it was found that the (real) lower divisions of the artery (two or three in number) were so extremely diminished that they could not be traced beyond the lower border of the disc; some hazy, thin, white lines in the lower part of the retina near the disc were probably the obliterated remains of these arteries, but with an undilated pupil this point could not be determined with certainty. The small arterial branches running straight outwards to the yellow-spot region were unaltered. The retinal veins were rather small. The effect of pressure on the eyeball as a test of the circulation in the arteries was unfortunately omitted.

A doubtful systolic bruit was heard over the base of the heart. She had never had rheumatic fever, but her father was subject to "chalk-gout." She now stated that for some little time before the sudden failure of sight she used to have "momentary" attacks of a curious feeling, during which the objects she was looking at seemed to "rise up"; it was not "double vision," and was not "giddiness," although she said she would have fallen during the attacks had she not held on to a support.

The ophthalmoscopic appearances, taken with the history of the case and the ascertained character and position of the visual defect, leave no room for doubt, in Mr. Nettleship's opinion, that this was a case of embolic obstruction of the lower and inner divisions of the arteria centralis retinæ, the upper divisions and the small branches to the yellow-spot region remaining pervious. The two spots of pigment in the fundus were doubtless the remains of hæmorrhages.

Mr. Nettleship remarks that in several cases of embolism of branches of the arteria centralis the first symptom has been obscuration of the whole visual field, amounting either to total blindness or general haze. In his case the girl said she was in total darkness with the affected eye for about an hour, after which the sight quickly and completely returned in the unaffected part of the field. In one of Knapp's cases recovery was also very complete and rapid in the unaffected part, while in two others the improvement was spread over several weeks, and the parts supplied by still pervious branches never perfectly recovered. It appears, as Knapp has pointed out, that the part of the retina supplied by the blocked branch or branches never recovers in the least; in each of the seven cases, as in his own, the corresponding part of the visual field was entirely wanting, the boundaries of the defective portion being as a rule sharply defined. The yellow-spot region, as in Mr. Nettleship's case, generally escapes and recovers perfectly from the temporary general blindness. If, however, the general obscuration lasts for long, the yellow spot does not recover perfectly, and central vision is not fully restored. The small arterial twigs which commonly pass outwards directly from the main artery on the disc, to supply the yellow spot, are seldom blocked in the cases under consideration, and it is doubtless in part to this fact that we must attribute the frequent retention of good or even perfect central vision. There are in these cases, as in instances of embolism of the trunk of the arteria centralis, great differences in the ophthalmoscopic changes of the retina, especially in respect to the duration of the retinal haze and the presence or absence of hæmorrhages. Mr. Nettleship thinks that perhaps the chief factor in determining the occurrence of hæmorrhage will be the soundness or otherwise of the retinal capillaries and veins. Something may also be due to the part of the retina involved; thus there would be more probability of passive collateral distension and rupture in the yellow-spot region, where he states that the blood-supply is very free and capillary anastomoses between arterial twigs are found, than in other parts less freely supplied with vessels. Possibly an unusually free communication between the ciliary and retinal arteries near the disc may, as supposed by Knapp, now and then act in the same way. The condition of the *optic disc* is a feature in these cases to which Mr. Nettleship calls attention. In no less than four of seven recorded cases it is particularly noted that the part of the disc which corresponded to the blocked arterial branch was very pale and atrophic, the remainder being either quite healthy or much less pale; while in one of the remaining cases the same is implied, though not quite clearly stated. In his case no difference was noticed between the different parts of the disc, and though a slight variation may have escaped observation, it is unlikely that there was any marked distinction of colour in the parts corresponding to the embolic and pervious arteries respectively. In this connexion Mr. Nettleship observes that in his case all the arteries were at first somewhat diminished, and the whole disc pale, the pervious arteries afterwards regaining about their normal size; the same is noted in one of Knapp's cases, where the pervious arteries were a little smaller than the corresponding branches in the other eye, while the corresponding part of the disc, though less pale than the part belonging to the embolic branches, was still decidedly paler than the disc of the other eye. Mr. Nettleship thinks that the pallor of the disc in cases of embolism must probably be ascribed—first, to an inflammation of the disc, accompanied by the formation of opaque tissue, which may or may not, according to its quantity, interfere with the function of the nerve-fibres passing through it; secondly, to atrophy of the nerve-fibres of the disc, consecutive to atrophy of the retina, the latter being the result of the permanent cessation of blood-supply. If the embolism occludes the trunk of the central artery the whole area of the retina will atrophy, and the consecutive atrophy will include the whole disc; if the embolus shuts off the blood from only a part of the retina, this part alone will atrophy, and the secondary atrophy of the disc will involve only the corresponding portion. That chronic inflammatory changes do occur has been shown by the results of several post-mortem examinations of the optic nerve and disc in cases of embolism, the alterations having been noted especially in the ocular end of the nerve-sheath, and about the lamina cribrosa. That retention of perfect sight by the unaffected part of the retina is compatible with a very definite degree of pallor of the entire disc, also seems to point to the pallor being, in such a case, due to morbid opacity (inflammatory) of the substance of the optic disc, obscuring its capillaries, rather than to atrophy and anæmia. Mr. Nettleship suggests that in embolism of a branch of the central artery, the inflammatory changes may involve either the corresponding part only or the whole of the disc; but the atrophy of nerve-fibres, and consequent intense and punctate whiteness mentioned in some cases, will occur only on the part corresponding to the affected portion of the retina.

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* Archives of Ophth. and Otol., vol. iii., No. 1, p. 36, 1873.

Mr. Nettleship thus accounts for retention of perfect sight by the unaffected portion of retina, together with pallor of the entire disc, in these cases, by attributing the pallor to newly-formed white tissue, which does not of necessity interfere with the nerve-fibres.

The question may be asked whether in some other cases where good sight co-exists with pale or partly pale discs, the same explanation will suffice? In tobacco amaurosis, for instance, where the patient has recovered almost completely, it is, Mr. Nettleship believes, usual to find the discs in very much the same state as during the amblyopia—viz., exhibiting a varying amount of pallor on the yellow-spot side, the remainder being, as a rule, of healthy colour. He thinks it probable, from the fact that in this malady the failure of sight often precedes by many weeks the appearance of any atrophic change, that the amblyopia is caused by some change occurring primarily in the nerve-fibres themselves, and which impairs their function before causing visible alteration in their structure; rather than by any inflammatory process in the surrounding connective tissue acting secondarily on the nerve-fibres, as in cases of embolism.

CASHEL UNION HOSPITAL.

EMPYEMA; THORACENTESIS.

(Under the care of Mr. THOMAS LAFFAN.)

THE following notes were taken by Mr. O'Dwyer.

J. P——, aged thirty-five, shoemaker, was admitted into hospital on March 21st, 1874. There was a previous history of chronic bronchitis of long standing; his habits also had been intemperate. Pulse 112; respiration 48; temperature 100°. Chest measurements: 18½ in., right; 19½ in., left side.

On admission there were, in addition to the signs of universal bronchitis, signs of effusion occupying the entire of the left half of the chest, as well as of partial effusion in the base of the right pleura. The general condition of the patient was so grave that it was deemed necessary to perform thoracentesis. This was accordingly done on March 24th. The incision was made between the seventh and eighth ribs, and 56 oz. of pus were evacuated by the aspirator. The wound was enlarged, and directions were given to keep it permanently open, but this the unmanageableness of the patient rendered impracticable. The patient seemed much benefited; pulse, respiration, &c., were much improved. On the 27th a bronchial fistula formed, as evidenced by the sudden expectoration of a large quantity of pus and by auscultatory sounds peculiar to that condition. The patient continued in the same improved condition for six or eight weeks. He daily expectorated some pus, and a drain continued also to flow through the small external opening. A tardy consent was wrung from him towards the end of April to have a free opening and counter-opening made. This attempt was defeated by the existence of strong adhesions at the points where the trocar was inserted. Permission to repeat the attempt was sought, but this the patient would not give. He left the hospital on May 3rd, and returned no better on July 3rd. From this time until September his state remained the same. He continued daily to expectorate some pus, but the bulk of what was secreted remained pent up and decomposing in the pleural sac, it being quite clear that the patient was less borne down by hectic than slowly poisoned by the gradual absorption of the decomposing pus.

Repeated efforts were made to obtain his consent to allow free openings to be made in situations where the light of previous experience indicated that they might be made successfully. All these efforts proved in vain; and towards the end of September it became more and more evident that this chronic purulent absorption could have but the one ending. The man remained in the hospital till the end of October. His appetite and strength failed; he became emaciated; his stomach and bowels were both disordered; the local signs and symptoms continued as before; the expectoration was, however, materially lessened; and the pulse and respiration fell nearly to the normal standard. He left the hospital on the 17th October, and died on the 15th November following.

This case seems to teach the necessity for the thorough and continuous drainage of an empyemic cavity. It is also another of those cases which prove at once the safety with which thoracentesis may be performed and the at least temporary gain which it yields. Had the operation not been performed, this man would, in all human probability, have died shortly after his admission. It also shows how imperfect an outlet a bronchial fistula is for purulent secretions.

Reviews and Notices of Books.

Essays and Papers on some Fallacies of Statistics. By HENRY W. RUMSEY, M.D., F.R.S. London: Smith, Elder, and Co.

DURING the past twenty years the name of the author of these essays has been intimately associated with all branches of sanitary reform, and some of his efforts to render State hygiene more of a reality than it has been, or is even yet, will be found in the pages of this volume. A perusal of these essays, some of which were written more than fifteen years ago, is still full of interest from the fact, discouraging as it may appear to an ardent disciple of sanitary reform, that by far the larger proportion of what was then advocated by Dr. Rumsey and others as necessary to sanitary progress still remains unaccomplished. State registration of sickness still exists only in the regions of speculation, discussion, and anticipation. Certification of the causes of death, although somewhat modified and improved by the recent Births and Deaths Registration Act, 1874, is still far from complete, as no provision is yet made for obtaining any trustworthy return as to the cause of death in those cases in which no medical practitioner has been in attendance and no inquest been held. Again, although recent legislation has placed some restriction upon the burial of still-born children, with a view to check the dangerous practice which previously prevailed of getting deceased children interred as still-born, England yet stands almost alone, among nations in which vital statistics are recorded, in the non-registration of still-births.

Notwithstanding these and many other shortcomings, which are ably discussed by Dr. Rumsey in these essays, it would answer no useful purpose to ignore the real progress that has been made in the last few years in the sanitary organisation of the country, which, if it has not taken the form which Dr. Rumsey advocated, has marked the commencement of a new sanitary era. No part of the country is now without its urban or rural sanitary authority, upon which distinctly rests the responsibility of its sanitary condition; and, with few exceptions, each of these authorities has appointed a medical officer of health. Then in the Medical Department of the Local Government Board we have now the hopeful nucleus of a State board of health or Central health authority. The working of the new system has disclosed plenty of defects, and especially the far too permissive character of so large a proportion of recent sanitary enactments; but when combined sanitary districts with efficient and experienced medical officers of health, who are well paid and debarred from private practice, are the rule and not the exception, and the Central authority is invested with an actual power of control, then will sanitary progress become more general, and begin to exercise a more rapid effect upon the public health. The most fatal defect of the present system is that in small towns and in rural districts the sanitary authorities consist in great part of those whose private interests clash with the performance of their sanitary duties. Combined sanitary authorities, in order as far as possible to neutralise these interests, are fully as important in the interest of sanitary progress as combined districts, in order to secure the services of efficient and independent medical officers of health.

But to return to Dr. Rumsey's essays, their subject and scope may be considered from two points of view. First, in their bearing upon the past, present, and future of sanitary organisation and progress, and upon the defects and means for improvement of the various sources of our information as to national vital statistics; and secondly, as to the value of the argument which runs through most of them, depreciatory of what has been styled the *national* system of death-rates, as a test of sanitary condition.

From the first point of view we recommend these essays to the perusal of all sanitarians, as a contribution to the history of sanitary aspirations during the past twenty years, some of which have borne fruit, although not always of the recommended shape, while many of them, as we have noted, still remain mere aspirations. Dr. Rumsey's proposed sanitary organisation, under medical and sanitary superintendent registrars, has, it is true, not come to pass, but most of its objects will be attained under the existing system of sanitary districts, authorities, and medical officers of health, more especially if upon these officers were placed the responsibility of certifying the causes of those deaths in which this information is not attainable either from medical practitioner or coroner. With regard to the defects and shortcomings of our census enumerations, and our birth and death registers, for the purposes of sanitary statistics, it cannot but be useful that they should be generally recognised and understood; at the same time it is desirable that they should not be exaggerated, or their effect overrated. This brings us to the consideration of the second aspect of the volume before us.

The essays and papers here reprinted under the title of "Some Fallacies of Statistics," contain the groundwork and substance of the sweeping charges against the value of death-rates, as published by the Registrar-General, made by Dr. Letheby in his inaugural address in the last session of the Health Officers' Society, an address which was as remarkable for its uncompromising denunciation of the "national" system of mortality statistics as for the fallacious argument by which it was sought to support those charges. Throughout these essays the disturbing influence, among others, of sex and age distribution, is continually dwelt upon, without any attempt being made to ascertain the limit of error that could be thus produced on any existing population. Like many reformers in other fields, Dr. Rumsey has, moreover, been often too intent on pointing out undoubted defects in our sources of information, to appraise at its proper value what has been effected with the aid of this information, or to ascertain what is the actual extent of error which is due to those defects and shortcomings. Hence his conclusions that "the comparison of temporary death-rates for practical objects is a mischievous absurdity"; and that "the indiscriminate appeals so often made to the rates of mortality threaten to become a public nuisance." Such opinions are based on a belief that it is possible for a community in a good sanitary condition to show a high death-rate, and, on the other hand, for a population in an unsatisfactory sanitary condition to show a low death-rate. There is no serious attempt to justify this belief. Although Dr. Rumsey, in a note to one of these essays, states that he does not "attack rates of mortality in the abstract, but only the abuse of them," no impartial reader of the present volume can come to any other conclusion than that he entirely distrusts the "national" system of death-rates. He expresses a belief that under this system a high death-rate may be shown when the correct rate of mortality is really a low one, and that these death-rates are "not only a statistical fiction, but lead to practical mistakes."

Since these papers were originally written and published, the limit of error produced by sex and age distribution in a population has been carefully calculated and proved to be confined within such narrow limits as not seriously to affect the general usefulness of death-rates calculated by the "national" system. The "fallacy" of the birth-rate being the controlling element of the death-rate has been once more exposed, and the oft-urged theory that a high birth-rate produces and explains a high death-rate has again and again been shown to be false; it has also been conclusively proved that, sanitary conditions being equal, the death-rate in populations with high birth-rates should be lower than in those with low birth-rates, because the effect of a large proportion of infants and young children in a population, upon its death-rate, is more than counterbalanced by the inevitably large proportion of young adults, and the small proportion of elderly persons, among whom the death-rate is even higher than among young children. Death-rates, as published by the Registrar-General, in calling into prominent notice the great waste of life in towns, have rather understated the excess of urban mortality, compared with that in rural districts, but all general deductions from them have been fully warranted. The effect of sex distribution in different populations on the death-rate is almost inappreciable, and the individual or aggregate influence of other disturbing causes is insufficient to warrant the surrender of the use of death-rates for general conclusions as to sanitary conditions, more especially as no better test is even proposed. The registration of disease, necessary as it is, and valuable as it will be, will never afford a test of general sanitary condition, as it can only apply to a varying portion of a population.

Although some of Dr. Rumsey's "fallacies" are of his own conjuring and are more or less unsound, and the effect of others is exaggerated, we should advise students of vital statistics, who are now numerous, to read these essays. They are suggestive, even when they are not altogether trustworthy, and after the perusal of what has been written on the other side of the question, the student will be in a position to arrive at independent conclusions on the subject.

Space alone forbids our consideration of many of the interesting and important branches of sanitation which are discussed in these essays, and we can only regret that their influence for good is somewhat affected by the following paradoxical and, as we believe, untenable assertions. Dr. Rumsey says, "a diminution in the rate of mortality will be found to coexist generally with an augmentation of the rate of sickness. The very triumphs of advancing medical art are probably attended by an average prolongation of the helpless and infirm conditions of life." In another place, speaking of the increased duration of life in our great cities as the result of improved sanitary conditions and medical treatment, he adds: "But, at the same time, the sickly and infirm period of existence has been prolonged probably in a greater degree than life itself. Weakly, diseased children are now mercifully helped, as they never were in olden times, to grow up into weakly, ailing adults, who, in their turn, propagate with abnormal fecundity an unsound progeny." Such arguments, if logically worked out, would lead to pure fatalism, and seem out of place when urged by so consistent and ardent a sanitary reformer as Dr. Rumsey. They are, moreover, dangerous weapons to put in the hands of the enemies of sanitary progress, although they might recommend themselves to the Peculiar People.

In conclusion, we may express a hope that Dr. Rumsey's health may ere long allow him again to take an active part in the now more hopeful progress towards a system of public hygiene worthy of being called national.

Outlines of Practical Histology. By WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh, &c. London: J. and A. Churchill. 1875.

THIS handy little book is intended to aid the student in acquiring a practical knowledge of the various means and appliances employed in the investigation of tissues, and it very thoroughly fulfils the object it has in view. During the last few years many improvements have been made in the mode of examining tissues, and chromic acid, gold and silver staining, osmic acid, and the freezing microtome have introduced a new era into histology. The accomplished Professor of Physiology in the University of Edinburgh has had such long experience in teaching that he well knows the student requires to be taught innumerable details in the use of the microscope—the mode of preparing tissues, the use of cutting instruments, and the methods of mounting specimens—which to one more advanced seem almost self-evident. In the very short compass of seventy-two pages this is all admirably done. After a short description of the instruments required, and of the principal solutions needed for hardening and softening tissues, the exact quantities being given, Dr. Rutherford takes a series of objects, in so many brief lessons, by a study of which the young histologist will be conducted through every tissue in the body. This book should be in the hands of every student, and well supplies a want that has been much felt.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

ON Sept. 17th an association under the above title was formed at the house of S. W. North, Esq., Castlegate, York. There was a considerable gathering of medical officers of health from all parts of Yorkshire, the important districts of the county being well represented.

The meeting took place in reply to an invitation circular issued by Mr. North, who was unanimously voted to the chair. The president informed the meeting that a considerable number of officers of health who were unable to attend had expressed their cordial approval.

Preliminary rules were drawn up, the objects of the Association (as had been well defined by Dr. Parsons) being stated to be, "to promote the progress of sanitary science, to watch the course of legislation on subjects relating to the public health, and to afford mutual counsel and support to medical officers of health."

The following gentlemen were appointed members of Committee, with power subsequently to add to their number:—President: Mr. S. W. North. Members of Committee: Mr. T. Britton, Halifax; Mr. T. Deville, Harrogate; Mr. G. Goldie, Leeds; Mr. E. B. Hicks, Easingwold; Mr. H. F. Parsons, Goole; Mr. W. S. Wade, Wakefield. Hon. Treasurer and Secretary: Mr. J. S. Wesley, Wetherby.

The secretary was empowered to issue circulars to every public health officer in Yorkshire, stating the objects of the Association, and the next meeting of the Association was appointed to be held at the public offices of Dr. Goldie, Corn Exchange, Leeds, on October 27th, at 3 o'clock, members of Committee being requested to attend at 2 o'clock.

MAUNSELL MEMORIAL FUND.

A MEETING of the friends of the late Dr. Toler Maunsell was held last week. The chair was taken by Dr. H. Kennedy, Vice-President of the College of Physicians. There were also present Dr. Stewart, Dr. O'Leary, M.P., Dr. Hayden, Dr. Atthill, Mr. O'Grady, M.B., Dr. Peele, &c. &c.

It was moved by Dr. Stewart, seconded by Dr. Neary, and resolved—"That considering the valuable services rendered by the late Dr. Daniel Toler Thomas Maunsell to the public and the medical profession, by his writings on the Poor-law and the public medical services, and his zealous and untiring efforts to improve the position of the Poor-law medical officers throughout Ireland, his memory is entitled to some substantial mark of public respect."

The following resolution, moved by Dr. O'Leary, M.P., and seconded by Dr. Peele, was adopted—"That a subscription list be opened with a view of raising a Maunsell Memorial Fund. This fund to be applied to the educating and forwarding in life of Dr. Maunsell's family, who at present are insufficiently provided for.

Amount already acknowledged	£79	3	6
The Rev. James Baxter, C.C.	1	0	0
Dr. Benson, Sheffield	1	1	0
B. Banks, Esq., Sec. Loc. Gov. Board, Ireland	2	0	0
Dr. Burnside, M. O., Clondalkin	1	0	0
Dr. Cahill, Ballynacargy	0	5	0
Dr. Chapman, M. O., Donnybrook	2	2	0
W. Colles, F.R.C.S.I.	1	1	0
Dr. Connolly, Multyfarnham	1	0	0
Mr. Henry Coulter	1	1	0
E. W. Collins, M.D.	1	1	0
Dr. Davey M. O, Terenure	1	0	0
Dr. Davys, Swords	1	1	0
R. Donnell, Esq.	1	0	0
Dr. Dwyer, Camden-street	0	10	0
Dr. Denham	1	0	0
John Ferguson, M.B., North City Dispensary	1	1	0
Dr. Finegan, M. O., Glasnevin and Finglas Dispensary	1	1	0
Edward Gibson, Esq., Q.C., M.P.	2	0	0
E. Dwyer Gray, Esq., "Freeman's Journal"	1	1	0
Rev. S. Haughton, M.D., F.T.C.D.	1	1	0
J. S. Hughes, F.R.C.S.I.	1	1	0
Jas. Hynes, Esq.	1	0	0
Patrick Joseph Hayes, M.H.	1	1	0
Dr. Hayden	2	2	0
Dr. L.	0	5	0
Dr. Laylor, R. D. L. Asylum	1	1	0
Francis Mayberry, M.B., M. O., Kenmare	0	10	6
George Mayberry, M.D., Kenmare	0	10	6
Dr. Charles Maunsell, R.A.	35	0	0
J. W. Moore, M.D.	1	1	0
Dr. Hyman Marks, South City Dispensary	2	2	0
Dr. Murphy, Camden-street	0	10	0
Dr. Neary, M. O., Howth	1	0	0
Dr. Newland, Richmond-street	1	0	0
Dr. Nicholls, Longford	0	10	6
W. H. O'Leary, F.R.C.S.I., M.P.	3	3	0
Dr. Purcell, South City Dispensary	2	0	0
Dr. Seward	1	1	0
Dr. Strahan. Castletown-Geoghegan	0	5	0
H. R. Swanzy, M B.	1	1	0
Henry H. Stewart, M.D.	5	5	0
Dr. Stock, Camden-street	0	10	0
L. M. Tabuteau, M.B., M. O., Portarlington	1	1	0
S. G. Wilmot, F.R.C.S.I.	1	1	0
Albert Walshe, F.R.C.S.I.	2	2	0

THE LANCET.

LONDON: SATURDAY, OCTOBER 2, 1875.

We deem it desirable this week to consider the general question of specialism and special hospitals, and to endeavour to show wherein either or both may be commendable and wherein they are open to censure, if not to distrust. Specialism, it must be confessed, is to some extent the inevitable consequence of the progress of the science and art of medicine. The rapid strides made during the last fifteen or twenty years in the domains of physiology and pathology, the modern employment of physical modes of examination, the exact methods of diagnosis, the enormous increase in our knowledge of therapeutics, have not only added greatly to the skill of medical men, but have rendered the subdivision of labour more or less necessary, and have led to the institution of special branches of study and practice. If we reflect on the changes that have been wrought in the theory and practice of medicine and surgery by the introduction of the stethoscope, the ophthalmoscope, the laryngoscope, the otoscope, and other mechanical aids to diagnosis, it must be confessed that it is scarcely possible for any one man to excel in the employment of all these apparatus, or to thoroughly comprehend all the multifarious phases of morbid action which the regular and skilful employment of these appliances may disclose. But even this does not justify the existence of such a large number of specialties as we have at present. We do not require, as practitioners of medicine, men who can only use the laryngoscope or the otoscope, nor should we encourage men whose mental vision cannot penetrate deeper than a patient's skin. Surely the average intelligence of man can grasp the knowledge of the ailments of more than a cubic inch of the human body. Everyone, in fact, who engages in the practice of the healing art, and *ipso facto* takes upon himself the responsibility of guarding the health and even the lives of his fellow-creatures, should endeavour to acquire sufficient skill in the use of every apparatus for physical examination as will at least enable him to recognise the presence of disease, even though he should prefer to submit the subsequent management of the case to some one more experienced than himself. But we then produce a specialty. It is the unavoidable multiplication of the departments of practice and the great extension of each department that has led to modern specialism. So far specialism is quite legitimate. Unusual opportunities for observing and studying certain diseases or a certain class of diseases occur to some men, or it may be they purposely devote themselves to the consideration of particular diseases which stand, as it were, by themselves outside ordinary routine practice. It is only natural, when they have thus acquired special skill and knowledge, that they should desire to make them available to others.

This, of course, is not the kind of specialism we object to. The kind of specialism that we condemn is that false specialism practised by those who are either incapable of understanding more than a very small portion of the wide subject of the science and practice of medicine, or seek in the covert and ambiguous paths of specialism a short and easy way to lucrative practice. Not unfrequently they rent a small house in a back street, to which they give the name of hospital for this or that, dubbing themselves chief physician or surgeon according to their fancy, while they procure as members of the committee their needy relatives or some members of the decayed gentry, whose only chance to be known at all consists in having their names printed on the prospectus of the pseudo-hospital. Then follow the impudent appeals to the public—appeals which are not unfrequently downright dishonest, and really made for the purpose of remunerating the medical staff and the committee for services they have never performed, inasmuch as they have had neither patients nor furniture. It is surely time that the public should open its eyes to this serious scandal and refuse to be further imposed upon by the charity swindles. No one charitably disposed should subscribe to an institution the reputation of which is not well known, unless he first take the advice of someone who is acquainted with the hospital system. The Charity Organisation Commissioners are generally in possession of useful information respecting the metropolitan hospitals, especially the shaky ones; and from the report of the Hospital Sunday Fund Distribution Committee a very good estimate may be formed of the merits of particular institutions.

Finally, to come nearer home, we would warn students—whether they are entering on their medical career now for the first time, or have already completed part of their curriculum — to regard special hospitals with a jealous eye. Students, especially the senior ones, with a mistaken zeal for knowledge, are, we fear, too apt to neglect their own tried teachers and to run to special hospitals, in the vain belief that they are adding greatly to their store of experience by listening to the oracular utterances of the presumptuous and self-elected instructors who preside at these places; whereas, if they saw things in their true light, they would find that their new love was, in ninety-nine cases out of a hundred, immeasurably inferior to the more modest but better-educated teachers attached to the tutorial hospitals.

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The ninth series of half-yearly Reports supplied by the surgeons to the Customs at the Treaty ports of China have just been published, and contain much information of considerable interest to the profession generally, as well as to those who, by connexion with the locality, are more immediately concerned. These Reports originated, our readers may remember, with the Inspector-General of Customs at Peking, who thought it well to take advantage of the peculiar opportunities which the surgeons at the Custom ports of China possess of gaining accurate information concerning the medical circumstances of the inhabitants of the country and of the locality. The series just issued comprehend Reports on Kiukiang, Shanghai, Peking, and Foochow, by the surgeons stationed at the respective ports, arranged for publication by Dr. Jamieson, of Shanghai.

The individual Reports vary in the information they contain according to the medical opportunities which the stations respectively present. At Foochow Dr. SOMERVILLE has nothing but meteorological observations to record; while the accounts from Shanghai and Peking are of very considerable medical interest; their authors, Drs. JAMIESON and DUDGEON, deserve great credit for them.

Among the prevalent zymotic diseases small-pox takes the most conspicuous position. It has existed as a severe epidemic throughout the east of Asia, and is still now frequent in China and in India. To what extent vaccination is employed does not appear, but it is receiving the countenance of persons in high position, the little Emperor having been vaccinated, as well as the Emperor and Empress of Japan. Whooping-cough is prevalent among foreign children at Peking. The increase in diseases connected with insanitary conditions, such as typhoid fever and erysipelas, at Shanghai, is very suggestive of evils which must be hard to remedy where the means necessary are so foreign to the habits and customs of the people. Among curious facts mentioned with regard to the Chinese is the prevalence among them of hæmoptysis. Hæmorrhage from the lungs is both frequent and severe, but there seems to be an immunity from what are here its usual consequences. Persons are often subject to the disease for years, following some of the roughest and most exposed occupations, without evidences of further lung mischief. It is worth inquiry whether there may not be here some unusual condition of the lung causing the hæmoptysis, such as miliary aneurisms. Aneurism of large vessels and heart disease—in Peking at least—are very rare.

A curious association of boils with malarial poisoning is mentioned by Dr. JARDINE. Simultaneous attacks of intermittent fever and of boils among members of the same family in the same household were met with. "On one or two occasions neuralgia preceded the outbreak of the boils, and many had an attack of fever ushering them in. If there was a recurrence of the paroxysm of fever no boils appeared, and when boils presented themselves there was an end to the fever." It is said that in certain malarious districts of America an attack of boils is considered a safeguard against an attack of intermittent fever. In all Dr. JARDINE's cases quinine was found beneficial, not only in hastening suppuration, but in preventing a recurrence of the attack.

Perhaps the most interesting portions of these Reports are those in which incidentally descriptions are given of various points in the native pathology and practice. The systematic elaborateness which is so characteristic of Chinese theory shows itself conspicuously in their descriptions of disease. The accounts of disease which are given in the native medical books are very full; the supposed causes, symptoms, and varieties being described with great minuteness and refinement. They recognise many varieties of disease, founding them on principles not altogether different from our own, depending especially on the supposed causes, characteristic features, or imagined relation to viscera. They apply the same form of classification to many diseases, and are specially fond of adopting the division founded on the five senses, or on the five viscera which they enumerate—the lungs, heart, liver, stomach and spleen, and the kidneys, according as the stress of the disease seems to have fallen on one or the other of these. They enumerate, for instance, five different forms of small-pox corresponding to these five viscera. The medical works are most voluminous. It is the custom to state whatever any previous writer has said on the subject, and, in addition, to give the views of the writer himself, no attempt being made to point out the errors of preceding writers or to sift the true from the false.

Walnuts are ordered in disease of the testes; the Siberian crab in ulcer of the breasts. The latter may suggest a curious association with cancer of the breast; but cancer is not recognised as distinct from ordinary ulcers, and the Chinese can with difficulty be prevailed upon to submit to any special treatment for it. In accordance with the same principle we find that a favourite remedy for impotence is the penis of certain animals, that of the dog, ass, or deer being preferred on account of their respective qualities of hardness, length, and strength! The testicles of the deer are also taken for the same purpose. In the list of remedies for every disease we have an equally absurd series of agents, some selected on the same principle, others having no apparent association with the disease to be cured. For instance, fifty different remedies are enumerated as accelerating, and an equal number as easing, parturition. None of the former, except perhaps camphor and iron, have any western reputation for the purpose. The list includes the most fanciful and disgusting compounds. The comb of a black cock and a husband's garters are among the least repulsive. The Chinese doses are always large. The habit, consequently, acquired of swallowing large quantities of the medicines prescribed renders it dangerous to entrust them with any considerable quantity of a powerful drug, and has been found a troublesome characteristic in dispensary practice. Arsenic, for instance, cannot be used for ague on this account. The Chinese doctors rarely prescribe powerful foreign remedies on account of the uneasiness their potency excites. Indian hemp is one of the agents of which the Chinese physicians are afraid; and yet it affords a striking illustration of the manner in which, as we have said, some of our important methods of treatment were anticipated long ago in China. It is supposed, Dr. DUDGEON informs us, to have been the substance used by a celebrated surgeon, HWATO, who flourished A.D. 220–230. "It is mentioned in the 'Collection of Ancient and Modern Medicine'—a book published in the beginning of the 16th century,—that, in acupuncture and in applying the moxa, HWATO gave a preparation of hemp, which in a short time produced such anæsthesia as if the patient had been either drunk or dead. During this period of loss of sensation, openings, cuts, amputations, &c., were performed without the slightest pain being felt." Fumigation is the common method of treating asthma in China. Curiously enough, one prescription for a compound to be smoked contains an ingredient which is said by many botanical authorities to be stramonium itself. It is a drug introduced from abroad. It is remarked how many foreign substances have found their way into the Chinese herbal. Some were introduced from India by the Buddhists and others, and have retained their foreign names, at least to such an extent as to admit of their identification.

Another remarkable fact is that the Chinese treatment of syphilis for the last 2000 years corresponds very nearly with our modern therapeutics. "Calomel, cinnabar, and realgar are among the recognised formulæ, and the calomel enters into every prescription." Prescriptions are also given to drive out the poison of calomel after it has effected a cure; and for this is used a kind of sarsaparilla, which is prescribed with an aperient. Moreover, we have been anticipated even in the method of employing mercury in syphilis. Fumigations and vapour mercurial baths, both local and general, are employed by them. One prescription for the purpose contains lead and mercury, cinnabar, olibanum, myrrh, dragon's blood, realgar, and aloes-wood, the whole to be pulverised, wrapped up in paper to form a wick, and put into a lamp. The patient is to be covered over, and inhale through the nose, taking cold water into the mouth to preserve the teeth. Secondary and tertiary symptoms are regarded as not so much a further development of the disease as of the calomel—a notion also not confined to the Celestial Empire. Foreign medical men have much surgical practice. That branch is somewhat lightly esteemed by the native practitioners, who have more faith in their skill for the cure of internal diseases which are hidden, and hence beyond the scrutiny of the patient. Native surgery consists chiefly of acupuncture, the moxa, and plasters, and is relegated to druggists, street quacks, and Mongols. It is satisfactory to learn that the Chinese seldom blame the profession for any untoward course their diseases may take. Death is ascribed to fate, and any unfavourable symptoms are accounted for on the supposition that they have caught cold. The life of many an English practitioner would be relieved of much needless worry were his patients equally philosophical!

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WE commend to the careful study of our readers the lecture "On Softening of the Brain," by Dr. J. HUGHLINGS JACKSON, which we published on the 4th of September. It contains very much that is suggestive on this subject, not only in the region of diagnosis and pathology, but also in that of therapeutics. The precision of thought and language, the strict adherence to what is justified by clinical and pathological observation, which form always such a valuable part of Dr. JACKSON's treatment of a question, are very noticeable in this communication. And the subject is one which is of immense importance in practice. There is a great deal of talk nowadays, even in common parlance, of softening of the brain. Happily, we can say now, on Dr. JACKSON's authority, there is a great deal too much talk. That is to say, people, even educated people, talk about softening of the brain where it does not exist. The cases thus wrongly called softening of the brain are really cases of nervous exhaustion, to be remedied by simple common-sense care. Supposing a man to have exhausted his system by excess of any kind—excess of work, by sexual excesses, by various excessive excitements,—and to display in more or less perfection the group of symptoms described by Dr. JACKSON—irritability, despondency, slight power of attention, feeling of pressure or burning at the back of the head, a "queer," "intolerable" feeling at the upper part of the spine, often intermittent;—supposing a man to have these feelings and no others, Dr. JACKSON believes that they are to be removed by "common-sense care"—that is to say, by proper regulation of work and passion and habit.

The great point which Dr. JACKSON insists on is that softening of the brain is essentially a localised disease, never affecting the general body of a hemisphere, but a more or less limited spot, answering to a certain arterial supply; secondly, that it means bad *arteries*—that is to say' arteries blocked either by embolism or by thrombosis, more frequently the latter; and, thirdly, that the symptoms of such a real lesion as this are very real, though negative, consisting of loss of faculty—such as loss of speech, loss of power over one side. Though there are cases of temporary loss of speech and hemiplegia which do not admit of this explanation, and indeed are still very inexplicable, all those who have watched the progress of recent pathology will agree with Dr. JACKSON, and thank him for giving out the truth with so much plainness—that the reason why the highest part of the motor tract (corpus striatum) and adjacent convolutions are usually the parts to suffer damage—softening—is simply a mechanical one: viz., that they are supplied by the middle cerebral artery, which often gets blocked up. Being in the direct line of the circulation, this artery is most liable to receive a fibrinous plug from the heart, or by the strain of the circulation to have degenerative changes set up in it leading to diminution of its calibre and blocking. There may be general mental symptoms preceding and following this grave and very defined interruption of a given arterial supply; but the direct effect and proof of it is to be found in such symptoms as hemiplegia, or loss of speech, without loss of consciousness. An important part of Dr. JACKSON's lecture is that in which he discusses the significance of what he calls general mental symptoms positive and active, as distinguished from special mental symptoms of a negative character; the more so as he shows that decided therapeutical courses depend on the intelligence with which we discern this significance. Dr. JACKSON calls the grave symptoms, really indicative of serious brain disease, *physical*—such as gross motor affections, convulsions, and paralysis,—in contradistinction to what he would call the *mental* symptoms—illusions, delusions, grotesque actions implying an *over-excitement* of the lower nervous arrangements *permitted* by the loss of control of the higher nervous arrangements.

Good practitioners will not fail to receive the caution which Dr. JACKSON gives as to depleting patients suffering from sudden loss of speech or from hemiplegia, on account of symptoms falsely supposed to indicate inflammation of brain membrane or tissue, but which are really due, some of them to the mere excitement of the attack, and others to the debility and anæmia of the brain resulting from the sudden stoppage of food supplies. It is to be feared that too many still treat a brain suddenly failing as if it were strong and over-nourished, instead of remembering that the very occurrence of loss of faculty is a proof of such a state of vessels as involves impoverishment and starvation of brain-tissue. Dr. JACKSON says "we should be cautious how we begin to change a man's habits, even bad habits, very soon after an attack of hemiplegia." Of course Dr. JACKSON would not wish us to overload the stomach with food or to charge the blood with alcohol. If we rightly apprehend his meaning, it is to the effect that no sudden changes in diet should be made which will have the effect of lowering the arterial tension and the supply of pabulum to the parts of the brain geographically furthest from the heart.

There are two points in Dr. Jackson's lecture of the highest interest upon which we should desire to hear more fully from him. The first is the opinion which he expresses that we shall find the explanation of the neuroses proper, such as chorea and epilepsy, in the condition of the arteries: "*My own belief is that in this direction of inquiry we shall find out the pathology of the neuroses. I do not believe that chorea and epilepsy are nervous diseases in the sense that the pathological changes* BEGIN *in the nervous tissue.*" Considering our ignorance of the pathology of these diseases—that they occur at periods of life when degeneration of arteries does not exist—that their whole character, history, and causation differ so much from those of softening, hæmorrhage, &c.,—this seems to us a very bold opinion. But Dr. Jackson is not given to speak without data, and we look confidently for some justification of his opinion.

The other point is that, allowing the dependence of such diseases as softening, hæmorrhage, &c., on arterial changes to be, as Dr. Jackson says, affairs of arteries, the question of heredity yet remains. It may still be true that arterial degeneration in some families will take the shape of diseases of the nervous system more than in other families. It nevertheless is of vital importance to realise the truth that the causes of paralysis are primarily in arteries, and not in the nervous tissue itself. We seem to know something of, and have some control over, the causes of arterial degeneration; and perhaps the best way in which we can preserve the integrity of arteries is by cultivating such habits as tend to preserve the integrity of the great eliminating glands, such as the kidneys and the liver.

Annotations.

"Ne quid nimis."

THE INTRODUCTORIES.

The 1st of October, and with it the commencement of the academical year, has again come round, and teachers and students with their friends have again exchanged their greetings and listened together to the time-honoured "introductories." Nor have these been wanting in the diversity which has been their most distinctive feature of late years, which seems to render it necessary for each one who delivers such an address to define what in his opinion is the object and scope of an introductory, and to enter upon a defence of his own particular view. It is not our purpose now to discuss the origin and utility of introductory addresses in general, especially as we have often had occasion to expound our views upon the subject. We believe that they may be made extremely useful, if rightly directed; and we should much regret to see the example of the one hospital which has given them up generally followed. To the student who is freshly entering on his medical studies the "introductory" is a momentous affair; to his uninitiated mind it is a mysterious ceremony, at which he will first, with bodily vision, see those distinguished men by whom he is to be trained and taught, and whose names he has already learned to reverence. He anticipates, moreover, that he will receive some direction as to the conduct of his future work, or that the veil will be lifted to give him a glimpse of the mysterious land of knowledge which lies before him, and of which he is as yet profoundly ignorant. To the more advanced student it is a return to work in which he has already made advances, but where there are ever new fields of interest opening up in which he needs not only instruction but guidance and example to enable him to overcome the difficulties which beset him. And to him, as well as to the teacher and practitioner, the opening address is a fresh trumpet-call to the onward march in the noble work of advancing science and curing disease. Such, we trust, will be the effect of the addresses this year; their results will, we hope, be seen in the character of the work of the session now commencing.

VACCINATION.

The Appendix to Mr. Simon's last Annual Report on Public Health (to which special reference was made in The Lancet of last week) is mainly occupied by a most valuable report on vaccination and small-pox, compiled by Dr. Seaton, assistant medical officer to the Local Government Board. It includes the first annual return under the Vaccination Act 1871, and has reference to the children born in England and Wales in 1872. It appears that of 821,850 births returned to the Board by the several vaccination officers in the kingdom as registered during that year, 698,137 (or 85 per cent. of the whole) had been registered as successfully vaccinated at the time the return was made; 1693 (or 0·2 per cent. of the whole) had been registered as unsuccessful (after having been, of course, unsuccessfully vaccinated three times); 905 (or 0·11 per cent. of the whole) as having contracted small-pox before they could be vaccinated; and 78,594 (or 9·5 per cent.) as having died before they could be vaccinated; leaving 42,527 (or 5·1 per cent. of the births) still to account for. If from the 821,856 births deduction of the deaths without vaccination be first made, it appears that of the surviving 743,262 children about 94 per cent. were returned as successfully vaccinated, 0·35 per cent. as either insusceptible of vaccination or having had small-pox, and 5·72 per cent. as still to account for. A further analysis shows that the cases not finally accounted for consist of those in which vaccination was at the time of the return postponed on account of the child's health, or cases removed from the district or place of birth before vaccination, or in which the operation, though performed successfully, could not be registered as such, because the legal certificate had not been received by the vaccination officer. The number of direct refusals on the part of parents to have the operation performed constitutes an utterly insignificant proportion of the cases unaccounted for.

Having regard to the fact that this was the first year's working of the Act, that 1400 local officers were employed acting under the direction of 647 boards of guardians, and that the duties devolving on these officers were new, it must be acknowledged that the results are very satisfactory.

An examination of the cases not finally accounted for, shows that the proportion in the metropolis considerably exceeds the average of the rest of the United Kingdom, due probably to the large number of lodgers, and also to frequent removals.

A total of 275 unions were inspected last year, with reference to their proceedings under the Vaccination Acts of 1867 and 1871, and the sums awarded to public vaccinators for successful work amounted altogether to £8204. There are 23 vaccinating stations in England, 1 in Edinburgh, and 2 in Glasgow; and of these the Surrey Chapel, Tottenham Court Chapel, Pimlico, Westminster, Marylebone, Whitechapel, and Strand establishments are also vaccination stations, as well as those at Manchester, Birmingham, Bristol, Liverpool, Newcastle-on-Tyne, Leeds, Glasgow, Edinburgh, Exeter, and Sheffield. During the year 12,963 charged ivory points and 30,045 charged tubes (each estimated as equal to 10 ivory points) were supplied from the stations, 10,478 applications for them having been made—viz., 9320 from practitioners in England and Wales, 4 in Ireland, and 237 in Scotland, 533 from the Army, 76 from the Navy and Emigration Department, 206 from the colonies, and 102 from the diplomatic and other foreign sources.

SICK NURSES AND THEIR COSTUMES.

There is a popular saying that no one can be "a good nurse without being a born nurse," and there is just that amount of truth in the expression which everyone can appreciate. It would be more correct to say, however, that some persons would never become good nurses with any amount of teaching; they lack the temper, tact, gentleness, fortitude, and intelligent appreciativeness necessary to make a nurse. But, good, bad, or indifferent, rich or poor, it falls to the lot of most women at some time or other of their lives to have to discharge the duties of an amateur nurse to a sick child or relative, and there is a right and a wrong way in this as in everything else worth doing. To begin with, most people, and especially sick people, would prefer to have a fresh, comely, and cheerful attendant to a bilious-complexioned, funereal-looking old "frump." And this reminds us that there is much room for improvement in the matter of the personal attire of nurses. It is common enough for a medical man to be called to a case of grave illness in some household where the patient is being nursed, and often very badly nursed too, by some one or more near relatives, who are already worn out with watching. The first thing to be done is to secure the services of some trained nurse, and if she turns out a good one, as is usually the case—for the Gamp variety is happily as extinct now as the dodo,—the benefit of her presence in the household is little short of a blessing to everyone. But there are the scruples of relations to be overcome; they have an affectionate solicitude for the patient which a stranger cannot feel, and they often seem to regard the presence of a professional nurse as an abiding gloom, instead of welcoming it as a great relief from worry and watching. This is to some extent to be attributed, we think, to the feeling associated with a nurse's costume. While so many ladies and others, who are unselfish and devoted in the discharge of their duties as nurses, are not content with doing good for its own sake and for its own reward, but must conform to some system, and attach themselves to this or that ecclesiastical or religious society, we must expect that there will be uniformity in the matter of their attire, indicative of the order to which they belong rather than of the duties they have to perform. At the good that is done we rejoice, but we think that the usefulness of such people is often much restricted in this way. The sick poor, for example, speedily discriminate the difference between sympathy and services rendered primarily and exclusively to and for themselves, or only to them as a means to another end. Moreover, sick people are every bit as fastidious in their tastes as healthy people, and whilst we attend to the æsthetics of a sick room by flowers and other pleasant objects, why should nurses be so often attired as if for a funeral, in black and white? There is no more excuse for a nurse making a "guy" of herself than for her being decked out in vulgar finery, with her hair got up after an elaborate style which it would take her half the day to arrange. Print dresses of pretty pattern, or grey alpacas, according to season, with a light white cap, linen cuffs and collars, scrupulously white and clean, and a coloured neck ribbon, would, it seems to us, be infinitely preferable to the black costumes of the sisterhoods.

THE FACTORY POPULATION.

Some few weeks ago we took occasion to draw the attention of our readers to a report by Dr. Ferguson, at Bolton, which referred very distinctly and emphatically to the progressive degeneracy of the factory population. Mr. Redgrave, senior inspector of factories, in his last official report, demurs to the conclusion and the evidence upon which it is founded. He says: "Before we can accept as proved the statement that the factory population is degenerating, a very clear and detailed publication of facts, gathered not in one town only, but in fifty towns, must be presented to us." The inspector then, speaking as a layman, avers that since 1848 there has been a material improvement in the physical condition of the English operatives, and that although the factory hands in some of our densely-populated towns may not compare favourably with those who worked in what were some time ago country districts, the workers in the smaller textile towns and villages of Lancashire and Yorkshire are as well-grown, as well-developed, and as healthy as the working classes in any county in the kingdom. Mr. Redgrave doubts also whether there is either an increase of immoral habits or in the consumption of alcoholic drinks. "The breaking-down of the health, the curved spine, the deformity of the extremities, are not now to be met with," but there is an increased and increasing employment of women in factories. The official returns in 1848 gave an average of eighty females above thirteen years of age employed in the Lancashire cotton factories, whereas one hundred is the average at the present time. Evidence has been given frequently of the disastrous consequences to child-life and infant development by the working of the mothers in factories. "The abstention from factory labour of women for a month or six weeks after confinement would to a small extent mitigate the evil as regards their more certain retention of health, but it would not touch the evils of the loss to the infant of its natural food and of maternal care and love while abandoned to the indifference of a sordid nurse and the baneful influence of a soothing cordial." There can be no doubt that the evil thus described by Mr. Redgrave demands serious attention, and our legislators should endeavour to protect the health of the mother and the well-being and physical development of the offspring.

BOGUS DEGREES.

Can nothing be done by Congress to regulate the system by which medical diplomas and degrees are granted in the United States? We gather from our own correspondence with members of the profession in America that they sincerely desire that more strictness should be exercised in the legal recognition of practitioners. Not long ago we were asked for information as to the working of our own Medical Act by practitioners who were desirous to see it applied in the States. The letter which we published last week from his Excellency the Acting Commissioner of the Bureau of Education, Washington, to Mr. Sparkes, of Shelton, Stoke-on-Trent—part of a correspondence which has been kindly forwarded to us—shows that the American Government is not uninformed as to the existence of "fraudulent" institutions in the States which supply "handsome diplomas and certificates of registration" for money considerations only. It is gratifying to have the assurance of the Acting Commissioner that one such institution has had its charter withdrawn, and that it has no "actual or legal existence." But the evidence is still considerable that something representing it still exists, and is not alone, to supply degrees to those who have more money than self-respect. Mr. Sturman, of Packington-street, N., in his letter published last week by us, says, "I can influence you (*sic*) the diploma A.M. and Ph.D., B.Sc., or D.Sc., &c., *from several universities in the States.*" Dr. P. F. A. Van der Vyver, of Jersey, makes a similar offer to Mr. Sparkes in the course of the correspondence above referred to and now before us. It is not enough for the satisfaction of public opinion, either in the States or in England — for England is greatly interested in the condition of the medical profession in the United States—to be told by the Commissioner that no respectable institution in the United States confers degrees for money. What we want to know is, not only the number of institutions covered by Mr. Sturman's expression, "several universities in the States" which sell degrees, but also the number of universities, colleges, or medical societies in the States that have the serious power of granting degrees or diplomas, and, further, the extent to which they are supervised by any body answering to our own Medical Council. We know too well, even with a body specially created by Parliament to superintend our nineteen examining bodies, how possible it is for unfit men to enter the profession. We know how much worse it is and must be in the States, where every State is a law to itself in this matter, and recognises anything that looks like a diploma. We have reason to believe that Congress, at its next meeting, will be asked to pass a law in the direction of our own Medical Act. We devoutly hope it will accede to this request. We do not write in the interest of any medical theories. We only want, for the sake of human life and progress, that men practising the calling of medicine in the States shall give evidence of their knowledge of anatomy, physiology, and of the means by which disease may be detected and treated. We know that there are schools of medicine in the States not to be well excelled in Europe, but Congress owes it to these schools and to its own citizens to, if it can do so, withdraw all legal recognition from the multiplied societies which can show no adequate means for educating and examining students, and give no adequate excuse for their own existence as licensing bodies.

THE CONTAGIOUS DISEASES ACTS.

AT the recent International Medical Congress at Brussels an interesting and useful discussion was provoked by a communication from Dr. Chapman, in which it was attempted to be proved that the surveillance of prostitution is to be condemned because it leads to clandestine immorality. Dr. Sigmund, of Vienna, on the other hand, stated that since a system of surveillance had been adopted there a remarkable diminution had taken place in diseases of this character, both as to the number of cases and their virulence. Dr. Vleminckx, the President of the Congress, declared that the mastery over the scourge in Belgium had been obtained only by a system of legal surveillance, adding, at the same time, that he was unable to understand why England, which decreed obligatory vaccination, does not take a like action in this matter; the maintenance in England of the English way of treating this grave question appeared to him a danger for the whole of Europe. This is the view, we are glad to see, held by nearly all continental physicians, and others having a really practical knowledge of the subject, as opposed to those, whether in this country or abroad, whose conclusions are derived from theoretical considerations, or greatly influenced, if not based, upon sentimental ones. In the face of the evils which confront us in daily life, and in opposition to the logic of facts, it certainly seems strange that attempts to limit the spread of one of the direst maladies in the world in a reasonable and common sense way—in the only way, be it understood, that any attempt can be made from its physical side—should have excited so much opposition. It is to be accounted for, however, by remembering the sources from which such opposition has sprung. It has not sprung up in districts where the Acts have been in force, and among people acquainted with the facts, and who have had experience of the beneficial working of these Acts, but in towns and places where the inhabitants have not been able to see for themselves the favourable contrast which a town presents in this respect after such legislation has been extended to it to what it did before. However, we think that we perceive signs of the waning influence of excited oppositionists. There is nothing like a vigorous discussion of the subject in the House of Commons, and a rigid scrutiny of the assertions and arguments of those most violently opposed to these Acts, for demonstrating the inaccurate and fallacious character of what has been advanced against them. Instead of declaiming against the existence of the present laws, it would be wiser to inquire whether the measures adopted for the prevention of contagious disease were not still insufficient.

ARTIFICIAL RESPIRATION.

SOME nine years ago Professor Schiff, of Florence, in his lectures on the nervous system, announced that in fulminant apoplexy consequent on paralysis of the medulla oblongata artificial respiration—never bleeding—was the treatment indicated. This induction he had reached after numerous experiments on the lower animals. By artificial respiration the blood is saturated with the oxygen, indispensable to life, while the pressure of the circulation is kept low, so as to obviate a new hæmorrhage in the brain. For this reason, to say nothing of the fact that the artificial introduction of air can be regulated according to the requirements of the case, Prof. Schiff prefers the artificial respiration by means of the bellows to the respiration of pure oxygen.

His assistant, Dr. Corso, describes a case in which the efficacy of the practice was well illustrated. A lady having accidentally fallen on her occiput was brought into hospital with fracture of the base of the skull. Immediately on admittance she was found insensible, with her eyes closed, her face cyanotic, the respiration very slow and shallow, pulse small and feeble, and, in fact, all but moribund. Artificial respiration was at once practised. After a few minutes the heart began to beat with greater frequency and force; in twenty minutes' time natural respiration was re-established, and sensibility returned. Next day she had improved to such a degree that she could sit up in bed and eat by herself. The intellect, however, was not perfectly restored, her attempts at discourse being incoherent. This indication of lesion of the cerebral substance increased, till after fifteen days she died. At the autopsy there were found fracture of the base of the cranium, hæmorrhage on the right side extending down to the medulla oblongata, and lesion of the substance of the brain.

The immediate danger in apoplexy lies in paralysis of the medulla oblongata, and consequent impairment of the mechanism of respiration. If this patient had not had, together with the hæmorrhage, lesion of the brain, which is common to apoplexy, whether spontaneous or produced by an external cause, she would (says Dr. Corso) have been saved. By artificial respiration time is given to the brain and medulla oblongata to recover the shock and resume their functions, if not perfectly all at once, still in such degree as to maintain life and make improvement possible.

Even as it was, the patient, but for artificial respiration, must have died within a few minutes after entering the hospital. A great future, thinks Dr. Corso, lies in store for artificial respiration; pulmonary diseases, in particular, seem a fertile field for the practice.

THE POLICE TREATMENT OF DELIRIUM TREMENS.

We have hitherto supposed delirium tremens to be a disease, doubtless a most improper one to contract, and the circumstance of suffering from which must needs go far, though not always conclusively, to imply a dissipated habit and demoralised character. It now appears that the malady is included in the category of those affections for which the police are considered the best physicians, and to which they apply the universal specific of Scotland-yard—brute force and a *régime* dictated by economy, and the propensity for doing as little as possible, and that little ill. "A fine-looking man, who was evidently suffering acutely from a severe attack of delirium tremens" (we are quoting from one of the daily papers) "was charged (at the Thames Police-court) with attempting self-destruction." The report goes on to describe how the accused was so excited that constables were compelled to stand by him in the dock, and it concludes by informing the public that, after his forcible removal to the cells, his yells were heard, "but they gradually subsided as if he had exhausted himself." He was remanded to the House of Detention for a week. Not a word was said about subjecting the poor creature to medical treatment. Possibly the magistrate may have considered it likely the prison authorities would call in the services of their medical officer, but he did not allude to such a contingency, or suggest that the procedure would be prudent. In short, the magistrate handed over the treatment to the police as unreservedly as if the case were only one of fractured skull described in the charge-sheet as "drunk and incapable." It is difficult to accept this view of the matter as satisfactory. We have no desire to qualify the feeling of righteous indignation which even a stipendiary justice of the peace must feel when he encounters a person suffering from delirium tremens *presumably* brought on by excessive drinking. We do not even wish him to temper justice to the crime of excess with mercy for the victim of a self-induced disease. But we cannot help thinking it will be well to follow the old-fashioned practice of treating all maladies as calling for medical care, without regard to the manner in which they may have been contracted, and punishing the offence *after* proper measures have been taken to cure the offender.

SEA-BATHING.

Although the larger proportion of sea-bathers have, probably, abandoned their healthful exercise, many are asking themselves whether it is prudent to continue the pastime now that the year has entered its autumnal phase, the temperature is generally depressed, and the weather uncertain. Wind, rain, and cold are disagreeable attendants on the open-air bath, and detract seriously from its comfort, if not from its usefulness, to all except the most robust. The expediency of facing the occasional inclemency of this variable season should, for invalids and delicate persons, be a question to be decided by their medical adviser. It is a matter of considerable moment, and one which cannot safely be settled offhand, from the apparent condition of health and weather. Bathing too late in the season is to many persons a cause of cold and rheumatism, possibly even of worse misfortunes, which may last far into the winter. The evil effects of the hazardous experiment may not be immediately perceptible. The vital heat is lowered by the repetition of cold baths, from the "chill" of which the organism never perfectly recovers. The average temperature, or heat-force, is after each bath left a little lower than before. The reaction is not sufficiently prompt or strong to re-establish the normal condition. Sometimes—and perhaps this is the worst event, because the phenomena are deceptive—there is every appearance of reaction. The surface becomes flushed after leaving the water, the heat seems to be restored, and the sensations are agreeable. But the reaction is not natural. The accession of apparent warmth is in fact a slight pyrexia. It comes on too quickly. It is either distinctly febrile, accompanied by acceleration of the pulse and almost hectic flushing, or it passes immediately into a sweating stage, in which the temperature is rapidly depressed and the vital strength exhausted. Medical practitioners will do wisely to inquire somewhat more closely than may at first sight seem necessary into the symptoms exhibited by clients—we mean persons in generally good health—who consult them as to the wisdom of continuing the bath at this critical period. It is just the time when to swimmers and bold bathers the attractions of sea-bathing are especially seductive, but the atmospheric conditions call for unusual care.

THE MORMONS AND POLYGAMY.

The Report on the Hygiene of the United States Army, with descriptions of the military posts, being No. 8 of the magnificent series of publications issued from the Surgeon-General's office, War Department, Washington, contains a description of Camp Douglas, Utah territory, with some interesting observations by Surgeon E. P. Vollum, of the United States army, on some of the diseases of Utah. The adult population of the Salt Lake Valley are as robust as any within the borders of the United States, and there is a fair number of cases of extreme old age. The weight of sickness falls upon the children, who furnish not less than two-thirds of all the deaths, most of which occur under five years of age. The figures of the register show that the male deaths exceed the female by about 50 per cent. Surgeon Vollum adds that the polygamous children are as healthy as the monogamous, and the proportion of deaths about the same; the difference is rather in favour of the former, who were generally, in the city especially, situated more comfortably as to residence, food, air, and clothing, their parents being better off than those in monogamy. It is, perhaps, too early to express any mature opinion as to the influence of polygamy, as contrasted with monogamy, on the health or constitutional or mental character of the Anglo-Saxon race as seen at Utah; but the reporter states that, as far as his experience has gone, no difference can be detected in favour of one or the other. Polygamy in Utah, as far as Surgeon Vollum can learn, furnishes no idiocy, insanity, rickets, tubercles, struma, or debasing constitutional condition of any kind. The great mortality in the children is confined chiefly to the Mormon population, and it may be traced to absence of medical aid, nursing, proper food for sick children, and neglect of all kinds. Among the many mottoes that decorated the Tabernacle on the last anniversary of the advent of the Mormons into Utah, was "Utah's best crop: children." Abundance, says Surgeon Vollum, doubtless cheapens the value of anything, children as well, especially when the issue of several women are begotten in poverty, and all mingled together and contending like birds in a nest for the morsels within reach. The children of Salt Lake city may often be seen in groups insufficiently clad, the lower half of the body bare, playing about in the cold water that flows directly from the mountains and down each side of the streets. The consequence is catarrhs, pneumonias, fevers, and bowel complaints. The nonsensical mummery of "laying on of hands" is taught and practised by the priesthood, and the faithful and the ignorant resort to it with confidence for the cure of disease. Some observers imagine they notice a saddened expression of countenance on the Mormon children—that they have not the cheeriness and laughter common to that age; especially that the young women, who here are robust, ruddy, and well made, lack the amiable, bright, and cordial countenance characteristic of young women everywhere; and they attribute this supposed dulness of face to the pre-natal influences of the polygamous relation on the mothers. "Certainly," adds Dr. Vollum, "I have thought at times that there was some truth in the notion."

COEXISTENCE OF LUPUS AND CARCINOMA.

THE interesting fact of the occasional supervention of cancer upon lupus has received fresh confirmation at the hands of Professor E. Lang, of Innspruck (*Vierteljahr. für Dermatol. u. Syph.*, 1874, p. 165), who records a well-marked instance. He believes that many cases previously recorded were simply examples of the extension of the original lupoid affection, which would render the number of cases in which the combination occurs very limited. Of these cases two divisions may be made—viz., those in which the cancer springs up on the site of lupoid scars, as it frequently does on simple scars, and those in which both the cancer and lupus extend *pari passu.* The case which forms the subject of his paper was one of the latter group. The patient was a young man twenty-five years of age, admitted into Professor Heine's clinic at Innspruck in March, 1873, who had been the subject of lupus from the age of about three years, the disease commencing on the right side of the face and the left arm, gradually extending to the forehead, left side of face, and forearm. When admitted the face was almost entirely converted into a smooth, hard, somewhat reddened cicatrix, here and there covered by layers of exfoliating epidermis, and bordered by well-marked lupus nodules. The right lower eyelid was everted and the right cornea opaque; the cartilaginous part of the nose was absent. Between the upper lip and right lower eyelid was an ulcer the size of a finger-nail, with sharp undermined edges and irregular base. This ulcer had commenced in the previous autumn, and was accompanied by enlargement and softening of the lymphatic glands behind the right ear and in the neck. At the bend of the elbow was a lupoid cicatrix fringed by nodules, and another with tubercular eruption on the dorsum of the hand and fingers. Many scars occurred elsewhere on the trunk and limbs. The patient had been under treatment at various intervals for ten years. Professor Lang thought that the ulcer on the cheek was carcinomatous, although its margins were not indurated or everted. It rapidly extended whilst under observation, the lymphatic glands also breaking down. Microscopical examination of the discharge from the ulcer revealed numerous epithelioid cells, some being large and round with thick cell-walls, others multiangular, or spindle-shaped, and various shapes presenting grooved nuclei (Furchungkerne), which Lang and Gussenbaur have shown to be characteristic of rapidly growing cancer, a character presented by the nuclei of cells of all rapidly growing organisms. Before death, which took place two months after the patient's admission, there was widespread ulceration of the whole cheek, laying bare the mucous membrane, and of the side of the neck over the diseased glands. Post mortem, secondary nodules were found in the pleuræ, left lung, and liver. The microscopical characters of the ulcer on the cheek are most fully detailed. They may be summed up here as presenting the characteristic lymphoid elements of lupus, arranged mostly in the superficial parts, but penetrated by ramifying "tubes" of cancer cells in the deeper layers. The small round cell forms of the lupus contrasted markedly with the large epithelioid cancer elements. The stroma of cancer was, as it were, formed by the lupus cells; but in no part was any transition between the two varieties of cells to be seen. From the disposition of the cancer cells it is concluded that they mostly had found their way from the blood and lymphatic vessels, some sections showing appearances exactly as if vessels were filled by these cells. Although he has frequently found overgrowth of the cellular elements of the walls of vessels in cancer, yet he has never traced a direct conversion of them into cancer cells. The paper concludes by attributing the terribly rapid evolution of cancer, when grafted on lupus, to the loose and soft nature of the lupoid tissue, the rapid disorganisation of the new growth being aided also by the low vitality of cancer cells—still more diminished by the slight nutrient value of the lupus material forming the stroma of the former.

ICES IN THE STREETS.

IT came out incidentally at the Marylebone Police-court on Wednesday, that a man selling ice-creams in the streets made seven or eight shillings a day. The reflection is distressing. Something like a hundred ices a day must have been consumed from his barrow to yield such a return. It would be interesting to ascertain the amount of suffering inflicted by an ordinarily prosperous member of this trade in cheap and nasty luxuries. There is no reason why the poorer classes should not be regaled with cooling delicacies. They need them quite as much as, perhaps more than, their superiors in social status. But the common street ice is a concoction of dirt and indigestibility which it would be impossible to describe and difficult to realise. Cooling drinks and frozen eatables need to be especially pure and good in themselves, in order to minimise the danger of bad consequences. It is sufficiently perilous to introduce a frigid mass suddenly into the stomach, but when to that risk is added the evil of having swallowed something which no persuasion would have induced a sober person to eat or drink if it were not frozen, the folly of the proceeding is intensified. It would not be worth while to notice the matter, but that the practice of consuming cheap ices is increasing largely among the industrial orders, and particularly domestic servants, who expend a really considerable proportion of their pocket-money on these supposed delicacies. It would be well if either a better article could be supplied, or more caution evinced in the gratification of a natural desire for something cooling and grateful to the palate. There is no valid reason why iced drinks and frozen sweets should be either so dear as to place them beyond the reach of all who are not tolerably well provided with cash, or so bad in quality as to be wholly indigestible.

THE REGISTRATION OF DISEASE.

DR. WALTER DICKSON, R.N., medical inspector of Her Majesty's Customs, gives in his last annual report some interesting statistical particulars, which exemplify in an eminent degree the importance of keeping accurate and systematic registrations of disease as it occurs in large communities of the adult population. The total force of Customs officers in London and at Gravesend under the medical care of the inspector amounts to 923 men. The mean daily number on the sick list was 30·7, or 6·4 of strength. The mean duration of each was, in London 28, and at Gravesend 11 days, the loss of time per man (including Sundays) being 13 days in the one case, and 10 in the other. The total death-rate was 2·1 per cent., and 1 per cent. only of superannuation. Both these last figures appear to us exceedingly low, having regard to the fact that these men are out at all hours in all seasons of the year, and are employed in work that in a sanitary sense may, as we remarked some three weeks ago, be fairly denominated as risky. Dr. Dickson says: "The health of the Customs officers in the year was doubtless fairly typical of that of the adult community, which at present can only be partially and imperfectly estimated through the death-rate. The main features of the period were the prevalence and severity of pulmonary complaints and rheumatism in the colder, and of gout in the relatively warmer months. The epidemic character of gout in conformity with the season among this class is specially noteworthy. A total of 39 cases occurred during the year, almost exclusively limited to the London division. It proved most obstinate among the watermen class, occurred irrespective of age, intemperate or abstemious habits, and was remarkably influenced by the weather, warmth and damp occurring in a generally dry season seeming to be especially favourable to its development." The absence of zymotic diseases is also particularly noted. We desire to draw attention to this, among other interesting phases of Dr. Dickson's report, because it is, as far as we know, the only attempt at the careful registration of disease among the civil adult population of this country, and to urge strongly that the example is, for sanitary and scientific purposes, well worthy of imitation. The General Post Office employs a very large and annually increasing staff, and its chief medical officer, as well as its various district surgeons, might furnish a large mass of valuable information. Sickness as occurring in the metropolitan and City police might be similarly classified and reported upon by their respective surgeons, and the medical officers of the great railway companies could add most usefully to the list. Such efforts, exemplified in the report now before us, would pave the way for that invaluable work—a complete registration of disease as well as of mortality throughout the kingdom.

THE USE OF CURARA.

The general use of curara in our physiological laboratories as a convenient instrument for experiments upon animals is attracting a good deal of attention, and much severe comment from the opponents of animal experimentation. It is believed to be an agent which destroys all power of movement, while it leaves the capacity for sensation and for pain unaffected. Such is the belief of physiologists at the present time, and it must be confessed that it is in that belief that they employ it, if not as frequently as is asserted, at any rate often enough.

The alleged sensitiveness of animals poisoned by curara does not seem to us, however, to rest upon a very firm foundation. When frogs are under the influence of a moderate dose, if one limb be, by interference with the blood-supply to it, withdrawn from the influence of the curara, movements occur in the limb when the skin of that limb or of the body is pinched; hence it is concluded that the sensory nerves are unaffected. But so does a frog whose head is removed. The movements must be entirely reflex. Moreover, the property of excitability of the sensory nerves is lost when the dose of curara is increased. It is only reasonable to suppose that the effect which curara in a large dose produces in a moderate degree, it produces to some extent in a smaller dose, and that the sensory perceptions of the animal are lessened to some extent by a dose which is sufficient to destroy the irritability of the motor nerves. It must not be forgotten that central sensibility is a very different thing from excitability of sensory nerves, just as voluntary power is a very different thing from excitability of motor nerves. A poison will paralyse the will which has not the power to destroy the irritability of the motor nerves, and it is not unreasonable to believe that the sensory centres of the animal are dulled, even though its sensory nerves remain irritable. Until this is very conclusively ascertained, the use of curara, while it may be discountenanced, should not be deprecated as the atrocious agent it is alleged to be.

A SMALL MATTER OF MOMENT.

It is not a pleasant thing to meet one of those covered litters, something between an elongated trunk and a coffin, in which sick paupers are removed from their beds at home to the workhouse; but there is at least a show of carefulness in the proceeding which almost reconciles the spectator to the clumsy performance of a good action. Nevertheless, why cannot parochial officials be induced to add to their grace the virtue of a trifling precaution? If only they would select able-bodied and well-conducted paupers as bearers, in place of weak, decrepit, or reckless beings, who inflict unnecessary suffering on their burden, there would be no additional outlay, and there would be a considerable gain in comfort to the sick and in public approval. Again, the bearers should keep step. This is a very small matter, but it is one of great moment to the person carried. Now that the old distich about jolting the dead bones of a pauper over the stones, because they happened to belong to a person whom nobody owns, is grown obsolete, it would be no sentimental excess of care to avoid subjecting the sick or the dying to a process not unlike churning, and quite as uncomfortable. Nothing more is requisite than to appoint strong and careful bearers, and teach them to step together like the bearers of a military ambulance.

THE LONDON HOSPITAL.

We learn that on Tuesday last, the House Committee of the London Hospital decided to postpone for three months any election to the post of assistant obstetric physician, though a vacancy had been declared and applications received. The rules of the hospital require every eligible candidate to be a member of the Royal College of Physicians, and some of the candidates had this qualification whilst others had not, and the committee, it would seem, after consideration, decided it would be best in the interests of the hospital to defer the election. We believe that in this departure from usual custom the committee were supported by the opinion of many members of the staff, who were naturally anxious to encourage one of the candidates who had not the legal qualification necessary, but who had distinguished himself greatly whilst a student, not only by taking prizes, but by clinical work, and had, moreover, shown by general conduct that he would most probably prove a desirable colleague. As this decision allows more than one junior candidate the opportunity to legally qualify for the appointment, the committee have probably acted wisely. It is to the interest of large institutions that junior staff appointments should be filled by men who can give a great deal of time to clinical work, for the benefit of both the patients and the students.

MEDICAL LEGISLATION IN NEW SOUTH WALES.

It is proposed to introduce a new Medical Bill for New South Wales. Dr. Smith, the Dean of the Faculty of Medicine in Sydney University, has given great offence in arguing for this Bill by asserting that there is such an amount of ignorance, unskilfulness, and intemperance among legally-qualified men that human lives are daily endangered by them. We can readily believe that these words are a misrepresentation of the state of medical education and character in the colony; but we must dissent from some of the arguments against Dr. Smith used by the *Melbourne Medical Record*, which says, "Why should Dr. Smith gird at the profession because some of them can't spell?—as if knowing how to spell made a doctor. Medicine owes more to quackery than members of the profession either know or would like to admit. The Pharmacopœia is nearly made up of quack nostrums." This is strange doctrine for a medical journal, "the only weekly medical journal in the Australian colonies." The sooner there is another, we should say, the better.

THE NORWOOD POISONER.

FIVE years may seem a long term of punishment for a man going about drunk, and with nothing but the recklessness of a drunken man dispensing poisonous doses of strychnine to everybody that was drunk enough to accept his hospitalities; but we are disposed to think it is not much too long. It is high time that the principle was more fully enforced, that if men will get drunk and be reckless, they must not count too much on the fact of their being drunk as an excuse for their being reckless. One life was sacrificed, and it is a mere accident that two or three more were not compromised by this drunken freak of Walter Thompson Hunt. The incidents of the case are a painful illustration of the day's work of a man who has the curious complicated generosity of a drunken man—first to make everybody drunk he meets with, and then to administer something to undo the drunkenness. We entirely acquit Hunt of malice. No doubt strychnia had been found by him to act as a sort of pick-me-up, and it is known to be a useful tonic for inebriates. But after making all allowances, we are not sorry that he will have five years to reflect on the value of human life and the criminality of recklessness. It is lamentable to note that not one word of information transpired at the trial as to the source from which the prisoner obtained the strychnia.

HOSPITAL SUNDAY.

EXPECTANT hospitals and dispensaries probably feel rather acutely the delay in the distribution of the Hospital Sunday Fund. It is certainly rather tantalising. But there is reason to hope that the delay will secure a better distribution, and obviate much of the dissatisfaction and adverse criticism which it is so desirable to avoid with a view to the satisfaction of all parties. It was resolved in the course of the warm but valuable discussions of the spring that in no case should the grant to an institution be reduced or withheld until after a conference with the managing committee of the institution. We are informed that seven deputations are to be conferred with on the 7th of October, and half-a-dozen more as soon as the committee can arrange to receive them. Further, it was resolved in May that before finally distributing the fund, the Committee of Distribution should present their report to the Council. After the conferences with institutions, then, the Council will have to meet and sanction the report. All this anxiety to secure a good distribution is justifiable, and we may confidently believe that the Distribution Committee, having now got the holidays over, will use as much haste as is consistent with good work.

OF BAD PROMISE.

THERE used to be a provincial proverb to the effect that the shoemaker's children were generally badly shod. Is it because the Government is entirely engrossed with the prosecution of sanitary reforms in the country that it so strangely neglects the surroundings of its own *employés?* The condition of many of the public offices is little short of a scandal to the authorities. Attention is afresh directed to the matter by the statement that Brigadier-General Campbell, C.B., is absent from the War Office on leave, "the atmosphere of the place" having affected his health. Not many weeks ago a public servant fell a sacrifice to the defect of ventilation in the British Museum. The new buildings in Parliament-street were for some time unoccupied because the escape of sewer gas into the apartments was unbearable. The War-office has long been notoriously ill-ventilated. It is time to protest against this very serious, and we must add disgraceful, state of things. A Government which prides itself upon being especially solicitous for the health of the people should show its care for the public welfare by showing some regard for the health of public officials. We cannot but feel that the present grievous neglect of internal affairs is of bad promise for the general work, and it is impossible not to experience concern and misgiving.

THE LATE DR. HUGHES BENNETT.

WE regret to have to announce the death of Dr. John Hughes Bennett, F.R.S.E., late Professor of the Institutes of Medicine at the University of Edinburgh. The subject of our memoir was born on the 31st August, 1812, and in 1829 was articled to a surgeon in Maidstone. Soon after he proceeded to Edinburgh, where, in 1837, he graduated with the highest honours as M.D. Dr. Bennett afterwards proceeded to Paris, where he studied for two years. He then left for some of the German schools, where he remained until 1841. Returning to Edinburgh stored with varied knowledge and experience, he soon acquired an influential position, obtaining, among other advantages, the post of lecturer on histology and the use of the microscope. In 1843 he was appointed pathologist to the Royal Infirmary, and five years after, on the resignation of Dr. Allen Thomson, he was nominated to the chair of the Institutes of Medicine in the University, a post which he held most worthily up to quite a recent date. Dr. Hughes Bennett furnished numerous and valuable contributions to medical literature, the most important of which is his book on Clinical Medicine. We hope next week to give our readers a further account of his life and good deeds.

THE LICENSING LAWS IN LIVERPOOL.

WE are glad to learn that the Liverpool police for the last two or three weeks have been most active in laying information against publicans who supply drink to drunken customers. The great disproportion between the number of convictions for drunkenness and the convictions of publicans for supplying drink is a disgrace to the police. The radical evil, however, in Liverpool, as elsewhere, is in the fact that the number of public-houses is out of all proportion to the wants of the public. Half of them could not be kept up if people only took what, on even a generous computation, they required. For this state of matters, so palpable in London, not the police, but the magistrates are to blame. The sooner some greater stringency is introduced into the system by which licences are granted and continued the better.

HEPATICO-BRONCHIAL FISTULÆ.

A CASE of fistulous communication between the liver and the right lung was recently described to the Société Médicale des Hôpitaux by M. Laboulène. Such a condition is in itself of great rarity, and the instance was further remarkable in the obscurity of the condition in which it arose. The common cause of fistulous openings between the liver-ducts and adjacent viscera is the rupture of either an abscess or an hydatid cyst of the liver, but in this case there was nothing to indicate the presence of either of these conditions. The patient was a man aged forty-six, of intemperate habits. For six months there was constant expectoration of bile, which had commenced suddenly without preceding illness or indication of liver trouble, but after the ingestion of a large quantity of beer. There appeared to have been no vomiting, no expectoration of pus or membrane or clear liquid. Examination six months after the commencement of the bilious expectoration showed slight enlargement of the liver, and some dulness at the base of the right lung, where loud râles could be heard. When he coughed some bile was expectorated, and the râles disappeared. With rest, regulation of diet and bowels, &c., the expectoration lessened, and in a few weeks disappeared, and the patient left the hospital well.

DR. HENRY BENNET.

THE month of October, which brings back the busily engaged members of our profession, renovated, we must hope, by their hard-earned holiday, will see the departure of one of our best-known London physicians from the arena of consulting practice. Dr. Henry Bennet, after thirty-three years' practice as a consulting physician, retires from London professionally. In 1849 Dr. Bennet's career was arrested by all but fatal illness, and he was obliged to surrender active work, and to retreat for the winter to the south of Europe. Here his energy did not abandon him. His works on the climate of the Mediterranean and on thoracic pathology are well-known books of reference.

THE FEMALE MEDICAL STUDENT QUESTION.

A CONFERENCE of the medical staffs of the General and Queen's Hospitals, and of the professors and tutors of Queen's College, Birmingham, was held on the 29th ult., on the question of the admission of women to a medical education, when it was decided by a majority of thirteen to nine, "That the professors and tutors of Queen's College, and the physicians and surgeons of the General and Queen's Hospitals, are not prepared to undertake the medical and surgical education of women." Under these circumstances the Council of Queen's College will have no alternative but to decline to receive female medical students.

WORCESTER INFIRMARY.

AT a meeting of the Worcestershire Medical Society, held Sept. 29th, 1875, it was resolved unanimously:—"This meeting has learned with much regret the differences which exist between the honorary medical staff and the Executive Committee of the Worcester Infirmary. Having confidence in the moderation of their professional brethren connected with it, this meeting assures them of their sympathy and approval in their attempt to obtain for themselves and their successors such protection by the rules as may be needful to secure them from unnecessary vexations in the responsible yet privileged position of honorary medical officers of that institution."

MEETINGS OF THE MEDICAL SOCIETIES.

WITH the opening of the medical session the time arrives for the renewed meetings of the various medical societies of the metropolis. The first society to commence proceedings is the Obstetrical, which meets on Wednesday next, the 6th inst. This is followed by the Clinical, on Friday, the 8th, and the Medico-Chirurgical on Tuesday, the 12th. The Pathological Society is the last in the field, its first meeting being appointed for Tuesday, the 19th. All these societies meet at half-past eight o'clock, with the exception of the Obstetrical, which begins at eight.

MR. JOHN SPEAR, medical officer of health, in presenting a report to the Jarrow Urban Sanitary Authority, describes an outbreak of enteric fever which made its appearance in the district in August last. In a few days thirty-four cases were reported, occurring in twenty different families. Of these more than half were of children. There was no difficulty in proving that the disease was caused by contaminated milk. Nearly all the sufferers had obtained their supply from the same farm. When the farm was visited six of the occupier's family, including himself, were down with typhoid. The water used in the dairy was derived from a well situated about eighteen yards from a privy and cesspit, the latter simply a hole dug in the ground, and in no way protected. Examination made it quite clear that soakage had been going on for a long time. The whole arrangements of the place were of a disgusting kind. There was direct communication between the dairy and a room in which some of the fever patients were lying, and the clothes of these patients were washed in the dairy.

THE late medical officer of health for Paddington, in issuing his last report on the condition of the district, animadverts on that long-standing nuisance, the Paddington Canal. Every attempt made to abate the evils connected with the foul and stagnant water of the basin had failed. House-dust, garbage, street sweepings amounting to hundreds of tons, and the manure of thousands of horses, were daily loaded into the barges in the canal. Analyses of the water made in July, August, and September showed it to be little better than sewage. It is surprising that the health of the inhabitants near the canal is so good, but sooner or later we fear epidemic disease will make its appearance.

WE are glad to hear that the Newcastle-on-Tyne Dispensary has been particularly fortunate within the last year as to its finances, a sum of over £12,000 having been added to its resources by legacies, including the munificent bequest of £10,000 left by the late Wm. John Hutchinson, Esq., of Newcastle. Various improvements are suggested in the working of the institution; not the least is that of Dr. Lyle, one of the honorary staff, who mentions the difficulty experienced by poor patients of the dispensary in obtaining instruments and surgical appliances.

THE Committee of Management of the Evelina Hospital for Sick Children appeal for increased support to enable them to receive forty-four additional patients. The committee would be glad to see a greater number of visitors to the hospital, and feel sure that a large amount of sympathy would be awakened by witnessing the sufferings and helplessness of the little patients, and the skilful and tender treatment they receive. One ward of the Evelina Hospital is expressly appropriated to cases of whooping-cough, and another is entirely set apart for Jewish children.

IN London 1319 deaths were registered last week, including 13 from measles, 90 from scarlet fever, 12 from diphtheria, 49 from whooping-cough, 18 from different forms of fever, and 125 from diarrhœa. No death from small-pox was recorded. In the large public institutions 200 deaths were reported, or 15 per cent. of the total mortality. The Fever Hospital at Homerton contained 281 patients on the 25th ult., 211 being under treatment for scarlet fever.

DR. DIVER, of Southsea, has received an official letter from the Humane Society of Boulogne, in which his services in crossing the Channel with Captain Boyton during his two trips are set forth in very complimentary terms.

WE understand that the Chertsey health authority have requested Mr. Birch, C.E., to make a survey of Bagshot, and prepare a report of its sanitary condition. It will be remembered that the district was visited by our Sanitary Commission some few months ago, when, although its very great natural advantages were described at length, the sanitary defects existing in the town itself were fully pointed out.

DURING the past month no less than five ships have arrived in the Thames with cases of scurvy on board, and seven or eight of the victims have been admitted into the Seamen's Hospital. The medical inspector of the Board of Trade has, by direction of the Marine Department, held official inquiries in three of these cases, but the result has not yet been published.

WE hear that cholera has broken out in the European camp at Delhi. It is, however, of a mild type, and it is confidently hoped that it will have disappeared long before the assembling of the troops forming a large part of our Indian army who are to meet the Prince of Wales outside the walls of the historic city.

IN the *Athenæum* for September 18th will be found an interesting article by Mr. Thoms on the Tring centenarian. Mr. Thoms strives to demolish the evidence offered by Sir Duncan Gibb in our columns towards establishing the great age of Elizabeth Leathurlund.

A YOUNG gentleman has been prosecuted by the Colemine Board of Guardians for exposing himself while convalescent from scarlatina. The Board deserves much credit for applying the law in this case.

IT is stated that the sanitary advisers of the Government of India have recommended that Simla be abandoned for three years on account of its unhealthiness.

WE are requested by Mr. Cripps, of Cirencester, to say that it was the Weymouth Sanitarium to which he alluded in his letter published in our columns last week.

FOOT-AND-MOUTH DISEASE.

THE reports relative to the foot-and-mouth disease show that it has abated nothing of its virulence, and that it is widely prevalent in England and Scotland, causing great inconvenience and immense loss, and in many districts leading to the suppression of cattle-shows. It is not likely that it will be much diminished in prevalence for some time to come, and if we could arrive at anything like a correct estimate of the loss it has caused this year, we should probably find that it amounted to more than a million at the very least.

In our previous article on the subject, we alluded to the principal causes which are in operation in extending this purely contagious malady, and we pointed out that the system of inspection—if such a designation can be applied where there is no system—is of very little value, inasmuch as the principal sanitary inspectors are the police—men no doubt worthy of reliance in their own special sphere, but neither by their knowledge nor training fit to be entrusted with the control or suppression of contagious diseases, either human or animal. The Annual Report of the Veterinary Department of the Privy Council for 1874 fully corroborates our statement in this particular, as we are informed that on the 31st December last there were 1706 inspectors holding appointments under the local authorities, and of these 371 only were veterinary surgeons (it is not mentioned whether they were all qualified), 1021 were officers of police, and "314 appeared to have possessed no special qualification for the office." Without inquiring whether the police officers themselves possessed any special qualification, we may point out that less than one-fourth of the total number of inspectors were veterinary surgeons; and when we know that these are generally only called in now and again to verify the existence of certain contagious diseases, and have, as a rule, nothing to do with tracing the history of these, nor advising as to their suppression, we need not be surprised that this malady in particular is just as active, and as free to spread, as if we had no Veterinary Department and no inspectors.

It appears to be imagined that anyone can perform the duties of an inspector, and that, as the police are already in pay, and their duties are not particularly heavy, they might as well have this work thrown on them. We need scarcely say that a greater mistake could not be made. It requires well-trained and thoroughly competent veterinarians to perform the functions of an inspector efficiently; for not only have these subtle maladies to be thoroughly stamped out wherever and whenever they appear, but their invasion or re-introduction has to be guarded against, and their mode of access closely watched. Indeed, from what we know of these contagious diseases, and from what we see of the trade in animals and the manner in which it is conducted, we are convinced that nothing beneficial can be done until veterinary surgeons—and the very best of them—are appointed to take charge of districts at a liberal salary, with the view of protecting the public from the ravages of these scourges. The attempts now made in this direction would be amusing were the results not so painfully serious. The Veterinary Department of the Privy Council must be roused up from its supineness and apathy, and made to see that its existence depends on its usefulness. Hitherto it has been of very little service to the country; it leaves everything to the local authorities, and the majority of these either know or care little about the matter, or try to get the work of inspection done for next to nothing.

In the meantime, as the reforms which are so urgently required are not likely to be instituted until more millions of pounds are lost, it may be useful to indicate what should be done in the way of prevention or cure by those whose stock is menaced or already invaded by this "foot-and-mouth" complaint. These indications we will summarise from Mr. Fleming's "Manual of Veterinary Sanitary Science and Police."

Newly-purchased animals, and especially those which have been exposed at fairs or markets, or travelled by boat or rail, should be quarantined in some convenient place apart from other stock, and no communication should take place between them for at least six days. Forage from infected districts should be interdicted, unless it is proved that it cannot possibly be tainted; and no persons or articles from infected stables or pastures should be allowed to go near healthy animals.

As a rule, few animal diseases are more amenable to treatment, and still fewer exemplify the beneficial effects of hygienic measures, than this. When it has appeared, the sick animals, if at pasture, should be housed and allowed to stand on some soft material, such as sawdust. If they cannot be sheltered, then they ought to be put on firm grass land. Soft succulent food, mashes and nourishing gruel, must be the diet while the mouth is sore, and bran gruel, or water slightly acidulated, given to drink. If the fever runs high or constipation is present, treacle, Epsom salts, or common salt may be gently administered. Laving the mouth in cold water (which may be slightly acidulated) is grateful when the eruption is slight, but when the erosions are extensive and painful, gargles of vinegar-and-water, hydrochloric acid, honey-and-water, or a weak solution of tannic or gallic acid (one ounce to the gallon) are necessary. Lime-water is a good dressing when the ulcers are deep. When the feet are affected, and even before they are involved, they may be dressed with carbolised glycerine, a weak solution of carbolic acid, or any mild astringent. It is frequently very beneficial to send the animals into a shallow running stream to bathe their feet; but when these are affected, it is better, as a rule, to allow the animals to rest as much as possible. When suppuration occurs beneath the hoof, or the feet are severely involved, it is advisable to procure the services of a veterinary surgeon.

Great cleanliness and thorough disinfection must be advocated, both during the prevalence of the disease and after it has disappeared. In many farms and cowsheds the active germs of the malady are allowed to remain, and cause repeated outbreaks.

But, we repeat, the therapeutical treatment of the disease is altogether a secondary affair; its prevention and absolute extinction are what we must insist upon; and the matter is now assuming such a grave aspect, both in a pecuniary and sanitary point of view, that we feel convinced that nothing less than an efficient organisation to effect this object, and to stamp out other serious animal contagions, will now satisfy the public. The present temporising policy with regard to these destructive pestilences has been tried for now nearly ten years, and has proved notoriously useless. It is high time a common-sense view was taken of the matter, and measures adopted which would relieve us from these heavy annual losses and panics.

THE MEDICAL HISTORY OF THE DUTCH WAR AGAINST ATCHEEN IN 1873.

(Concluded from page 453.)

Sanitary Experiences of the Expedition.

THE surgeon-in-chief strongly recommends that in future on shipboard the Europeans should be supplied with thin mattresses and pillows, and the natives with mats.

The first night on shore found the troops without any protection, there being no time for extemporising huts or tents, besides which an immediate change of camp was foreseen to be unavoidable from the proximity of a graveyard to the superficially lying ground-water of the locality.

In the new camp all kinds of skeleton huts were erected as a defence against the heat, which was distressing more from its uniformity than its actual intensity. No unfavourable influence was noted in the camp of the field column. The waterproof sheets of the officers were very useful to protect both from rain and from the ground-damp of the rice-fields.

The troops while on board the steamers were excellently fed, according to the contract with the Netherlands and Ostend Steamship Company.

From the first day of landing fresh meat was served out, and it was agreed between the authorities and the surgeon-in-chief that live stock should be provided, so that once a week recently killed meat should be substituted for the Australian beef. It would be a most advisable thing that, in the rationing of troops, the salted and smoked flesh, as bacon, &c., should be entirely replaced by Australian meat.

The best drink for troops on the march was found to be cold tea; the dangerous properties of strange water are destroyed by boiling, and the objectionable taste of boiled water corrected by tea.

On the return voyage, water brought from Padang by one of the invalid ships sent thither was for the most part used. At the same time, on all ships it was ordered that only cold tea should be drunk, and the very rare occurrence of diarrhœa speaks for the judiciousness of this rule. Alum as a means of clearing water was rejected, purification by sesquichloride of iron and bicarbonate of soda being substituted.

In clothing and equipment there is much room for improvement. The use of sun-covers to the ordinary head-dress is much to be condemned, since the back piece hanging down obstructs the air and heats the back of the neck, besides which, from being too broad and too long, they enclose the ears, and the words of command are not heard. For this reason many of the men put up the back pieces. For service such as this wicker helmets should invariably be procured. The haversack was also a great hindrance, since by swinging to and fro it impeded the man's progress; and it is only fair that when engaged against an unencumbered enemy, as here, the men should be relieved of all impediments, carrying only their weapons and ammunition, and a rolled coverlet capable of containing a change of linen.

Esmarch's triangular bandage was served out as part of the kit of each man, but its application by the men was not necessary, as surgical assistance did not fail; this, however, does not lessen the value of the appliance.

The Care of the Wounded.

As a rule the wounded were attended immediately after the fight. Only on the 16th April, when 117 were wounded, was there any delay, and even then the severely injured were in camp by midday. Fresh meat, vegetables, milk, seltzer water, &c., were liberally supplied for their use.

The splints of split bamboo were in many cases of complicated wounds of much service, but especially was the quantity of pasteboard valuable for hurried bandages. The plaster-of-Paris bandage could not be made to set either at the seashore ambulances or on board the hospital ship, a defect which must have been caused by the excess of atmospheric moisture, since the same material hardened perfectly when used on returning to Batavia.

The tandus, as stretchers, were superior to all others; the wounded did not roll in them as on the broader ones, and two coolies were sufficient to carry them, besides which water could be brought in the hollow bamboo. The objection of their not affording an even surface for fractures of the lower extremity can be guarded against by the previous application of splints, and it is maintained that even unset fractures can be conveyed in them. If broken they can easily be replaced, and may be extemporised from mats or waterproof sheets.

The hospital coolies ought always to be marked with a distinctive badge, as otherwise in the confusion of an engagement they mingle with the other coolies and disappear.

The European hospital *personnelle* won by their courage and endurance unanimous commendation; but for a big war special sanitary companies are indispensable.

The principle of taking invalided men, unfit for active service in the ranks, is in the highest degree reprehensible.

The judgment pronounced on the service rendered by the coolies proves it to be necessary that for the hospital service there should be *well-disciplined soldiers*, since only a hospital corps trained and schooled as other bodies of soldiers can perform the required duties. The opinions of military surgeons in all armies agree on this question, and it is to be hoped that this universal accord will in time overcome existing prejudices.

In the Ambulance.

By the timely evacuations of sick and wounded to Batavia, overcrowding of the ambulance on shore was prevented. It was capable of accommodating 100 patients, and only for three days, from the 16th to 19th April, were all the beds occupied. 97 sick in all were treated in the ambulance, not counting those detained only for one or two days before removal to the hospital-ship.

On the Hospital-ship.

During the short time from the 22nd March to the 10th May 403 patients were treated; of these 152 were cases of severe wounds. As a protection for sick a ship is, above all, the most undesirable, since only by the constant use of windsails, by forming side-wall openings, and by turning the ship square to the wind, could anything like adequate ventilation be secured. An additional evil was that the ship carried cargo as well as hospital equipment; planks and bamboos were stowed away in the damp hold, which on being taken out caused a most disagreeable stench. Worse still, dried fish for the native sailors was packed under the wards, and only discovered by the surgeon-in-chief perceiving the smell when making an inspection.

The number of sick made sanitary efforts most pressingly necessary. With this view the boards of the sick decks were daily well swept, cleaned, and sprinkled with carbolic acid and water, half a bottle of the red acid to a bucket of water; while day and night the vapour of carbolic acid was continuously produced by the following means: sand impregnated with carbolic acid dissolved in alcohol, in the proportion of eight ounces to ten pounds of sand, was sprinkled over the floor, and from this a constant exhalation of carbolic acid took place. All soiled dressings and excreta were at once disinfected and disposed of, and every attention paid to cleaning the clothes of the wounded.

For the disposal of the dead from the hospital-ship the body was wound round with 25 lb. of old iron chain, enclosed in canvas, and dropped into the sea. This was preferred to shot, as the latter sank to the bottom of the bag, which, by friction against the coral reefs, was quickly cut through; the shot then fell out, and the body floated. As it was no corpse ever came to the surface by Atcheen.

Return of Sick and Wounded.

Sick: 542 (proportion to strength, 15 8 per cent.); of these 27 died, being about 5 per cent.—*Wounded:* 50 killed (proportion to strength, 1·4 per cent.); 421 wounded (proportion to strength, 12·8 per cent.) Of their wounds 33 died, being less than 8 per cent.

The relative frequency of sword wounds to shot wounds was as 15 per cent. to 81 per cent.

The 421 wounded received in all 487 wounds, which, as regards the part of the body injured, were as follows:—

	Per cent.	Actual number.
Head wounded	12·7 ...	62
Face	9·6 ...	47
Throat and neck	2·6 ...	13
Breast and back	7·8 ...	38
Abdomen and loins ...	2·8 ...	14
Pelvis	3·6 ...	18
Upper extremity	34·4 ...	168
Lower extremity	25·9 ...	127
Of sickness superadded to wounds 6 died.		487

On the whole the treatment of the wounded was most successful, since, out of 421, only 33 (7·8 per cent.) died. Of those which proved fatal, 7 were breast wounds, 5 head, 1 abdomen, 3 knee, all of which were penetrating.

The most remarkable fact connected with this expedition was the total absence of typhus fever and pyæmia from their hospitals up to the time of their return to Batavia. "Notwithstanding the overcrowding of the hospital-ship with severely wounded, some of whom suppurated profusely, neither at Atcheen nor up to the re-arrival in Batavia had anyone died of pyæmia." The reasons for this exemption were recognised by the surgeon-in-chief in the care for ventilation, the scrupulous cleanliness of the places for the wounded on the decks, the plentiful supply of food, and the attention paid to dressings, which were changed many times a day when required. Also the three several evacuations of the wounded contributed to the happy result.

The operations performed were in all eleven:—*Disarticulations:* 1 left arm (died of exhaustion after healing of the wound; was an opium-eater); 1 right arm; 2 fingers.—*Amputations:* 2 left arm and 2 right arm (2 died); 2 right thigh (1 died of pyæmia in hospital at Batavia, 1 died of secondary hæmorrhage); 1 forearm.

By deducting the three cases which ended fatally under special circumstances a successful operative result is claimed, but the paucity of operations would testify rather to the fortunate issue of conservative treatment.

The Atchinese used their tulwars with great effect; in many cases the skull was cut through and the brain exposed. In one instance four fingers were cut off, in another a hand, and in a third both bones of the leg were severed without splintering, at one blow. The projectiles of the Atchinese were chiefly leaden, with a piece of porcelain or coral inside.

The best evidence of the sanitary success of this expedition is afforded by the detail of inward illnesses, of which only 187 cases were admitted during the whole campaign, and but five of these died. Fevers, however, increased to a considerable extent during the return voyage to Batavia, yet were for the most part of a mild type. Diarrhœa and dysentery, which have ever previously been the certain accompaniments of such undertakings, were almost entirely absent, and the few cases that did occur were especially amenable to treatment.

Correspondence.

"Audi alteram partem."

MEDICAL EXPERTS IN THE DAILY PRESS.

To the Editor of THE LANCET.

SIR,—THE LANCET has so consistently condemned the practice of medical men rushing into the daily press, that I venture to ask your attention to an instance which appeared in *The Times* of yesterday under the sensational heading "Homicidal Lunacy":—"I have received," writes Dr. L. S. F. Winslow, "through the courtesy of one of the leading lunacy authorities in Scotland, formerly a Commissioner in Lunacy, full details of 'the Cambuslang murder' to express an opinion on, and I trust you will allow me to do so in *The Times.*"

It is apparent that my old friend, Dr. W. A. F. Browne, is here indicated. I cannot for an instant believe—as this extract would imply—that he ever thought of seeking the opinion of Dr. Winslow on a difficult psychological question; still less that he sanctioned this appeal to the public through *The Times,* on a matter of life or death at the moment under the consideration of the Home Secretary. As a writer in the *Pall Mall Gazette* the same evening remarked, this letter should have formed the subject of a private representation to Mr. Cross.

But what I wish now to notice is the rashness—excusable only on the plea of youthful inexperience—which has led Dr. Winslow thus to constitute himself the judge of a difficult medico-legal case, which he has neither seen nor examined. It is really too absurd. "Sancta simplicitas," says Mephistopheles, "bezeugt nur ohne viel zu wissen." "I do not see," writes Dr. Winslow, "how there can be two opinions in the case"—my own sentiment precisely with regard to the presumption which dictated this letter in *The Times.*

I am, Sir, your obedient servant,

London, September 25th, 1875. F. R. C. P.

To the Editor of THE LANCET.

SIR,—Dr. L. S. Forbes Winslow's letter to *The Times* of the 24th instant about the Cambuslang murder opens with a statement which is—doubtless unintentionally—misleading, and which I should be glad to have an opportunity of correcting. He says that "the full details" of that murder have been received by him through "the courtesy of one of the leading lunacy authorities in Scotland, formerly a Commissioner in Lunacy, *to express an opinion* on." As my father, Dr. W. A. F. Browne, is the only ex-Commissioner in Lunacy in Scotland, it must be he to whom Dr. Forbes Winslow refers. I am in a position to state that he sent to Dr. Forbes Winslow a newspaper containing the report of the trial, but that he did not request any judgment thereon. He ventured to form his own opinion of the case without any extraneous assistance.

I am, Sir, your obedient servant,

West Riding Asylum, Wakefield,
Sept. 29th, 1875.
J. CRICHTON BROWNE.

ALBINOS.

To the Editor of THE LANCET.

SIR,—A remarkable case of the existence of four albinos in one family has recently fallen under my observation, which, with your permission, I should like to place upon record.

They are all children, of the ages of twelve, nine, four, and two respectively, three of them being of the male sex, and are typical specimens of their class; one description, therefore, will serve for all—viz.: The eyes present the well-known waving or restless condition of the muscles of the orbit, but are not so intolerant of light as in most cases. The pupils are of average diameter, and of a deep pink colour of great purity. The hair is of the softest texture, like the finest floss silk, and of the most exquisitely white and silvery colour, being luxuriant in its growth. The children, so far from exhibiting any of the mental deficiency noticed by some observers, appear to possess more than ordinary intelligence, and are well developed.

The parents are each thirty-seven years of age, and belong to the agricultural labourers; they are dark, swarthy people, and can offer no suggestion as to the cause of their children's peculiarity, there being no family history of the like on either side.

Other children not albinos have been born to them, and it is curious to note the order of succession. Thus, the first child was dark; second, albino; third, dark; fourth, albino; fifth, dark; sixth, dark; seventh, albino; eighth, albino; ninth, dark.

If any of your scientific readers would like to see them, they can be found at No. 96, Whitechapel-road.

I am, Sir, yours truly,
W. Sedgwick Saunders.
Queen-street, Cheapside, E.C., Sept. 29th, 1875.

AN AID TO THE OPERATION FOR STRANGULATED HERNIA.

To the Editor of The Lancet.

Sir,—Probably most surgeons who are familiar with the operation for the relief of strangulated hernia, in private practice, at night, have felt the want of skilled assistance in addition to that afforded by the practitioner whom they meet in consultation. This gentleman is fully occupied in the administration of an anæsthetic, whilst some friend of the patient is able at most to hold a candle. This need of additional help has been very frequently experienced by myself, and was also observed by Mr. Francis Toulmin, of Clapton, whom I met in consultation on the 19th ult. In discussing the subject we agreed that some kind of speculum, to hold apart the edges of the wound, would much avail. I have taken the most simple—*i.e.*, the common eye speculum—as a pattern. This has been made for me, of stouter wire and of twice the ordinary size, by Messrs. Kröhne and Sesemann. I think some such device as this will prove very useful to the operator.

I am, Sir, your obedient servant,
C. F. Maunder,
Queen Anne-street, W., Sept. 21st. Surgeon to the London Hospital.

THE LATE DR. HUGHES BENNETT.

To the Editor of The Lancet.

Sir,—The lamented death of this distinguished physician induces me to remind his numerous old pupils that a bust of him was presented in August last to the University of Edinburgh.

The committee are anxious to present a replica to the new infirmary at its opening, and for this purpose a sum of £60 or £70 is still needed. Subscriptions will be gladly received by Dr. A. P. Stewart, 75, Grosvenor-street; Dr. Andrew Clark, 16, Cavendish-square; Dr. McKendrick, of Edinburgh, or by myself. I am, &c.,

Great Charles-street, Birmingham. Lawson Tait.

WINCHESTER SCHOOL.

To the Editor of The Lancet.

Sir,—I beg permission to correct some inaccuracies in that part of your Commissioner's report which refers to the dormitories and meals of the Winchester scholars. In addition to the old dormitories there are four modern ones, smilar to those in the Master's boarding-houses for commoners. Only thirty-two scholars sleep in the old dormitories, some of which are no longer used as sleeping apartments. All the bedsteads are iron, the boys drink out of tumblers and eat off plates; they have, in addition, wooden trenchers for their bread. I have known Winchester forty-five years, and never even heard of a boy drinking out of a "black-jack." I believe that specimens of "jacks" and trenchers are exhibited to visitors, hence, I presume, the error of your Commissioner.

I am, Sir, yours faithfully,
Godfrey B. Lee.
New College, Oxford, September 26th, 1875.

IRELAND.

(From our own Correspondent.)

The births registered in Dublin for the week ending 11th September amounted to 140, and the deaths to 144. The average numbers in the corresponding week of the previous ten years were—births 160, and deaths 155. The mortality from diarrhœa was 19; all of the fatal cases, except one, occurred in children. But two fatal cases of small-pox were registered in Dublin since 20th March last; none since 22nd May.

A good deal of objection continues to be urged in different quarters, for various reasons, against continuing to use the so-called "Dean Swift's Cabbage Garden" for interments. W. R. W. writes to the morning journals pointing out the error of calling the place in question "by the name it derived from the class of resurrectionists of former days." He states the proper name for this very ancient ecclesiastical enclosure was *Jardin des Capuchines*—the Garden of the Capuchins,—where a community of that order had an establishment. Dean Swift had no cabbage garden there, but owned an orchard, which has been alluded to in his writings, and which existed to the rear of the present Meath Hospital, in part of the locality formerly occupied by Keeffe's Nursery. Many of the tombstones appear of considerable antiquity, the inscriptions being quite effaced by age. The date on one was 1685. Adjoining this graveyard, on the north, is a smaller one belonging to the descendants of the French Huguenots. There are at least two other small burial-grounds belonging to the same class in the south part of the city of Dublin. Intramural burial should be entirely forbidden; the presence of rather a severe form of autumnal diarrhœa ought to quicken a movement in this direction.

The Factory Acts Commissioners, Sir James Fergusson, Lord Frederick Cavendish, M.P., and the O'Conor Don, M.P., are at present sitting at the Shelbourne Hotel. Several witnesses made startling statements as to the existence in Dublin of the "sweating system." We have reason to believe that the pictures drawn by the witnesses are by no means over-coloured. It is to be hoped that the result of the labours of the Commissioners will tend to provide better workrooms for the many minor factories in Dublin, and that a system of compulsory education may be provided for the young. The state of the tenement houses and of the labouring classes generally in Dublin much needs improvement, without which physical and moral degradation can but progress.

A meeting of the Senate of the Queen's University was held at Dublin Castle on Wednesday, the 15th ult., at which the following examiners were appointed:—Benjamin G. M'Dowel, M.D., examiner in medicine; Anthony H. Corley, M.D., examiner in surgery; William Roe, M.D., examiner in midwifery; Charles F. Moore, M.D., examiner in materia medica; Matthias O'Keefe, M.A., M.D., examiner in medical jurisprudence.

Dublin, Tuesday, Sept. 21st, 1875.

Diseased Horses.—At the Lambeth Police-court lately a case was brought before the magistrate under the Contagious Diseases (Animals) Act. The landlord of a tavern in Brixton was summoned, at the instance of the Metropolitan Board of Works, for neglecting to give notice that he had in his possession a bay mare affected with glanders or farcy. It was proved that the animal never had been affected with either disease, and that the cause of its death was non-infectious fever. There was no other course left the bench than to dismiss the case.

Medical News.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 23rd :—

Jackson, Ernest Carr, Harley-street.
Scott, William Edward, Robert-street, Hampstead-road.

The following gentlemen passed the Primary Professional Examination on the same day :—

Dell, Joseph Francis, Guy's Hospital.
Harvey, Thomas Prickard, London Hospital.

At the Preliminary Examination in Arts held at the Hall on Sept. 24th and 25th 145 candidates presented themselves, of whom 32 were rejected, and the following 113 passed and received certificates of proficiency in General Education :—

First Class (order of merit).—1. F. S. Pridden. 2. C. Ellaby. 3. A V. Bernays, F. C. B. Butler, J. F. Easmon, S. de C. Elmsall, P. Garrard, C. J. Harper, W. L. Pruen, F. C. Selous, C. L. Stow, E. G. Williams, and G. J. Wilson.

Second Class (in alphabetical order). — C. D. Adam, J. B. Adams, R. A. Bazire, D. Bennett, E. J. Biden, R. A. Billiald, A. Bosanquet, H. Bourcheier, J. L. Bousignac, P. Brown, C. G. Bunn, H. P. Butler, S. Butterworth, J. F. Caddy, J. A. Caldwell, G. H. Capes, H. W. Carr, W. J. Clarke, E. S. Cockell, W. S. C. Collins, C. A. R. A. Colmer, E. R. Cree, W. H. Crosse, H. W. T. Crow, B. H. Dale, E. Davies, J. D. Davies, W. J. S. Davis, P. H. Day, B. J. Dorrian, J. M. Douglas, J. B. Dreaper, H. W. Edis, F. W. Elliott, E. Evans, E. Farmer, S. Farmer, W. A. Fenton, J. W. Field, H. E. B. Flanagan, C. L. Gill, G. T. Girdler, P. Hall, J. Hammond, E. Hazel, N. Hildyard, F. Hitch, W. Holt, A. R. Jacobs, F. Jones, G. M. Jones, R. B. Knowles, T. L. Laxton, F. R. le Cocq, A. Lee, J. J. Lewis, R. Lewis, J. P. Litle, E. H. Locker, L. Mark, L. Matheson, G. McKee, E. J. Moberly, Peter Monti, H. Parsons, W. H. C. Payne, J. H. Powell, Z. Prentice, F. W. Prideaux, J. D. Priest, T. Rhodes, J. T. Richards, J. M. Rogers, C. Rowley, R. F. Shaw, W. E. Sicard, G. E. Skinner, A. Slate, W. Slater, S. Smyth, A. Sharland, W. C. Steele, W. H. Sturge, C. A. A. Taylor, A. B. Thorald, F. F. Thorne, A. W. Veness, A. J. Verrall, J. E. Viney, J. Waldron, A. Ward, G. B. Waterhouse, F. S. Watson, J. G. Webb, W. S. Webb, J. Whitehouse, R. J. P. Wilson, O. Withers, and F. Woore.

The Royal Aquarium and Summer and Winter Garden at Westminster is rapidly approaching completion. It will be opened to the public in December next. Last Tuesday a luncheon was given in the building to a large number of noblemen and gentlemen interested in the scheme. It will prove, we are sure, a great boon to London. The educational facilities of such an establishment are not to be lightly estimated.

The Privy Council and the Foot-and-Mouth Disease.—The Clerk of the Peace for the county of Warwick has received a communication from the Privy Council Office in reply to an expression of opinion by the local authority of Warwickshire to the effect that they ought to possess the power of stopping sales, fairs, and markets when they find the occasion, in their opinion, sufficiently urgent. Their lordships express their concern at the prevalence of foot-and-mouth disease, not only in Warwickshire, but in the country generally, but state that they are not prepared to put in force so extreme a measure as stoppage of sales and fairs on that account. In conclusion their lordships express an opinion that a severe application of the powers vested in local authorities will be found sufficient to reduce the disease to such proportions as will admit of ordinary legislative remedies to be obtained when the country is comparatively free from the disease.

Medical Appointments.

Alcock, J., M.R.C.S.E., has been appointed Medical Officer of Health for the Burslem Urban Sanitary District, vice Goddard, resigned: £50 per annum to commence with.

Austin, Mr. T. F., has been appointed an additional Hon. Dental Surgeon to the Liverpool Dental Hospital.

Bourke, G. J., L.R.C.S I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Shercock Dispensary District of the Bailieborough Union, Co. Cavan, vice Rooney, resigned, and appointed to the Kingscourt Dispensary District.

Bower, D., L.F.P. & S. Glas., has been appointed Resident Medical Superintendent of Saughton Hall Asylum, near Edinburgh.

Brown, P., M.D., has been appointed Medical Officer and Public Vaccinator for the Winlaton District of the Gateshead Union, vice Megget, resigned.

Brownrigg, T. H., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Moira Dispensary District of the Lurgan Union, Co. Armagh, vice Anderson, resigned.

Corley, A. H., M.D., has been appointed second Examiner in Surgery at the Queen's University in Ireland.

Davidson, A. D., M.D., has been appointed Assistant Professor of Materia Medica at the University of Aberdeen.

De Denne, T. V., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Medical Superintendent of the Bristol Lunatic Asylum, Stapleton, vice Dickson, resigned.

Dougall, J., M.D., C.M., has been appointed President of the Glasgow Southern Medical Society for 1875–76.

Douglas-Lithgow, R. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Inspector for the Port of Wisbeach.

Dunstan, R., M.R.C.S.E., has been appointed Medical Officer of Health for the St. Ives, Cornwall, Urban Sanitary District.

Fulshaw, R., M.R.C S.E., has been appointed Certifying Factory Surgeon for Earl-Shilton, vice Spencer, deceased.

Knox, T., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Maguirebridge Dispensary District of the Lisnaskea Union, Co. Fermanagh, vice Johnston, resigned.

M‘Dowel, B. G., M.D., has been appointed second Examiner in Medicine at the Queen's University in Ireland.

M‘Kendrick, J. G., M.D., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

Moore, C. F., M.D., has been appointed second Examiner in Materia Medica at the Queen's University in Ireland.

Moore, J. B. G. G., L.R.C.P.L., has been appointed Medical Officer and Public Vaccinator for the No. 4, or Leigh District of the Martley Union, vice Taplin, resigned.

Morris, B. R., M.D., M.R C.P.L., has been appointed Physician to the new Hospital for Women, Nottingham.

Moutray, C. D., L.R C.P.Ed., L.R C.S.I., has been appointed Medical Officer and Public Vaccinator for the Ballyroan Dispensary District of the Abbeyleix Union, Queen's County, and Medical Attendant to the Royal Irish Constabulary, vice Walshe, resigned.

Murray, F. R., L K Q.C.P.I., L.R.C.S.I., has been appointed House-Surgeon to the Southport Infirmary, vice Potts, resigned.

Newby, T., M.D., M.R.C.S E., has been reappointed Medical Officer of Health for the Great Grimsby Urban Sanitary District for one year.

O'Connor, Mr. T., has been appointed Apothecary to the Cavan Union Workhouse.

Ogston, A., M.D., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

Ogston, F., jun., M.D., has been appointed Assistant Professor of Medical Jurisprudence at the University of Aberdeen.

Riley, J. St. P., M R C.S.E., L.M., has been appointed a Medical Officer to the new Branch of the Salford and Pendleton Royal Hospital and Dispensary, Manchester.

Rodger, J., M B., C.M., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

Roe, W., M.D., has been appointed second Examiner in Midwifery &c. at the Queen's University in Ireland.

Smith, P. B., M.B., has been appointed Assistant Professor of Chemistry at the University of Aberdeen.

Smith, R., M B., has been appointed Assistant Professor of Anatomy at the University of Aberdeen.

Stewart, Mr. C. T., has been appointed Stipendiary Assistant Dental Officer to the Liverpool Dental Hospital.

Tindal, D., L.F.P. & S. Glas., has been appointed Vice-President of the Glasgow Southern Medical Society for 1875–76.

Births, Marriages, and Deaths.

BIRTHS.

Clouston.—On the 25th ult., at Tipperlinn House, Morningside-place, Edinburgh, the wife of T. S. Clouston, M.D., F.R.C.P.Ed., Physician-Superintendent of the Royal Edinburgh Asylum, of a son.

Easby.—At North Villa, Darlington, the wife of W. Easby, M.D., of a daughter.

Fox.—On the 19th ult., at Widford, near Chelmsford, Essex, the wife of Dr. Cornelius Fox, Medical Officer of Health for East, Central, and South Essex, of a daughter.

Meikle.—On the 21st ult., at Strathearn House, Crieff, the wife of Thos. H. Meikle, M.D., of a son.

Royds.—On the 24th ult., at Reading, the wife of Wm. Royds, L.R.C.P.L., of a daughter.

MARRIAGES.

Lloyd—Meadows.—On the 23rd ult., at Christ Church, Kingstown, John Lloyd, M.D., Surgeon Bengal Medical Service, to Mary Lloyd, daughter of Joseph Meadows, Esq.

Smith—Crampton.—On the 25th ult., at Christ Church, Highbury, Wm. J. Smith, M.B., to Louisa, younger daughter of Thomas Hill Crampton, Esq., of Highbury.—No Cards.

DEATHS.

Braund.—On the 21st ult., Marian, the dearly beloved wife of James Montague Braund, Esq., of Hill House, Stratton, North Devon, in her 40th year.

Derbyshire.—On the 20th ult., at Stockport, Wm. Derbyshire, M.R.C.S.E., aged 61.

Dickinson.—On the 27th ult., Joseph, the second son of the late W. F. D. Dickinson, M.R.C.S.E., of Fountain-street, Ulverston, aged 29.

Evans.—On the 22nd ult., at Bristol, J. J. Evans, F.R.C.S.E., aged 67.

Home.—On the 17th ult., at Mount Æolus, Portobello, A. G. Home, M.D.

Keddell.—On the 18th ult., at Aylesford, Wm. F. Keddell, M.R.C.S.E., aged 48.

Leech.—On the 22nd ult., at Chichester, Edward Leech, M.R.C.S.E., aged 75.

Robinson.—On the 22nd ult., at Poplar, Chas. Robinson, Surgeon, aged 70.

Sutherland.—On the 9th of Aug., at Uitenhage, Cape of Good Hope, Wm. Sutherland, M.B., C.M., aged 40.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE SELFISH PRINCIPLE AND INFECTIOUS DISEASE.

ONE of the Bristol papers, the *Western Daily Press*, gives Dr. Spencer, of Clifton, Physician to the Infirmary, much praise for betaking himself, or allowing others to take him, as a paying patient to the Bristol Sanitary Authority Hospital, St. Philip's Marsh, when attacked with small-pox, caught from an infirmary patient shortly before the meeting of the British Association, at which Dr. Spencer had to act as President of the Physiological section. Dr. Spencer's example was a good one worthy of being followed. We are glad to think that such action as Dr. Spencer's is becoming increasingly common, and that, in London, at any rate, the better class of patients are increasingly showing their intelligence and their unselfishness by allowing themselves to be removed to the private wards of the London Fever Hospital, where every comfort and convenience is provided, associated with good medical attendance and nursing. The selfish principle is most tested perhaps at the end of infectious diseases, where the patient seeks air and change, and yet where reckless movements on his part involve the carriage of infection and often death, conveyed furtively in cabs or omnibuses or railway carriages, and in hired apartments. There is a law against such movements made recklessly; but it sadly lacks yet the support of the principle of consideration for others.

M. B.—We know nothing of the Office in question, except as advertisers.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—By the last mail we learn, amongst other things, that an increase of pay to the officers of the army medical department is contemplated. It is to be hoped, if this prove true, that definite arrangements will be made with the India Office to prevent the absorption of any extra pay that may be granted to us by Royal Warrant.

The Warrant of April 1st, 1867, was received as a great boon by the then assistant-surgeons, who consoled themselves on an increase of 2*s.* 6*d.* a day after each five years of service in lieu of rapid promotion to field officers' rank; but this proved a delusion to those who were destined to serve in India. Surgeons, as a rule, come out to this country after one year's service at home, and remain for five years, return home for two or three years, and again come out for another four or five years. It will be thus seen that they are in India *one* year after the first increase of 2*s.* 6*d.*, and *three* or *four* after the second increase after ten years' service; but it is scarcely credible that these officers do not receive the increase of pay granted to them by Royal Warrant, and the pay of surgeons of the British army in India stands unaltered since before the Warrant of 1867 was published. As our pay in India exists, it is calculated on a wrong basis, and at a rate of exchange utterly ruinous, considering the depreciation in value of the rupee. It appears that the Warrant of 1858 is the basis of calculation, and in turning English money into rupees, half-a-crown is valued at a rupee; whereas, in remitting money for family purposes, the Government value their rupee at 1*s.* 10½*d.* The following table will serve to show more clearly my meaning:

Amount now paid to surgeons of over ten years' service. English pay calculated at 2s. 6d. = 1 rupee.	r.	a.	*Pay calculated from Royal Warrant of* 1867. 2*s.* = 1 *rupee.*	r.	a.
English pay at 13*s.* a day ...	158	0	English pay at 15*s.* a day ...	225	0
Full batta...	182	10	Full batta...	182	10
Gratuity	36	0	Gratuity	36	0
Tentage	75	0	Tentage	75	0
Consolidated pay of a surgeon of over ten years' service, monthly...	451	10	Amount a surgeon of over ten years' service considers himself entitled to monthly	518	10

It will be clearly seen that the difference between these two calculations is 67 rupees, which, calculated at its nominal rate of 2*s.* to the rupee, is £6 14*s.* a month, or £80 8*s.* a year—a very large sum to lose by the rate of exchange; but when remitted home at 1*s.* 10½*d.*, utterly ruinous to a married man trying to educate his children.

In explanation of the table, the "full batta" and "tentage" are old institutions granted, according to rank, to all officers in lieu of quarters, coal, candle, and servants, and to enable officers at all times to possess a tent, and be thus independent of the State. The "gratuity" is an additional allowance to enable junior officers to maintain existence. It is plainly shown that the Royal Warrant of 1867 is not acted on in India, and it becomes a question, Are we entitled to ask, each of us, for the amount deducted from our wages since April 1st, 1867? And who is responsible for this breach of faith? Perhaps this may be one cause for discontent in our department.

Your obedient servant,

India, August 21st, 1875. HOPE.

MEDICAL MEN AND QUACK MEDICINES.

A CORRESPONDENT forwards us two remarkable testimonials to the virtues of "Burnet's Female Pills" by Liverpool practitioners. If these testimonials, respectively by Mr. A. Maclellan and Mr. John De Courcy Young, are not genuine, the sooner they are disowned the better.

TAVISTOCK DISPENSARY.

To the Editor of THE LANCET.

SIR,—The paragraph in your journal of September 25th is wrong as far as I am concerned. In consequence of the interference of the dispenser, Dr. Crighton resigned; but on September 27th (yesterday) withdrew his resignation.

Yours truly,

Tavistock, Sept. 28th, 1875. R. SLEMAN.

SUPERANNUATION ALLOWANCES.

Union Surgeon.—The law of 1864 is that no officer shall be entitled to such allowance on the ground of age who shall not have completed the full age of sixty years, and shall not have served as an officer of some union or parish for twenty years at least. The Act of 1870, "the Medical Officers' Superannuation Act," secured the application of the earlier law to medical men, *though they might not have devoted their entire time to the service of the parish.* No allowance can be obtained under this Act on the ground of permanent infirmity of mind or body, unless a Poor-law inspector, or some person authorised in that behalf by the Local Government Board, shall have first certified that in his opinion such officer has by reason of such infirmity become incapable of performing the duties of his office with efficiency. As to the amount, it is not to exceed in any case two-thirds of his salary at the time of resigning; but in the estimation of this may be included certain extras, excluding such as he earns in his character of medical practitioner.

Dr. Moore and *Mr. Johnson* (Lancaster) are thanked.

FOOT-AND-MOUTH DISEASE.

To the Editor of THE LANCET.

SIR,—Many of the statements contained in the article on "Foot-and-Mouth Disease" in THE LANCET of September 18th may be disputed, especially those relating to the veterinary department of this country, whose usefulness is only limited by its narrow proportions. It is constituted of one chief, a gentleman of acknowledged talent in his profession, and of a very extended experience, supported by a well-selected staff of scientific, intelligent, and energetic veterinary surgeons, supplemented by a very respectable class of men whose lives have been spent among cattle &c. The intuitive knowledge of these men as regards the detection of the earliest symptoms of disease renders them extremely valuable as auxiliaries to the veterinary inspectors, to whom all suspicious cases are referred. The police, from their perfect organisation in carrying out the correspondence, and enforcing compliance with the orders of the department, combine to form a supervising power in circumscribing the extension of contagious diseases it would be difficult to improve upon were it less contracted in its dimensions.

Veterinary inspection at the port must be admitted to be the best security that the importing country can have, next to its own quarantine. Such inspection must also gradually recoil on the *fons et origo mali*, which is not so amply provided for as it might and ought to be; but, however complete the arrangements for inspection at the source, they would not do away with the absolute necessity for a repetition of it at the point of embarkation.

"Unfairness and oppression" rarely result from the operation of the provisions of the Act in this country; whilst cases of reckless neglect and attempts at blockade running, owing to the vigilance of the department, seldom fail to meet the retribution they so justly merit. My experience during the last three years of the surveillance of the Irish departmental veterinary surgeons in the conduct of their inspectorial duties at the North-wall and other ports in this country convinces me of the enormous utility of their services in preventing the shipment of cattle &c. presenting even the faintest signs of contagious disease, much less those which might be more deeply invaded by infectious lung mischief, many of which would otherwise inevitably be shipped. Their presence has further a very beneficial effect in deterring the unscrupulous in attempting to ship doubtful cases. Too great stress is laid upon the idea "that Irish cattle are a fertile source of the affection"; nor, considering the great numbers exported, is it surprising that after all their travels by road and rail on *both* shores, with the intervening sea passage, many of the outbreaks should be ascribed to their movements, though I am firmly of opinion that the emigrating cattle frequently contract it after their departure from these shores. As the existence of the incubative stage or the presence of the contagium can never be certainly discovered or repressed if known, and as the malady is generally tractable, sure to run a definite course, it appears to me that we may be content to accept such practicable methods regarding its limitation as tend to reduce its dangers to their minimum, and that there is no necessity to resort to German models for the conservation of our public health on the one hand, or the facilitation of our cattle commerce on the other; nor need we pale at the phantom of imaginary contamination, lest in our attempts to clear this Scylla we fall into the Charybdis of a paralysed supply, with the evils which such a deficiency would entail upon our carnivorous population.

As the result of a personal inquiry at the Office of the Veterinary Department of the Privy Council, I beg to append the following information as to the extent of its correspondence, the comparative existence, spread, and diminution of "foot-and-mouth" disease during last week, ending Sept. 19th, 1875:—

Number of communications received by post during week ending Sept. 19th, 1875	3205
Ditto ditto ditto Sept. 12th ...	3828
Number of fresh outbreaks reported during week ending Sept. 19th, 1875	1983
Ditto ditto ditto Sept. 12th ...	2224

Showing a decrease of 241.

N.B.—Outbreaks do not mean individual cases, but farms, lands, premises, or places on which the disease has appeared within the periods set forth, on which many animals became affected. By returns sent in to-day (Sept. 20th, 1875) the disease is reported to have disappeared off 674 farms &c. The above figures show no indisposition on the part of "farmers and others" to screen the existence of the disease.

Each of the communications alluded to contained from six to ten enclosures or separate documents. The number of envelopes sent out to the post on Saturday was upwards of 1490, each of which contained from one to fifty papers; two cabs were filled from floor to roof by the volume of correspondence &c., which amounted to close on 12 cwt. So much for "a few returns, which, even if reliable, are of very little value," according to your contributor.

As an army veterinary surgeon, I may be acquitted of any other motives than public weal and a love of fair play in raising my voice in defence of a very useful but obviously insufficiently appreciated section of my professional brethren, whose position seals their lips, but whose usefulness will stand the test of public criticism.

I am, Sir, yours obediently,

THOMAS PATON,

Dublin, Sept. 23rd, 1875. Veterinary Surgeon, Army Service Corps.

A "VERY IMPRUDENT" ACT.

A LINEN-WEAVER at Leeds was charged at the Police Court of that town on the 24th ult. with what the magistrate, in pronouncing sentence, described as a "very imprudent act." It appeared in evidence that this weaver had had a son who was unfortunately attacked with small-pox, and who died on the 9th of September. It may here be parenthetically remarked that this weaver has, or rather had, five children, not one of whom has been vaccinated, and all of whom have had small-pox; but this is not the "imprudent act" of which he was found guilty. While the son above-mentioned was suffering from small-pox, the weaver, like a dutiful father, sat up with the patient at night, but went to his work every day in the same clothes. He was engaged in a linen factory, where he had charge of a room in which sixty girls used to work. The result of the importation of small-pox infection into this factory-room was that at the time of the hearing of the case ten or twelve of the girls were stricken with the disease, and three had already died. The weaver was charged under the 126th section of the Public Health Act, 1875, with having exposed, without previous disinfection, clothing which had been exposed to the infection of a dangerous disorder. He was convicted, and sentenced to pay a fine of £5, or, in default, to undergo two months' imprisonment. This was the offence which the Leeds magistrate described as a "very imprudent act." We must confess that we should have been inclined to describe it in much stronger terms. Perhaps, however, under the circumstances, we ought to feel satisfied that the new Public Health Act contains a clause under which a magistrate, who regards so lightly such an offence as that of which the Leeds weaver was guilty, feels bound to convict.

Podagra.—It can be obtained at Walters', 16, Moorgate-street.

"CHEAP DOCTORS."

To the Editor of THE LANCET.

SIR,—In a note on the dispensary system as applied in private practice, you write disparagingly thereof, and remark that, although there be no written law to the contrary, an unwritten code forbids the system. Something, Sir, is to be said in behalf of the private dispensary system.

A medical man, living in a poor part of town, has to find his account amongst a population ill able to bear *any* charge for medicines and attendance in sickness. The cost of living has certainly not been cheapened of late, nor the struggle for existence eased. A man earns, say 30*s.* per week. Suppose he has four children, not a large family; two have scarlet fever, in one followed by dropsy. What charge for visits and medicines would make this illness unfelt in that family? At 1*s.* 6*d.* a visit, including medicines, the man would be wellnigh ruined, and even at 1*s.* per visit greatly reduced, and that at a time when extras may have to be supplied. Let the "bread-winner" himself be stricken down, and even the 2*s.* 6*d.* or 3*s.* per week of the private dispensary system cannot be paid, and the aid of the parish must be sought, to the impairment of that spirit of independence that political economists seek to keep up, and to the probable increase of the rates.

Again, few medical men who are not poor at the commencement of their career "start" in a working-class neighbourhood, and ready money is to those who do everything, and all losses are avoided. But it is not because a gentleman is poor that he is ignorant, and unable to treat the majority of cases that come under his care cheaply. The cost of most drugs is not overmuch when a few of the more costly are left out, and it is not every case that requires the latest discovered drug or combination of drugs. A large mass of patients is properly treated for syphilis with mercury, mineral acids, or iodide of potassium. Hundreds of cases require only some preparation of iron; and ammonia, the alkalies, bitters, and nux vomica are not expensive; whereas the dearer drugs, as quinine, opium (which latter will go a very long way), are not very ruinous in cost, even when freely prescribed, and I do not believe anyone would fail to give them when required. I have experience of the practice of several gentlemen with dispensaries, and I know they all use quinine largely.

Sir, I hesitated to open an establishment of the kind in question when my receipts were but £5 per week, and when I had to do a lot of work, for part of which I lost the payment. This amount was inclusive of about seventy cases of midwifery in the year. Since I have opened a dispensary I take £16 per week, and have no losses and no midwifery. My health is better, my circumstances are better, and I have more leisure, and I do not plead guilty to having neglected the interests of my patients. Nor can I in any way admit that I have hurt the pockets of my neighbouring practitioners; for I am surrounded with dispensaries, which were in existence before my advent here.

Sir, that unwritten law of which you wrote allows free hospitals and dispensaries, where it is sometimes said highly educated gentlemen of good position give advice for nothing to people who, though they can pay a fee, do not; and if a medical man of the higher grade may work for nothing, and have for patients a class which can afford to pay, why may not another work for a small fee, which is as much as the sick can spare, and which in the aggregate well pays the recipient? Yours obediently,

London, September, 1875. S.

Dr. R. T. H. Bartley.—We are not competent to give a legal opinion on the question; but it seems to us that Dr. Bartley's title is too special and distinctive to be complained of by the proprietors of Visiting Lists. Rather should they be obliged to him for a valuable addendum and advertisement.

PERIOD OF UTERO-GESTATION.

To the Editor of THE LANCET.

SIR,—The following brief notes of a case which has just occurred in my practice may interest statisticians.

T. B——, in her twenty-seventh year, began to menstruate on Christmas day last. On the 3rd January following she was seduced by her lover, only one intimacy taking place. Labour began on the 23rd inst. about 8 P.M., and was completed by short forceps this day, 25th inst., at 11 A.M. Duration of pregnancy consequently 265 days.

I am, Sir, yours &c.,
Old Kent-road, Sept. 25th, 1875. W. T. GREENE, M.A., M.B., &c.

COLD-WATER INJECTIONS IN TYPHOID.

THE use of cold water in therapeutics, and especially in typhoid, is one of much present interest. Dr. Foltz, of Lyons, has lately published in *Lyon Médical* a valuable series of papers, containing the results of his employment of cold-water injections in typhoid fever. He states that they exert a general and local action. The local action consists in a cooling sensation, accompanied by intestinal contractions. The general action produces slackening of the pulse, marked diminution of temperature, and quietude of the nervous system. It abates thirst, excites the appetite, and increases the secretions. The cooling, sedative, and tonic action is about the same with all injections under 38° (centigrade); but it is so much more intense and durable as the injection is colder, more abundant, and more frequently repeated. As to the therapeutical indications of cold-water injections, Dr. Foltz thinks they are very numerous. Through their local action they are of use in affections of the abdomen, and through their general action in febrile maladies. They are, therefore, doubly necessary in typhoid fever, for the treatment of which they constitute the chief remedy.

Mr. Douglas Lithgow's letter shall be kept in mind.

SCARLET FEVER AT HURDSFIELD (MACCLESFIELD).

To the Editor of THE LANCET.

SIR,—I cannot help thinking that Mr. Leighton Kesteven's letter is calculated to do more harm than good to the cause he advocates.

Hitherto, although much has been written relative to the outbreak of scarlet fever in Hurdsfield, I have refrained from entering into any controversy about it. I still decline to do so; but Mr. Kesteven's letter contains so many inaccuracies that, in justice to you, Mr. Editor, to the Macclesfield Sanitary Committee, and myself, I feel I ought to correct them.

Mr. Kesteven states that when the vicar of Hurdsfield refused to close the school, the scholars at which were suffering severely from scarlet fever, he was acting on the advice of certain medical men, who had signed a memorial to that effect. This is not the case. On the morning of Friday, Aug. 20th, the vicar positively refused to accede to the request of the Sanitary Committee to close his school, and stated that under any circumstances he should keep it open, unless ordered to close by the Education Department. Nothing was then said about any medical memorial; neither was this memorial signed until the following day, when it was generally known throughout the town that the vicar had placed himself in opposition to the sanitary authority. Thus it is evident that the vicar's refusal was not based on the medical memorial, but that he afterwards obtained the signatures to help his case. As Mr. Kesteven places so much stress on the memorial in question, he should in fairness have stated that the signatures of the medical men were obtained solely on the *ex-parte* statements of the vicar, and that, although among other things the memorial certified that the school was in "a good sanitary condition," several of those who appended their names thereto never troubled themselves to ascertain the truth of that statement by a personal examination of the premises; indeed, one medical gentleman has since admitted to me that he never read the memorial before signing it! Against signatures obtained in such a loose way as this, I think we may fairly place your statement, Mr. Editor, which has been endorsed by the whole sanitary press:—"There is not a shadow of doubt that, however originated, the infant school was the focus of disease, and the intercourse of so many children at this infected spot was a source of danger to the inhabitants."

It is not a fact that the sanitary inspector gave such a report on the state of the school as described by Mr. Kesteven, or any other report on the subject. He inspected the school with me, and his opinion was similar to mine as to the choked-up drain, the defective ashpit, and filthy state of the closets, which had never been limewashed since their erection, and were, without exception, the dirtiest I have ever seen attached to a public school. After, however, the vicar had refused to close the school, and after the closets had been limewashed, and the drain laid open, a member of a local firm of surveyors examined and reported on the sanitary condition of the school. The value of a report obtained after the chief causes of complaint had been removed is easily estimated.

The use of the name of Mr. Jas. Bland, and the assumption of a closer degree of relationship than really exists between us, are unwarranted. I may state that Mr. J. Bland, who is a practitioner of forty years' standing, and a J.P., and was for twenty years the medical officer of health, has never interfered in the slightest degree between the sanitary authority and the Rev. Mr. Handcock *ab initio ad finem.*

Mr. Kesteven commences his letter by stating that the vicar of Hurdsfield refused to close his school when requested by the medical officer of health, and concludes with the remarkable statement that no one "could ever assert truthfully" that the vicar "ever did, or could, want to obstruct" the work of the medical officer. The fact is well known that the vicar did obstruct the work of the sanitary authority and their officer of health by refusing to close his school when scarlet fever was epidemic among his scholars. Your correspondent, in attempting to justify the vicar's refusal, admits the "obstruction," and his letter also proves—if it proves anything—that Mr. Handcock was aided and abetted in his resistance to the powers which be by those who ought to have known better.

There are other inaccuracies in your correspondent's letter, which, did your space and my time permit, I might refute; but I will conclude by expressing a hope that when next Mr. Leighton Kesteven addresses your columns, he will previously ascertain the truth of any statements he may make, and that he will not use his pen in attempting to justify ill-advised resistance to the requirements of a sanitary authority.

I am, Sir, your obedient servant,
GEORGE BLAND,
Medical Officer of Health for the Borough of Macclesfield.
Macclesfield, Sept. 27th, 1875.

PHILADELPHIAN DEGREES.

Dr. Walker is thanked for the interesting copy of correspondence which he sends us. He will see that the subject is noticed elsewhere.

Mr. Thomas Q. Couch.—A master is not responsible for payment for medical attendance on his servant in the absence of a special undertaking.

A Query.

A correspondent wishes to know whether traction after death, such as might be used in dragging a body out of a river, could lengthen it *three* inches. Two men disappear; the height of one is 5 ft. 6 in., of the other about 5 ft. 7 in. or 5 ft. 7½ in. A body is found, so much decomposed as to be unrecognisable, under suspicious circumstances, hands tied &c.; but the body is 5 ft. 9 in. in the recumbent position.

Mr. Boughton Kyngdon. — The advertisement is a disgraceful one. The individual is probably insensible to criticism or reproof.

Medical Certificates in Cases of Deaths from Violence.

To the Editor of The Lancet.

Sir,—The author of the article in your impression of Sept. 18th, headed "Medical Certificates in Cases of Deaths from Violence," appears to have written it without bearing in mind two sections of the Births and Deaths Registration Act, 1874. By section 20 it is enacted that—"In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by this Act to give information concerning the death a certificate stating to the best of his knowledge and belief the cause of death." And by section 39 it is enacted that—"Every person who refuses or who fails without reasonable cause to give or send any certificate in accordance with the provisions of the Act is liable to a penalty not exceeding forty shillings."

There is no law in existence which requires a medical man to report to a coroner the death of a patient, occurring under whatever circumstances it may. Had Mr. Lodge's certificate been taken to the registrar of deaths before the man's body was buried that official would have brought the case under the notice of the coroner, who would then, in all probability, have been spared much of the unpleasant duty which has since devolved upon him.

I cannot see that a medical man in giving a certificate of the cause of death of any patient whom he may have attended in his last illness "usurps the functions of a coroner," or that he exceeds his duty in the slightest degree. The course pursued by Mr. Lodge was, I think, strictly in accordance with the last Registration Act, and consequently did not merit the censure of the coroner. Your obedient servant,

Westbury-upon-Trym, Bristol, Sept. 20th, 1875. Henry Ormerod.

⁂ Our correspondent is mistaken in assuming that our article was written without bearing in mind the two sections of the Births and Deaths Registration Act, 1874, to which he refers in his letter. By section 20, a registered medical practitioner is certainly bound to give a medical certificate showing the cause of death of any person whom he has attended in his last illness. The Act, however, does not specify any particular time when the certificate is to be given, and certainly contains no provision which would prevent a medical practitioner declining to give a certificate in any case in which, in his opinion, an inquest ought to be held, *until* the case has been referred to the coroner. This is the course which we recommended, and believe to be highly desirable on public as well as professional grounds. Our correspondent will excuse us if we express our belief that in nine cases out of ten the medical attendant would be infinitely better qualified than the registrar to decide whether a case was a fit and proper one to be referred to the coroner; and it would be highly objectionable if medical practitioners were called upon to give certificates in cases of violence that would be the subject of inquests, when the certificates would become useless documents.—Ed. L.

Mr. P. B. Giles, Jun.—1. Wilde, Hœning, Ercolani.—2. Dr. Barnes in Medico-Chirurgical Transactions, 1851 to 1853.—3. Sir James Y. Simpson's work.

Palliative Treatment of Ulcers.

To the Editor of The Lancet.

Sir,—Will you kindly publish the following case, not of curative, but of quite successful palliative treatment of a large, open, offensive cancer.

Pain and the exceeding fetor make the last months of patients who cannot recover most miserable. The lotions &c. usually employed prove troublesome, and of very incomplete effect. It may be that this very simple method is known and practised; but as yet I have not met with any sufficient record of such a case. It has not been suggested by any consulting man my patient has seen; she herself and her friends feeling so marked and so happy a change deserve to be made known to all. The open sore, some nine inches in diameter, is well but most gently washed by a tepid stream of Condy's fluid and water, using syphon and jug. Then it is moistened all over with four or five drachms of a carefully filtered solution of two to three and a half grains of acetate of morphia in fine spray, so used that none leaks off. It is then covered, nothing intervening, with very finely sifted, perfectly dry animal charcoal, the sore being completely covered and concealed. This is done with a pepper or flour dredge or an indiarubber bottle. Over this is placed the very softest light covering, and the patient is clothed so as to be with her friends. Before this was done the smell was very offensive and sickening, not only throughout the room, but in the near passages. Now it can scarcely be perceived at three or four inches from the breast. The use of morphia (Battley's) &c. internally was more distressing than the pain. Now the pain is infrequent and comparatively very bearable; the morphia being used in no other way than by spray.

I am, Sir, your obedient servant,

Forest Hill, S.E., Sept. 21st, 1875. W. Rendle.

The late Dr. Wardrop.

To the Editor of The Lancet.

Sir,—Can any of your readers kindly inform me of the existence and present residence of any *near* relative of the late Dr. Wardrop, of Charles-street, St. James's? My query has especial reference to any constant visitor or resident (even old housekeeper or butler), who might be well acquainted with his excellent collection of pictures. Dr. W., as is generally known in the profession, died Feb. 13th, 1869, aged 87.

I am, Sir, your faithful servant,

Sept. 29th, 1875. An Old Subscriber.

Old Reader.—An author may certainly give a few copies of a professional work on a special subject to a few non-professional friends and well-wishers without being chargeable with advertising himself or acting unprofessionally. Of course there are subjects so special and scales of distribution so large as would make such a procedure open to criticism.

Carbolic Acid.—If our correspondent will refer to our back numbers, he will find numerous letters on the subject of pruritus ani.

Coroners and Doctors.

To the Editor of The Lancet.

Sir,—Your correspondent of the 18th inst., writing under the head of Coroners' Inquests, has brought forward a subject upon which many of your readers would like some advice. The following case occurred in my practice.

On the morning of the 12th August I was sent for to attend M. N——, and requested to hurry, as the child had been born some time. On arrival I found the woman had been delivered of a living child; the pulse was scarcely perceptible; skin cold and clammy—in fact, the patient was dying. The bed was saturated with blood, and in one corner of the room I saw a vessel containing about a gallon of blood clots. On examination per vaginam, I found the funis broken from the placenta, with a small piece of the latter attached; the uterus was large and flabby, filled with clots; and a remarkably tough placenta, which was almost entirely adherent. I removed the after-birth and clots without the least hæmorrhage, gave ergot and stimulants; but there was not the least action of the uterus until the woman died, about half an hour after I arrived. There was a nurse and a midwife in attendance, and from the latter I gained the following particulars. She had seen the patient on the previous day, when she recommended medical advice, knowing that her former labours were very difficult. The woman, however, did not like to have a doctor, nor did she retain the midwife. The latter was, however, sent for in the middle of the night, and on arrival found the child born, great hæmorrhage, and the funis broken. She immediately insisted on medical aid being sent for, thinking that the patient would perhaps not live until it was procured. The nurse in attendance states that "she slept on the bed with the patient, as the pains had left her; she awoke suddenly, found the child born, and the funis broken. Alarmed at the hæmorrhage, she sent for the midwife." After this I refused a certificate; but when the coroner heard the above facts, he said "there was no need whatever for an inquest; such a thing would be quite unusual." I then filled in a certificate, stating particulars to the registrar; but I heard no more of the matter.

Now, Sir, might not this woman's death be brought about by the nurse not attending to her in time, and then trying to detach the placenta by pulling at the funis, and in consequence breaking it? In a case like this (and I fear they occur too frequently) what is a medical man to do when the coroner refuses to hold an inquiry?

I am, Sir, your obedient servant,

September, 1875. An Inquirer.

The Body of Jeremy Bentham.

A correspondent wishes to know where the body of Jeremy Bentham now lies.

Convalescent Homes, and one of their Gross Abuses.

To the Editor of The Lancet.

Sir,—I was lately applied to by a young man (who is in a Benefit Society), asking if I would kindly give him a certificate for the Convalescent Home of Mrs. Ruster, of Dover. He had not been under my treatment, nor under the treatment of any other medical man, nor had he been suffering from any illness whatever; his only complaint being want of a holiday at the seaside. He could get a recommendation from the Rev. Mr. Bromfield, of the parish of St. Mary-the-Less; this would be available for a month. However, as he had but a week's holiday, he only intended to remain for that period in the Home. Of course I need scarcely add that I refused him a certificate. He seemed very much annoyed, and said he was down at the same Home last summer, under precisely similar circumstances, for a period of a fortnight, obtaining his letter from the same source. He stated that there were several people there under similar circumstances. He also added that they dined with the female *convalescents*, and went out for nice rambles and walks with them, and that he enjoyed his holiday very much indeed. He paid a reduced railway fare of 5*s.* for the return journey, and was fed and lodged in the Home for 9*s.* a week.

Need we wonder at the great difficulty there is in finding room for our poor convalescents when their beds are occupied by holiday-makers.

I am, Sir, your obedient servant,

September, 1875. Albert S. Morton.

"Penetrating Power of Salt."

To the Editor of The Lancet.

Sir,—Having read in your last issue "A. B.'s" account of the penetrating power of salt, I determined to try the experiment for myself. I accordingly left a strong solution of salt and water standing all night in a ware jug, *glazed both inside and out*, and in the morning found the outside of the jug quite *free* from the crystals of common salt—in fact, just as it was overnight. Had your correspondent's jug a crack in it? I should like to ask—1st. Supposing "A. B.'s" experiment to elucidate a physical fact, is this quality of the salt properly called its *penetrating power?* 2ndly. Can we take the "great power of penetration" of a drug as a means of estimating its "value as a local remedy in cases of gout, rheumatism, &c."?

I am, Sir, yours respectfully,

September, 1875. Sal Non-permeans.

Strychnia Poisoning.

To the Editor of The Lancet.

Sir,—I have just read Mr. Lammiman's letter in your last number about a case of strychnia poisoning.

I once took an overdose of liq. strychniæ, which would certainly have been fatal, as the spasms were becoming more frequent and stronger, one lifting me in the air and throwing me prostrate on the ground. I immediately took chloral hydrate in two half-drachm doses, one within ten minutes of the other. I began instantly to get well, each dose having great effect.

Yours &c.,

September, 1875. M.R.C.S.

CHEAP DOCTORS.

THE following is an illustration of what we said last week on [this subject. Could the Colleges, whose titles Mr. Timothy advertises in such an objectionable way, not remonstrate with him?

"Dalkeith-street, Barrow-in-Furness.

"INDEPENDENT DISPENSARY.—This dispensary was opened by Mr. Timothy, L.R.C.P. Lond., M.R.C.S. Eng., L.M.R.C.S., and L.S.A., to afford medical and surgical relief to the working classes. Attendance every morning from nine to twelve, and every evening from six until nine. To meet the working expenses, the charge for each patient will be sixpence. The charge includes advice, medicine, and every other requisite. A visit to any dispensary patient within the town will be one shilling."

Dr. W. A. Jamieson.—1. Mr. S. Jeffery, Superintendent, Kew Gardens.—2. About 2*s.* 6*d.*

SOFT CHANCRES.

To the Editor of THE LANCET.

SIR,—I have been very much struck with the following sentences in Mr. Hutchinson's lecture on the above subject, as reported in your impression of the 18th inst., and cannot help directing attention to them. "Thus," says Mr. Hutchinson, "if you could to-day exterminate soft sores, and destroy all the secretions capable of producing them by contagion, you must expect in a few weeks again to find them reproduced. If, on the other hand, you could destroy all hard chancres, and all the specific germs of syphilis, there would be no reproduction of the disease." Are we to infer from these assertions that Mr. Hutchinson is a believer in *the special creation of a syphilitic virus?* I am &c.,

September, 1875. D. CAMPBELL BLACK.

COMBINED SANITARY DISTRICTS.

A CORRESPONDENT writes to us as follows:—

"Allow me to correct an error in your last week's issue. The combined sanitary district of Peterborough, Whittlesea, &c., is not a new district, it being formed at the commencement, two years ago. The salary was then £800, and Huntingdon and Godmanchester were in it; but these places (and I believe others) have seceded, and one has joined, so reducing the salary to £639. The appointment was made last May for this year; but was, I am told, informal, inasmuch as it was made without advertising the vacancy."

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. R. Barnes, London; Dr. Lockhart Robertson; Dr. Sedgwick Saunders, London; Mr. Fairlie Clarke, London; Dr. Adam, Liverpool; Mr. R. Smith, Winchester; Mr. Sleman; Dr. Gill, Clapham; Mr. Price, London; Dr. Payne, London; Mr. Watkins, Worcester; Mr. Murray, London; Dr. Wiltshire, London; Mr. Tait, Birmingham; Dr. Walker, Anerley; Dr. Sutcliffe, Torrington; Mr. Reeves, London; Dr. Cripps, Cirencester; Dr. Faber, Freudenstadt; Dr. G. Bland, Macclesfield; Mr. J. Jones, Llanfyllin; Mr. Hardman, Blackpool; Mr. Crane, Bristol; Mr. R. Garnett, Brixton; Dr. Haviland, Northampton; Mr. Collins, Chepstow; Mr. Waren Tay, London; Mr. Scott, Wolverhampton; Mr. Wilson, Bawtry; Mr. T. Lylei, Dalston; Mr. Green, London; Mr. Barnett, London; Dr. A. Gamgee, Manchester; Mr. West, Tavistock; Dr. Black; Dr. Haughton, London; Dr. Moore, Dublin; Mr. Williams, Barrow-in-Furness; Dr. Francis; Mr. Mortimer Granville; Dr. Moore, Lancaster; Dr. Truman, Nottingham; Dr. Gairdner; Mr. Lee, New College, Oxford; Dr. Denton, Bridlington; Mr. R. Davy; Dr. Carson, Portrush; Mr. Douglas-Lithgow, Wisbeach; Mr. Williams, London; Dr. Randall, London; Mr. Vaughan, Denbigh; Mr. Robinson, Ditchling; Dr. Stevenson, London; Mr. Tivy, Cork; Mr. Fleming, Chatham; Mr. Paton, Dublin; Dr. Linton, Birkenhead; Mr. Bartley, Weston-super-Mare; Messrs. Silcox and Co., Hull; Dr. Stewart, Blackburn; Mr. Hudson; Mr. Wright, Liverpool; Mr. Bower, Inverkeillor; Dr. Jamieson, Berwick-upon-Tweed; Mr. Stedman, London; Mr. B. Kyngdon; A. G. Zoette; Old Reader; F.R.C.P.; Podagra; T. M. E.; Sal Non-permeans; R. W.; M.R.C.S.E.; M.D., L.R.C.P.; E. C.; Sigma; C. F. H.; An Old Subscriber; M. B.; A. Z.; Carbolic Acid; Medicus, Hull; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Cameron, Salen; Mr. Sims, Glasgow; Dr. Clouston, Edinburgh; Mr. Evans, Liverpool; Dr. Cochran, Port Patrick; Mr. Roocroft, Wigan; Dr. Easby, Darlington; Mr. Marshall, Moulton; Dr. Tuke, Falmouth; Mr. Braund, Stratton; Dr. Fox, Widford; Mr. Izod, Esher; Mr. Walshe, Aldborough; Mr. Pletts, Ryde; Mr. Faulder, Stockport; Lieut. Bourchier, Brighton; Dr. Cotterell, New Zealand; Mr. Paulson, Mountsorrel; Dr. Blake, Reigate; Mr. Satchell, Tunbridge Wells; Dr. J. Smith, Shanklin; Mr. Morgan, Llanelly; Mr. Symons, Dumfries; Mr. Davidson, Birkenhead; Dr. Fraser, Clitheroe; Mr. Taylor; Dr. Campbell, Swindon; Dr. Taylor, Colston Bassett; Mr. Cooper, London; Dr. Gowan, Edinburgh; Dr. Everitt, Worcester; Mr. Bowes, Herne Bay; A. Z., Amersham; Medicus, London; H. W., Amersham; P. O., Ballendalloch; Alpha, Bridlington; Medicus No. 3; Z. A., Dorchester; Medicus, York; B., Morriston; Alpha, Harwich; F. K.; Medicus, Kendal; M.D., Ashford; Delta; M.D., South Shields; A. F., South Shields; Medicus, Beaumaris; A. B., Rhymney; M. B., Barntley; Cecil; Rex, Saxmundham; A. B., Leek; Chirurgicus; Medicus, Leicester; Chirurgus; P. E. M.; S., Romsey; M.D., London; C. R., London; Commodious, London.

Tavistock Gazette, Newcastle Chronicle, Melbourne Argus, Welshman, Manchester Guardian, Western Morning News, Glasgow Herald, Surrey Advertiser, East London Observer, Cork Constitution, Huddersfield Chronicle, Tower Hamlets Independent, Liverpool Post, and *Rotherham Independent* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, SEPT. 30TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall	Remarks at 8 A.M.
Sept. 24	30·15	S.E.	53	55	72	62	53	0·61	Overcast
„ 25	29·86	S.W.	61	62	95	69	54	0·21	Raining
„ 26	29·97	S.W.	58	61	82	67	54	0·19	Cloudy
„ 27	29·70	W.	51	55	99	66	52	...	Cloudy
„ 28	29·77	W.	55	58	77	63	54	0·12	Overcast
„ 29	29·85	W.	49	51	95	65	48	0·03	Cloudy
„ 30	30·03	N.W.	50	53	...	...	50	...	Overcast

Medical Diary for the ensuing Week.

Monday, Oct. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 5.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Oct. 6.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1¼ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Geo. Roper, "On Prolapse of the Funis during Labour."—Dr. Galabin, "On the Occurrence in Normal Labour of Lateral Obliquity of the Fœtal Head."—Dr. Heywood Smith: "Notes of a Case of Ruptured Vagina during Labour, with Recovery."—Mr. F. H. Gervis: "Report of a Case of Inversio Uteri."—And other communications."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. C. T. Hudson, "On a New Species of Melicerta."

Thursday, Oct. 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Brudenell Carter, "On the Operation of Iridectomy as performed for Optical purposes."—Dr. Southey, "On a Case of Idiopathic Tetanus."

Saturday, Oct. 9.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—

Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

Introductory Address
ON
SCIENCE IN SURGERY.

Delivered at the Owens College (Manchester Royal) School of Medicine, October 4th, 1875,

BY EDWARD LUND, F.R.C.S.,
PROFESSOR OF SURGERY, OWENS COLLEGE.

MR. PRINCIPAL AND GENTLEMEN,—The command which I have received to deliver to-day the first lecture of the present winter session is one which I obey with feelings alike of anxiety and pleasure: of anxiety, lest in the remarks I have to offer I may fail to do justice to the important topics to which I must allude, and lest I may fail to inspire those who are to listen to me with the interest which the subjects deserve; and of pleasure, when I consider how it has come to pass that one who not many years ago entered Manchester as a stranger, with no claims of birth, of interest, or of kinship, should have found himself gradually raised, as the simple reward of hard work, and through the kind consideration of his professional brethren, to the proud position which I now occupy—that of joint lecturer on surgery with my friend Professor Southam, and a member of the Senate of the Owens College.

And here I am reminded that I appear in this lecture-theatre to-day as one of the few surviving representatives of the old Pine-street School of Medicine and Surgery. I was appointed demonstrator of anatomy in that school at the beginning of the session 1850–51. It was at that time that my present colleague, Professor Southam, seeing, with several other earnest and active men, that lethargy and inactivity were likely to overshadow in some degree the well-earned reputation of the school, conceived the idea that by establishing a second institution for the teaching of medicine and surgery in this city fresh energy might be excited and fresh interest be awakened in the ever-widening field of medical science. In this opinion the promoters of the new school were not mistaken, for from 1851 may be dated a certain revival in Manchester of the character and range of professional education. Medical education in Manchester since 1851 has steadily advanced; it has now reached its acme of method and opportunity (though still capable of indefinite expansion) in the splendid appointments and in the brilliant inducements to professional study afforded by the establishment of a medical department of the College in which we are now assembled.

In thus glancing at the past history of our school, how sorely do we miss on this occasion that which would have been a living commentary upon its best era—the benevolent, the honest, the cheerful face of our late dear friend, Professor Wm. Smith. How shall we estimate the loss we have sustained? And who, shall it be said, can fill as he did the vacant place? I knew him well—intimately, if I may be allowed to say so. I knew the inner spirit of the man. I knew (at least in regard to most public matters) the earnest motives which actuated him in all he did, and in all he tried to do, for the advancement of our medical school. In private life also, away from professional associations, I had frequent companionship with him, and in many ways I am still reaping the benefit of his many acts of generous kindness to me, in sickness and in health, the recollection of which can never pass away. Professor William Smith was indeed the student's friend; and this, happily, his pupils thoroughly understood and as thoroughly acknowledged, for there was not a lecturer in the school who was received by his class at the commencement of a session, and who was parted with at its close, with warmer or more sincere proofs of appreciation, and it may be doubted whether in this respect any lecturer can ever hope for an equal tribute. Not one of the lecturing staff could compete with Professor Smith in the marvellous way in which he held his audience upon his lips. Everyone who listened was enchanted by the vigour and the rapidity of his descriptions, by his wondrous memory, and the distinctness and the accuracy of his illustrations. He would continue for forty or fifty minutes, until, at the close of the lecture, every student felt that some new fact had been made more clear, some truth more positive, the only regret on his mind being that the lesson so ably imparted should have come to an end.

No one was more exact and constant in his appointments, either here in the College or elsewhere, until at length failing health seemed to say, "Thy work is nearly done." We have good reason to believe that this gentle hint, by Nature so kindly given, was not lost on him, for many things have come to light since his decease which show that this warning voice was not unheard. He knew full well, as he toiled on in the daily round of duty, that life's silver cord might soon be broken. He told me more than a year before his death, that his only ambition, as far as his school duties were concerned, was to give just one course of lectures in these new buildings, and that he then would take his leave. And really it would almost seem as if this great wish of his heart had met with its accomplishment, for we all know the sad incidents of his death, and I need not here dwell upon them. The circumstances connected with it remind me of an anecdote told of a foreign army, in which a private soldier, beloved by his fellows, had perished in the fight, completing some gallant act of duty with consummate bravery. After his death, when peace had been proclaimed, to give perpetuity to the esteem in which the fallen brave one had been held, one of his comrades was told off daily from the ranks, when the roll was called, the name of the dead soldier being retained upon it, as if his spirit hovered around his regiment to stimulate others to emulate his bright example, and the reply was to be "Died in action." So have I thought, gentlemen, if when we delight ourselves in recalling the many familiar names of those who have done good service in our midst, and the roll of past worthies shall be read over, we might appropriately place against the name of Professor Wm. Smith these words: "Died at his work." For so in truth he died, and those who knew him well can, I imagine, easily supply all the outlines of the picture of the last sad scene, in which, still working to do good, he must have bestowed on his little patient one of those bright smiles with which he was wont to light up and strengthen many a sad heart; and the very last act in which he was engaged was an act of kindness. "Ah! he was a man; I knew him well, and take him all in all, we shall not look upon his like again."

The science, as well as the practical art, of medicine—the *ars medendi*, the art of cure—falls by common consent into two great sections. To the physician are allotted all those deviations from health which depend purely upon functional derangement, or from that same condition, so far as it is traceable to structural change in the organs affected, if, indeed, it ever does occur without such change; and to the surgeon are assigned all those alterations of form which, either as hypertrophies or as new growths (arising from whatever cause they may, local or general, including the effects of injury, damaging the actual arrangement of structure) require mechanical treatment, either for removal, for relief, or for cure. But the mechanical surgeon is only half a surgeon, if the restoration to health in every case which is committed to his care is only to be sought in operative interference. If surgery is to be defined as operative medicine, many cases would be lost through the *nimia diligentia chirurgi*. In surgery, as in medicine, viewed as separate branches of a single art, scientific success can only be secured by placing each case under the most favourable conditions of health, so as at all times to give nature the first chance in her attempts to repair the injury, or absorb the growth. And it would almost seem as if, in the practice of surgical as contrasted with what are called medical cases, the surgeon has far more evident proof of the wondrous reparative powers of nature, when left alone, than medicine proper can ever boast of. While we think with wonderment on the creative wisdom by which the growth of animals is effected; whilst we delight to note in our anatomical explorations the exquisite manner in which every part is planned, so as to adapt itself to its requirements, and to harmonise with the parts around it, so that in the general contour of every portion of the body there shall be no loss of space and no redundancy, strength being given where most required; here elasticity, and there resistance, all designed beforehand in well-balanced proportions;—while we contemplate these things in the healthy body, and observe how the whole machinery is preserved intact until some external force injures it for a time, we shall find that there has been lying in quiet reserve all the while—it may be for years, even for those of a long life—a certain energy ever on the alert, and ever ready to step forward at once to repair the breach, and to replace in their proper order the broken walls.

This reparative power, this *vis medicatrix naturæ*, this power of repair, is declared throughout nature, and becomes especially conspicuous in the practice of surgery. No sooner, in a severe injury, has the system recovered from the nervous shock which pain and fright must occasion, than, if we note carefully, we shall observe, as action recommences, the early stages of repair; the faintness, even to loss of consciousness, which is present, is in itself, by diminishing the current of the circulation, a means of arresting the still further loss of blood, the very *pabulum vitæ* through whose agency we know the direct means of repair have chiefly to come. Then, after a time, in cases of special local injury, we have what surgeons call inflammatory changes. But the surgeon looks on these very differently from the physician; he knows that inflammation, after surgical injury, if it can only be controlled,—if it can be held back as a restive horse in its early and less rapid movements, will tend to secure a readhesion of the parts, and it would almost seem, as far as some of the less vital structures are concerned, the formation of a new tissue. Thus it is that the surgeon looks on only to admire the ready way in which repair is effected, provided always,—and here it is that his skill shows out most boldly,—that the conditions and aids to nature's efforts are made favourable. It is useless to talk simply of the power which nature possesses to repair a fracture in the hard tissue of bone after its forcible division by injury, and by which power it may be as neatly united as the scar in a cut finger. Such union may occur, and it has so occurred, where fortunately the corresponding points of the broken bone have been adjusted so as to be again absolutely opposite to each other, and there retained without the slightest disturbance for many days. But the great difficulty consists in this: around the broken bones there must be lacerated muscles, or displaced and extended tendons. These will pull the portions of bone still further apart, causing more or less deformity, and thus acting in direct opposition or direct antagonism to nature's efforts. What can the surgeon do here? It is not for him to insult nature by trying to stimulate or hasten her efforts by any artificial means, but simply to attempt—and the more successful he may be the more certain the result—to place the broken pieces of bone, particle by particle, exactly opposite to each other, as nearly as possible at the same spot as they occupied before the severance of their tissues; and this being done, to retain them there—to do all that is popularly termed "setting" a fracture, but which might be more accurately expressed as replacing the fractured bones; and then by means of the thousand devices, entirely mechanical in their nature, which surgery employs — the splints, the plasters, the weights, the bandages — keeping the broken portions of bone accurately adjusted. All the rest is nature's work, and happy is it for us when we do not thwart her, for she is ever equal to her task.

In practical surgery two things have to be had regard to—our means of investigation and our modes of treatment; and fortunately in both of these matters great improvements have been made in modern times. As means of investigating the exact nature and seats of disease or injury, we have now in our hands instruments of precision which those who trod before us the path of surgery would have gloried to have seen. What would Hunter, or Cooper, or Tyrrell, or Key have given for the extended vision which is afforded by the modern microscope, or for the practical and invaluable evidences which are supplied by the ophthalmoscope, the laryngoscope, or the delicate instruments for lithotrity perfected by the genius of Sir Henry Thompson? Until comparatively recent times, in cases of confirmed blindness, it might be said neither the patient nor the surgeon could see; the patient could not see, and the surgeon could not discern the cause of his loss of sight. A thousand attempts were made to record the subjective symptoms related by the patient, but the objective symptoms, as observed by the surgeon, were worse than useless. If, in the days of Milton, with "Wisdom at one entrance quite shut out" by "so thick a drop serene," the surgeon had possessed such an instrument as this, who can tell with what "cathedral music" the poet would have immortalised the man who, aided by the ophthalmoscope, could have devised a remedy for his great affliction?

Yet, in the employment of these instruments of precision—these fresh means of extended observation—we must ever bear in mind that it is not so much the objects which we see or feel as the clinical lesson which their presence teaches. This can only be learned by practice, by comparison of repeated observations, or by the systematic teaching of others. Mere observation without interpretation, so to speak, of the meaning of a phenomenon, is of little service. This brings me to speak of the modes of treatment in scientific surgery. Here, however, my illustrations will begin very early, as the first I shall give you is taken from the condition of the unborn child. There is a congenital deformity well known to surgeons, and which we call cleft palate,—a condition of things distinguished by imperfect growth of bone, whereby a cleft or fissured space is left in the centre of the roof of the mouth, exposing in this direction the cavities of the nostrils. The surgeon is often called upon to try to remedy this deformity after birth; but it may seem paradoxical to ask him to suggest a cure, or, more properly, the means of its prevention before birth. Yet even this may be rendered possible. By the study of comparative anatomy we learn that the portions of the bone wanting in cases of this deformity are two small ossific centres, which in man correspond to two distinct bones intended to carry the large front teeth or tusks in some of the lower animals, and their growth is completed only in the human subject near the close of intra-uterine life; therefore, if at this period the mother's health should fail in its nutritive powers, the child may be imperfectly developed in this particular part of its skeleton. It is the failure of bone-growth at a special period of fœtal life which is the very essence of this deformity.

It was observed in the collection of animals of the Zoological Society of London that a certain lioness, always breeding with the same lion, gave birth on several occasions to lion cubs with this particular deformity, and the probable cause was for a time a matter of doubt, such deformity being rare among the lower animals. As soon as it was noted that this animal, in common with the other carnivora, was fed on lean meat cut off from the bone, it seemed probable that the deficiency of growth might be due to the absence of bone-food in the mother at a time when she most needed it, she having given up, it might be said, all she could spare from her own system for the completion of the growth of her young. The idea was acted upon the next time the lioness was in cub. She was fed freely with meat still attached to the bone, and the bones were left in the cage to be gnawed by the animal at pleasure. The result was that in the next litter all the cubs were perfect, and the hindrance was cancelled: that which an insufficient observation in the human subject would have attributed to the effects of fright or an undue influence on the imagination, was shown to be referable to imperfect nourishment, and failure in the powers of growth entirely dependent on external conditions.

May we not read a lesson from this? May we not even say, are we not reminded, that possibly, in the progress of gestation in the human female, the food, composed, among other things, too exclusively of wheaten flour, as compared with the oatmeal porridge of our northern friends, and other errors of dietetics, may sometimes deprive the mother of the elements needful for complete fœtal ossification, and engender these deformities?

Take another example, also from the young, from the newly-born—the conditions by which the deformity of clubfoot are brought about, and see how far our reasonings on the subject must affect our treatment. Clubfoot is a deformity which generally, not invariably, dates from birth. In it the muscles of the leg which control the movements of the various component parts of the foot contract unequally, and in such a way as either to raise the heel inordinately, so as to place the foot almost in a line with the leg instead of at an angle, and there to fix it; or one set of muscles twists or pulls the foot inwards, and even casts it backwards; or the opposite muscles draw the foot very much outwards, which is the rarer form. Now, the question at issue is this: there are two sets of muscles, the one helping to invert the foot, the other to evert it. In any given case, say of inverted foot, the *talipes varus*, or perhaps the *equino-varus* of authors, which are the offending muscles? Which are they which by their continued action, unbalanced by their antagonists, are to be blamed for the deformity? Are the inverting muscles too strong, and are their tendons too short? Or are they really not excessive in their action, and is it the evertors which, either from imperfect growth, from temporary paralysis, or from special cause, are too weak to resist the inward direction of the foot, the deformity being thus commenced and perpetuated? Those who argue that the invertors are too strong and too short, proceed to correct this assumed condition by dividing the tendons, diminishing for a time the contracting power of the muscles. Then the foot can be bent over to its natural position with comparative ease, and it is thought that a great triumph has been gained. But the opponents of this line of treatment say, It is true that in this way to the eye of a casual observer the cure is instantaneous and complete, but this temporary gain is more than counterbalanced by the fact that, having brought down the standard of force of one set of muscles to that of the other weaker muscles, the movements of the foot are likely to be permanently weakened on both sides, and a dangling, flail-like motion of the foot in the act of walking will be a very possible consequence. The invertors of the foot were not the muscles at fault; they were but contracting with a force of normal intensity; it is to the innate weakness of the evertors (their antagonisers) that attention should be directed. Do not, therefore, divide the tendons on the inside, but employ a gradual traction of the foot by suitable mechanical appliances on the outside, so that with some elastic force of low intensity, acting constantly in the line of the tendons of the everting muscles, more strength may be given them, and in this way at last they will tire out the spasmodic action of the inverting muscles by slowly—very slowly it may be, but yet very surely, if the system be well carried out—drawing the foot into its natural position in relation to the leg, gradually bringing up the tractile power of the congenitally weaker muscles to the standard of their antagonisers. The surgeon rarely fails to relieve such deformities by the line of treatment I have detailed, if it be commenced early enough, for it is founded on the strictest principles of inductive reasoning.

Permit me to give two other illustrations of the advances made in scientific surgery, and I will then pass on to other subjects. One of these is the opinion now expressed in what may be called, for the sake of distinction, the doctrine of tension in surgical cases, and the other is the possible organisation of the blood-clot, in open wounds, under certain conditions. Recent observations have shown that tension, which is but another form of pressure, in so far as it interferes with the capillary circulation in any part, is frequently the cause of effusion of fluid, or of the continued secretion of fluid, where as a product of inflammatory action, or from any other cause, it has been formed already. Take, by way of example, an enlarged bursa containing fluid near a joint. Let us suppose it is the bursa lying beneath the skin near the tendon of the patella at the knee-joint, which is much exposed to pressure in the act of kneeling, and is styled, when enlarged, the "housemaid's knee." It is here placed by nature like a water-cushion, to diminish the effects of pressure and friction in the movements of the joint. In a healthy state its sides are nearly in contact, and the cavity between them would not hold more than a drachm of fluid. In the case which we are supposing, the cavity, let us imagine, has in eight weeks become so tightly distended that it contains an ounce of fluid, and it is hardly possible—indeed, it is highly improbable, that these eight drachms of fluid were secreted in equal times during the eight weeks—that is, at the rate of one drachm per week; but much more likely is it that, if we had the means of exact measurement, we should find the secretion had gone on in an ever-increasing ratio—say half a drachm per week in the commencement, against perhaps two or three times that quantity at a later period. And so we may conclude the formation of fluid would go on with augmented rapidity until the containing structures had been stretched to the very utmost; then most certainly would inflammatory action arise, as happens in a few rare cases of this sort, the final progress and termination being very similar to that of a chronic abscess left entirely to nature. But as yet we will assume that there is no active inflammation. The sac of the bursa is simply distended by fluid, to an excessive degree, by passive effusion.

Now let us see what lines of treatment are open to us in the management of such a case. I will name the heroic or the most extreme measure first. It would be possible, but not good practice, to cut down upon the bag of fluid, carefully to detach it all round from its connexion with other tissues, and, without in any way piercing the walls, to lift it entirely out of the bed or space in which it lies, and thus to remove it altogether. We will assume that the patient would recover, but of course she would no longer have a loose pliable skin over the knee, but an unyielding scar at the spot where previously we had had our water-cushion. Another plan would be this: either by simply piercing the bag of fluid at some part, or by cutting into it so as to fully expose its cavity and let in the air, to set up inflammation, by which we should have the formation of adhesive material, the walls of the sac would be glued together, and the cavity obliterated; or we might carry the inflammation into the stage of suppuration, in which, pus being formed, the vessels of the part will undergo some change of condition, and after a time they will cease to secrete the glairy, watery fluid they had done; the lining membrane of the sac is destroyed, and, in fact, the bursa is gone, and our water-cushion exists no longer.

But "there is yet a third course open to us," as a once eminent statesman would have said, and that is simply to open the bag of fluid and let out its contents. This at once takes off the pressure on its internal surface, by the continuance of which the circulation and the secretion had been so disarranged as to be the cause, in reality, of that loss of balance between secretion and absorption which is the true origin of the accumulation of the fluid or dropsy of the sac. If such an incision be made, if the balance of healthy pressure be thus restored and all be kept in this state, if none of the products of inflammation are allowed to manifest themselves, quietly day by day the cavity of the bursa will shrink back to its normal dimensions, a small opening, still left patulous to the very last, will finally close, and the bursa will once more resume its functions, filled only with just enough secretion—perhaps a mere *halitus*—to allow its walls, when pressed upon, to slide over each other without friction or pain. But this result can only be secured by some line of treatment whereby inflammation and its consequences can be with certainty avoided.

Next as to the organisation of clot in surgical injury. It has been long known to surgeons, and admitted ever since the days of Hunter, that clot, or an effusion of coagulated blood, may become organised, and may even have vessels travelling through its substance after a certain interval of time, and that gradually, by some mysterious process of vitality, this clot may be converted into cellular tissue, which is, as it were, a packing or connective tissue to all the others. But then until very recently this change in the blood-clot was very rarely, if ever, to be observed, since it never occurred in open wounds, for reasons which I will explain; and in closed wounds—those in which, although the tissues had been broken down and disintegrated, there was no exposure of the parts so injured to the air—as, for instance, in a simple fracture, where the skin is entire, as compared with a compound fracture, where the skin is broken,—but every structure around the ends of the bones was broken up, torn, and separated. Much blood was effused, but all being securely protected from the air by the interposition of the skin, we were unable to discover by ocular inspection, except in some cases after death, at a distance of time from the date of injury, that the blood so effused had become organised; while in a compound fracture, where all had been exposed to atmospheric contamination, no such result was possible or attainable. But it is to the glory and triumph of antiseptic surgery that it has shown, not only the possibility, but the actual and visible evidences, of the frequent occurrence of the organisation of the blood-clot, where wounds such as I have described are successfully treated on those fixed principles of antiseptic surgery now so often described, and yet, alas! so little appreciated by the majority of surgeons.

The two conditions to which I am now referring are perfectly attainable. The open bursa shall not inflame, and the effused clot of blood lying open to the eye in the superficial recesses of a wound shall not putrefy—shall not even liquefy and dissolve away, but it shall remain solid and become organised, helping to fill up in bulk the loss of substance, the destruction of which at the time of the injury had occasioned the escape of blood from the blood-vessels.

The subject is too vast and too much beset with difficulties to be dealt with, otherwise than by contemplating its results, in a lecture such as the present. I must just remark, however, that it is only when the excretions from the bursa, or from the wound on which we seek to note the changes in the blood, are kept absolutely harmless and free from putridity, that the results I have detailed are obtainable. We know, therefore, when we may hope to meet with them; we know equally well when we can never attain them. It is not by waiting until rancidity or putridity in the excretions of a wound has just commenced, and then trying to arrest these changes and so to hope for the wished-for result; it is then too late, far too late. It is by anticipating, not by antagonising, that such changes can be averted. Surgeons forget, or perhaps they have never seriously thought of the fact, that the antiseptics which we employ, at least those now generally in use, are valueless to arrest putrefaction when once it has commenced. If the term so employed, and which is in everyone's mouth, "anti-septic" (against septicity, against putrefaction), could have been written *ante*, and read *ante-septic* (before septicity, in the order of time), and if this simple principle could have been thoroughly inculcated into the professional mind, it would have been of immense value, and would have taught us the necessity of beginning our efforts to prevent putridity at the very earliest moment after the air could touch some divided structure of the body, with which nature never intended it to come into direct contact; and if this idea were generally and systematically recognised, an immense advance would be made towards a more cordial reception of the leading principles of our practice in this mode of treating wounds.

That these principles must at last be received and adopted in the practice of surgery no one can doubt who has watched the progress which they have already made and are still making amongst operating surgeons. The day cannot be far distant—if it be not already very near at hand—in which the great founder of this system, on which he has worked with energy and earnestness, and yet with the modesty of true genius, shall witness the best of all rewards—its universal adoption. It is a system, gentlemen, which surely in the abstract must commend itself to your attention; but, like all other novelties, in theory or practice, it has had to pass through its stages of development. At first it was said, "It is not true; such results cannot be obtained; it is a deceit, a delusion, and a snare." Then, as it moved on to its second stage of growth, it was said, "It is not new; if that be all you try for, we can attain corresponding results, with equal success, by far simpler means." And now at last, happily, it is entering on the third phase of existence: its former opponents are watching its results and acknowledging its utility; and a remark which Prof. Lister once addressed to me in a letter in the early days of his labours in this direction—almost prophetic in its nature—seems now to be on the verge of fulfilment. "Don't be disheartened," he said; "go on in your work, and you will be rewarded; for the time must come when a surgeon will be ashamed to own that he cannot dress a wound antiseptically."

Thus, gentlemen, I think I have shown you that in the practice of surgery, as a division of general medicine, there is much on which to exercise the mind in its higher faculties, not only of patient and thoughtful observation, but of inductive reasoning. If the subjects we seek to investigate have thus far been obscure, how much more should we welcome the entrance of the smallest ray of the light of truth, which will always shine out most brightly in the darkness of error.

To the new students who are here to-day, to the freshmen of our year, and to those who have not yet quite determined to join us in our search for knowledge, I would say a few words which I trust may confirm the wavering, and make them more decided in their choice, whatever that may be. "One volunteer is worth two pressed men" is a well-known adage, and when a student comes to us with a resolution to study medicine with interest, and because he feels a natural taste for the subjects it embraces, he will be ten times more likely to achieve success, than if he were forced into the work by the pressure of circumstances over which he has no immediate control. But, above all things, let me warn you not to follow our profession for the sake of acquiring wealth, for most assuredly if you do so you will debase a good cause, and make shipwreck of your fortunes. It must be done for higher objects than this if it is to be done at all, and with any prospect of success. In this busy world of ours the mind must have field for action. It holds within it, from its very nature, that restlessness which will drive us to some form of work, be it bad or be it good. The idle man is not really inactive; what he does is profitless, except for evil, but you may rest assured he is still at work—planning schemes of chance, or devising new forms of deceptive pleasure. His thoughts can never rest—move on he must, and we know, alas! in what pitiable obscurity his life must end. But the man of industry—the child of toil, has, with all his apparent wants, fountains of true pleasure which are unknown to others. We are all working-men, we have all our task to accomplish, and to try to do it well is in itself a source of endless comfort.

Let me then urge you, gentlemen, in the future of your life, to select for your occupation some acknowledged work which shall bring good to others. It may be in public life, where, actuated by high principles, you set yourself to promote some great social change, or to avert some widespread disaster. And where could you find, if such principles as these are to guide you in your selection, a more worthy employment for life than that of trying to heal the sick and to help the injured? In the pursuit of medicine you must abandon self, you must take in with your mental eye a far wider circle, and you must look for your reward, not in the accumulation of wealth, but in social status and conscious power.

Thanks to the energetic teaching of Professor Morrison Watson, and the untiring industry of his earnest colleague, Mr. Perrin, the success which has attended our presentments at the primary college examination in London during last year have been all that we could desire, for we are second for all England, including the metropolitan and provincial schools; and in the second or pass examination for the diploma of membership of the College of Surgeons of England, the students educated at the Owens College (Manchester Royal) School of Medicine have been first in the pass list, showing that our students have well profited by the many advantages presented to them in the surgical instruction at the Royal School of Medicine and at the Manchester Royal Infirmary. Long may this be so, gentlemen! But we must not forget that there are examinations, and there are examinations. This past success—I may say this recent success—must not lead us to be over-confident in the future. We must strive to retain our proud position, and I am quite sure I only express the feelings of my colleagues, as well as my own, when I say that we look to the future with an anxiety equal to your own, for your success will be ours. We are bound to you by an earnest desire for your advancement, and every fresh honour gained by you for our school will be always valued by us.

One very important addition has been made to our school life during the recess, to which I must now refer, for, by mutual arrangement most creditable to both parties engaged, the very valuable and extensive library of the medical section of the Manchester Royal Institution has been handed over to the trustees of this College under certain special conditions, and will very shortly form an integral part of the contents of this building in an educational point of view. In accordance with certain rules which have been framed with much care, the students of this school will have the privilege of using some portions of this library, but the greater part will only be accessible to the members of the Society, who must necessarily be qualified medical men. We trust, gentlemen, that the inducements to acquire a taste for literary pursuits in our profession will be excited in no slight degree amongst our students by the opportunities thus presented to them, and that it will become a rule amongst them, as soon as they obtain their qualifications, to become full members of the Medical Society, of which they will have already enjoyed a portion of the privileges; and in this way we hope the existence of an extensive library within this building may be one among other means of binding you in closer bonds to the spot where your education was commenced, and that you may look back in after life, with increasing pleasure, to this as your *alma mater*—I would almost call it, anatomically, your *pia mater*.

Medicine in all its branches is now pushed onwards at so many points, and day by day so many new facts are brought to light and old ones newly examined, that it behoves us all—students as we ever must be to the end of our career—to take advantage of every means by which we may keep ourselves abreast of the passing stream, and float on the tide of progress; for not to advance is to recede. May you all look back with pleasure to student days, not as we are apt to account all that are passed as the most agreeable of our life, but as days of profitable associations, enduring friendships, and industrious habits; and may you let your motto ever be—"*Aspice finem*,"—look to the end. Do not attach too much importance to present success; it will be bought too dearly if purchased by the slightest breach of inter-professional duty,—by any temporary advantage which circumstances may throw in your way over your fellow-workers; therefore, so try at all times to follow your path in life that, as the end draws near, there may shine out in the past at least a few cheering spots like oases in the desert, which you may remember with pleasure—some generous acts performed, some well-marked proofs of conquered selfishness.

It is in our intercourse with each other in professional life, especially with those who are travelling along the same course, and perhaps at the same speed as ourselves, that we have need to be prepared not quickly to take offence, as far as criticisms on our conduct are concerned, and not too readily to criticise the conduct of others. "He is the best surgeon who has made the fewest mistakes" is a saying which will often teach the operator himself humility, or lead him to be less ready to censure others; and if, perchance, gentlemen,—and such occurrences will take place, even where your proceedings are ruled by the most honourable motives—injustice has been done you by someone who ought to have inquired more closely before he helped to spread some groundless report, alike injurious to your honour and success, do not, as some would do when so aggrieved, make some solemn vow, registered with unbending determination, that with such a man no further intercourse shall ever be had, but try rather to call to mind the remark once made on a public character unjustly accused of dishonesty—"That man's reputation is not worth much who cannot afford to outlive scandal." If this should fail, and if, as time rolls on, it would still seem that the incubus of an unjust charge could never be shaken off, make one more effort to gain the comfort of an approving conscience;—do not persecute your accuser, but pass it by, and remember it is one of the attributes of a great mind to know how to forgive an injury.

Thus it is, gentlemen, that I hope in the future practice of your profession you may be able to press on, from year to year, in a sphere of increasing usefulness, carrying with you blessings by which you may be able to encourage the weak and comfort the afflicted, and to aid in restoring to health those bowed down by injury or struggling with disease; so that at the end of a well-spent life, reviewing its receding epochs till you call back your student days—perhaps this very day in which I now address you—you may apply with hope the words of the poet, where he says:

> "Time was when thou, a naked, new-born child,
> Alone didst weep when all around thee smiled;
> So live that, sinking to thy last long sleep,
> Thou only smile while all around thee weep!"

Disease among Pigs in Ireland.—Our contemporary, the *Veterinarian*, commenting on the fatal malady which has broken out among the pigs in the South of Ireland, especially in the district around Waterford, inclines to the opinion that the pigs are suffering from typhoid or enteric fever. This disease is by no means uncommon in Ireland, and, when once it has gained a footing in a district, is sure to spread and assume a fatal character for want of all sanitary regulations on the part of the owners of the animals. Typhoid fever in pigs, which has long been known to be contagious, is now also proved by the recent experiments to be infectious in the ordinary acceptation of the term.

Abstracts
OF
INTRODUCTORY LECTURES
DELIVERED AT THE
MEDICAL SCHOOLS OF LONDON
AT THE
Opening of the Session 1875-76.

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CHARING-CROSS HOSPITAL.

MR. FAIRLIE CLARKE'S INTRODUCTORY ADDRESS.

After alluding to the recent death of Dr. Headland, to the improvements which had been made in the school premises, and the enlargement of the hospital, Mr. Fairlie Clarke went on to address himself specially to the different classes of medical students. He said that he was particularly anxious to welcome those who were joining the school for the first time that day, and to give them some encouragement and counsel. He congratulated them on entering the medical profession at such an auspicious moment, when medical science was making such rapid advances. He mentioned the subjects which would chiefly occupy their attention during the next six months, and gave them some advice as to the best way of laying out their time. Mr. Clarke said: "You are just taking the important step whereby you pass from boyhood to manhood; and it is not too much to say that everything depends on the use which you make of the time that is under your own control. Temptation rarely comes during busy working hours; it is in his leisure time that a man is either made or marred. Make up your minds firmly as to your proper line of conduct, and, having done so, follow your own course with decision and resolution. It is oftentimes more really manly to dare to say "No" than it is to fall in with the suggestions of those who may be older than yourself in years or academical standing." He recommended a certain amount of reserve in the first instance in the choice of friends, but assured them that they would by-and-by find among their fellow-students not a few whom they might well be happy to gain as life-long friends. He pointed out that at Charing-cross a diligent student can always obtain one practical appointment after another as long as he remains *in statu pupillari*; whilst at the larger hospitals this is frequently impossible, and the students are often obliged to enter on the practice of their profession furnished with little more than the information that can be obtained from lectures and books.

To the second-year's students, who would now be expected to visit the wards regularly, Mr. Fairlie Clarke pointed out the great interest of in-patient practice, both on account of the severity of the cases treated and the more personal relations which are established between the doctor and his patients; and these personal relations cannot fail to draw out our sympathies. He said: "We seem to tread on sacred ground while we accompany the hopeless sufferer to the very verge of this world, to that bourne whence no traveller returns, and this invests our profession with an interest and a solemnity entirely its own." He specially urged upon those students who held in-patient appointments the cultivation of a considerate manner in going about their work, saying that this was quite compatible with a keen interest in the study of disease, and would be likely to win the confidence of the patients.

To the senior students Mr. Fairlie Clarke said: "To you, more than to any group among us, is the welfare of this medical school committed. I do not under-estimate the influence of your teachers, but more a great deal than what we can do is what you can do. Our influence is exercised only occasionally, yours is exercised constantly. We are placed here in authority, and we are all of us less disposed to accept the advice of those set over us than we are that of our equals. It is scarcely too much to say that what you are the younger students will be. Suffer me, therefore, to impress upon you one or two pieces of advice. Remember the weight that your example must of necessity have, and let no idle word thoughtlessly spoken sully the purity of the young minds that are joining us for the first time to-day. Let no word or act of yours cast ridicule on the principles that have been learnt at a mother's knee and fostered under a father's roof. Let nothing induce you to suppose that idleness and dissipation are manly. There is no true manliness but in the diligent discharge of duty. If you, senior students, act in the spirit I have endeavoured to indicate, then hard work and good order will be general among the whole body of students.

"I often think, as I come within sight of Charing-cross, that the very situation of our hospital is a constant reminder to us to do our duty faithfully and in a high-minded way. We are here surrounded by monuments of national grandeur. To say nothing of Charing-cross as a great commercial centre, we are here close to the Houses of Parliament, to the chief offices of State, and to the abodes of Royalty. The improvements that are going on in our immediate neighbourhood are beautifying it, and making it more worthy to be, as it is, the great centre whence the influence of England goes forth over the whole world. Often when I have been coming to my work here I have bethought me of that bright morning in October, 1805, when the English fleet bore down on the united squadrons of France and Spain off Cape Trafalgar. It scarcely needs the inscription on the Nelson monument to remind us of the watchword, now become an English proverb, which was then signalled from the masthead of the *Victory*, and which stimulated all to do their duty so gallantly. Or I have bethought me of the conqueror of Scinde, Sir Charles Napier, the very soul of honour and rectitude, so independent in his bearing towards his equals, so free from all time-serving and tuft-hunting, so just and considerate to those under his command, so kind and humane to those who were in trouble or distress. Or I have bethought me of Havelock, the very ideal of a soldier, an officer, and a Christian, doing his work diligently and cheerfully, notwithstanding straitened circumstances and professional disappointments. It was not the stimulus of early success, nor the favour of princes, nor any lower motive, which carried him through the disappointing years that formed so large a portion of his military career. It was nothing short of a strong Christian principle which sustained him.

"The monuments of these great men have been erected in our immediate neighbourhood, not merely to do honour to individuals, but also to keep alive in the breasts of each succeeding generation the virtues for which they were distinguished. And if there is any class of the community who are likely to be influenced by the recollection of their noble deeds, it is surely the young men of England, our educated youth, before whom life is just opening. Duty, honour, and the fear of God—these were the mainsprings in the characters of the three heroes to whom I have alluded. If you, students of Charing-cross Hospital, are fired with the same principles, we need have no fears for the success of the session that opens to-day. It cannot fail to be a happy and a prosperous one; and we may leave in your hands the interests of this medical school, feeling confident that they are safe in your keeping."

LONDON HOSPITAL.

INTRODUCTORY LECTURE BY DR. BATHURST WOODMAN.

After some prefatory remarks on the mingled feelings with which such a meeting of old and new students must be regarded, the lecturer remarked that the history of eminent medical men refutes the common notion that the study of medicine has a tendency to create sceptics. Such is not the case. Celsus, the medical writer, and Celsus who was answered by Origen, were separated by a whole century. Nor is it true that the medicine of antiquity was all a farrago of nonsense or a collection of quaint conceits. A careful study of the writings of Hippocrates and other ancient writers disproves this, just as the metrical precepts of the School of Salerno, or a view of the fine lavatory of Gloucester Cathedral, disproves the popular lecturer's notion that people never washed at all in the Middle Ages.

Vivisection was next alluded to, and, whilst its abuses and the needless barbarities at Alfort (twenty years ago) were condemned *in toto*, the necessity for experiments upon animals was insisted upon, and justified from the imperfections of our art, from the examples of the wisest and best of its professors in the past, and because human life and human happiness are so infinitely more valuable than the lives of animals. If those who oppose all such experiments could witness the scenes of horror often met with in our hospitals and in private practice, their opposition would be less keen. The late Sir Robert Peel's life would in all likelihood have been saved had chloroform been more known when he met with his accident, and such substances as chloroform must first be tested upon animals. We must look to a healthy public opinion to regulate these experiments, rather than to any sensational cries or legal enactments. Dr. Woodman next insisted on the necessity of students earnestly resolving to train themselves for the practice of their profession. "It is no longer possible to learn our art from the pages of any manual, however excellent, or from any one teacher, however eminent. Every day increases our difficulties in the diagnosis of disease. For example, a few years ago only wall-papers of a peculiar grass-green colour contained arsenic in any appreciable quantity, or so as to be dangerous. Some people think so now. But what is the fact? Since the general introduction of aniline colours, no paper, however sober its hue, can be trusted as free from arsenic until it has been carefully analysed." Numerous examples were given of lead and other poisons in articles of food, in cosmetics, and in clothing; and even in our medicines there are often dangerous adulterations. Hence the necessity that a medical man should have at least some general acquaintance with chemistry, and also with arts and manufactures. A part of this, at least, should be gained before coming to a medical school. Parents and guardians were earnestly appealed to to give their sons or wards, if about to enter the medical profession, a thorough grounding, not only in English, but in Greek, Latin, and elementary mathematics. From his experience as a teacher and as an examiner, as one who had helped some hundreds to gain diplomas, not from one examining body alone, but from almost every examining board in the three kingdoms, he confidently affirmed that nine-tenths of the rejections and failures arose from defective preliminary education. When a student came to the hospital and medical school, he ought not to be forced to work at any grammars or lexicons except those of disease; the wards of the hospital should be his chief books. Let not the student be too proud to learn from everybody or anybody. All his teachers will not be equally eloquent or equally skilful, but much may be learnt from the practice of the very worst physician or surgeon; much may be learnt from his fellow-students; even a fisherman or a ploughman may often be well-read in the book of nature. Great men like Linnæus and Agassiz knew this well, and acted upon it. If willing to be taught, the stores of knowledge in the London Hospital, now one of the largest in the metropolis, were shown to be almost inexhaustible. "If the difficulties of your profession are increased and are increasing, so are the facilities for learning. Here you will meet with every possible aid from the staff." The lecturer showed that the London Hospital had never lagged behind in the march of medical progress. Its staff and its alumni had not only availed themselves of every scientific improvement, but had largely added to the general store. They were truly practical men; but their practicality was not that of ignorance, but of science. Students were encouraged to work for the prizes which are offered by the London Hospital Medical College. This year some nine principal prizes, whose money-value alone is over £300, are to be given away. He defended the system of prizes. It had once been abandoned at the London Hospital; but the results were not encouraging. He earnestly begged the students not to waste their first year, as too many had done. Let them never forget that the chief aim and end of medicine was to cure and to relieve. Lamartine had well said: "La médecine guérit quelquefois, soulage souvent, console toujours." Let their aim be to multiply the cures. "Depend upon it the public will never tolerate us, or pay us fees, merely to stand by the bedsides of those they love as mere scientific observers, or a sort of Greek chorus. For although there be times when the highest wisdom is to hold our hand lest we rudely quench the struggling spark of life, it far more often happens that we can do much either to cure or relieve pain. But to do so we must learn all we can, and must ever be learning."

Examples of successful treatment on scientific principles were given. Hopes were held out that even cancer and tubercle—those malevolent twins—might in time be conquered and disarmed by careful studies and experiments upon animals. The influence of fashion in medicine was deprecated; and the lecturer concluded by warning the students against the baneful influences of dogmatic scepticism, which is often as injurious to the progress of the healing art as it is to the spiritual and eternal welfare of the man.

MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY MR. B. THOMPSON LOWNE.

The lecturer (who spoke without notes) said—"We must admit that theory has much to do both with the advancement and retardation of science, and at the very outset of your career as medical students, you are brought face to face with the rival claims of facts and theories. We must bear in mind that, although false theories have often retarded progress, no progress is made in science except when theories are used as instruments of research. Indeed, I do not know how any sharp line can be drawn between a fact and a true theory. A fact is the interpretation of certain external phenomena by our minds, for of the phenomena themselves we can know nothing, we only know their effect on us; so a theory is the interpretation of a more complex set of phenomena by the same instrument. Misled, then, by false views and theories, and unguided by true ones, men made no progress, but rather retrograded, until the modern science of medicine took its birth in the master-mind of Sydenham, who was truly a second Hippocrates. But I need hardly remind you changes had occurred in the world during this lapse of time; men's minds had been freed by changes in their religious tenets, culminating in the work of Luther. The greatest, perhaps, of man's inventions—the printing press—was actively engaged in reproducing the writings of the Ancients, and in rendering the workings of men's minds permanent, so that they should defy even the ravages of time. Columbus and Galileo had lived, and their discoveries were vast experimental verifications—the touchstone of inductive philosophy. Pliny, centuries before Columbus, believed the earth to be a globe, because he knew that the water that forms the dewdrop assumes the spherical form. Copernicus and Kepler had reasoned out the laws which govern the movements of the heavenly bodies; yet, even to a thinker like Lord Bacon, theories of spirals and vortices with the earth for their centre seemed more probable, and the great Chancellor never grasped the fact that Galileo had set the matter at rest for ever when he demonstrated the moons of Jupiter and the phases of Venus. Many men, however, learned to recognise the principles of the true reasoning which led to truth from the false and *a priori* deductions which led to no good results. To return, however, to our own science. Vesalius, even against the powerful antagonism of Fallopius, had shaken the authority of Galen in anatomy, and Harvey had discovered the circulation of the blood by the experimental methods. Chemistry was an infant science during the lifetime of Sydenham, and owed its existence to the minds of Boyle and Beecher. The time was propitious—the bright dawn of science had commenced, and it wanted only a master-mind to make medicine a most noble study. Sydenham laid its foundations on the work of Hippocrates, and Boerhaave took up the work where Sydenham left it. From that day to this great names and great workers have never been wanting in the medical world—men with free enlightened minds seeking laboriously for truth and finding it. * * *

"Knowing that your scientific work, through no fault of your own, must now begin *de novo*, I would urge you to lose no opportunity, but to use the best efforts to make up lost time."

UNIVERSITY COLLEGE.

PROFESSOR CORFIELD'S INTRODUCTORY ADDRESS.

After saying that most medical addresses nowadays treated of sanitary matters, and that therefore the audience would not be surprised if his did, Dr. Corfield went on to point out the importance of sanitary science as a part of the education of every medical man. "As it is not, like most of the subjects in the medical curriculum, made a compulsory subject of study for medical students, most of them not unnaturally think that it is not necessary for them to learn it, and so they pass it by; nay, more, their object in coming to a medical school is, they conceive, to learn to cure disease, and it may seem to them that it is not their business to try to prevent disease. Let us consider this for a moment. Medical men know more of diseases than other people do; they not only know much about the remedies that have to be employed, but they of necessity know much about the ways in which diseases spread, and much, therefore, about the ways in which they may be prevented. Are they not, then, bound to use their knowledge for the good of mankind? Are they not bound to make that knowledge as perfect as they can? And have not medical men always recognised this from the time of Hippocrates to the present day? Hear what our own Sir William Jenner says:—'No one acquainted with the present state of the science and art of medicine will for a moment question that to prevent disease is its first and most important aim.' Weigh well these words of your great master and mine, and place beside them those of Sir William Gull: 'It is enough for us that diseases prevail to stimulate our best efforts for their prevention, without our asking a question beyond;' words worthy to be remembered by every medical student. And have not medical men been the discoverers of the methods at present known for the prevention of disease? Look at the discovery of vaccination, the preventive of small-pox, the most terrible and fatal plague that ever appeared on the face of the earth. Who made that discovery? Who have strenuously advocated its advantages in spite of ignorant and often interested opposition? Who have proved that the ravages of small-pox are lessened, and that the disease might be exterminated by means of it? Who but those the hope of whose gains is gone by its practice? And why is small-pox not exterminated? It is because ignorance and prejudice prevail, and prevent the efficient carrying out of the Vaccination Laws, and prevent the general adoption of revaccination. Germany has set us an example here, for in March of last year a law was passed making the vaccination of infants, and also the revaccination of children of riper years, compulsory throughout the whole of the German Empire. If this law is strictly enforced, we shall see the practical extermination of small-pox in that great empire, and then perhaps other countries may follow the example. You may all help in hastening the arrival of the day when a similar law will be passed in this country, and it is your duty to do so—a duty you owe to the memory of Jenner.

"Let us look at some other diseases. Where are the black death, the sweating sickness, and the plague? Where is scurvy, that decimator of the armies and navies of the world? They are where typhus fever will soon be, where enteric will be some day, where every disease which we conquer will be sooner or later—they are, practically speaking, exterminated. Look at the discovery, by medical men of our own day, of the difference between the conditions under which typhus and typhoid fevers spread; or look at the discovery, by an old University College man, Dr. G. Buchanan, of the connexion between phthisis—our great endemic plague—and dampness of the soil below the houses; and you will see that medical men are finding out the ways of preventing disease.

"All medical men are liable to be asked their opinion nowadays upon the great sanitary questions of the day, and are expected to be generally acquainted with the works carried on, both engineering and architectural, for the well-being of the community; they are especially frequently required to give an opinion about the sanitary condition of internal household structures; but it is especially necessary that they should be acquainted with the means for preventing the spread of contagious fevers. Medical men, out of deference to the wishes of their patients, very frequently do not report cases of infectious fevers to the sanitary authority, and so it is essential that they should know how to prevent these diseases from spreading. What we really want is a law to make it compulsory on medical men to report these cases to the medical officer of health, and then patients would have no choice in the matter. Fortunately nature does much more to check the spread of these diseases than we can do; for if a man took scarlet fever in the first week of the year, and gave it to two persons in the second week, and each of these to two others in the third week, and there were nothing to prevent this going on at the same rate, everybody giving it to two persons (and only to two) in the week after that in which he got it himself, which is not at all an unreasonable rate, the people who would have had scarlet fever at the end of the year would be sufficient to populate four million five hundred thousand worlds, with a thousand millions of people each! So you see it is fortunate that something stops the spread of infectious fevers.

"Medical men are also bound to study hygiene because it affords important aids to cure, fresh air, exercise, and a proper diet being often more important to a patient than drugs. Remember the words of Rollet, of Lyons, 'Medicine cures individuals, hygiene saves the masses,' and the maxim of Hippocrates, 'Nature is the healer of diseases.'" Dr. Corfield then referred to the remarkable evidence given by Dr. Fergusson of the degeneracy of the factory population, and his opinion that want of milk was the chief reason for it; he said that the only way to get milk enough was by the utilisation of the sewage of towns, and that the solution of the sewage question would be the prevention of the degeneracy of the population of our large towns. "But it is especially essential that those who may become medical officers of health should be thoroughly acquainted with hygiene; they are consulted on all possible matters relating to the public health, and they must be thoroughly posted in all sanitary matters. Degrees and diplomas are now granted for State Medicine, as it is termed, and the facilities for instruction in the various branches have now been greatly increased in the College by the establishment of a practical course under the charge of Professor Williamson and myself, and a new laboratory for hygienic analyses is being fitted up and will soon be ready for use."

WESTMINSTER HOSPITAL.

INTRODUCTORY ADDRESS BY MR. RICHARD DAVY.

The speaker said that he disapproved *in toto* of introductory addresses, but, at the request of the Medical Council, conformed to custom. Both students and teacher preferred a day's pheasant shooting to hearing or giving an "introductory." As a surgeon, he should cut down his sermon from one hour to fifteen minutes, and his successor might still further reduce the volume of these fruitless harangues. After welcoming his audience, and referring to the changes in the hospital staff, the lecturer drew attention to reform in the practice of medicine and surgery. Far too much stress was laid on the necessity of elaborate teaching. Above all, a young man should be taught self-reliance; his own efforts would then pull him through, just as a vigorous constitution was the mainstay of recovery, independent of elegant prescriptions and repeated visits. University discipline and residence were strongly insisted on; healthy tone and lifelong friendships were acquired by this training, in lieu of an entire want of control now felt by hospital teachers over their pupils, and the acquaintance of these young men from the country with interestingly repulsive specimens of shark (*squalidæ*), known as London landladies. The payment and honours conferred on medical men were next criticised: their salaries were simply miserable; hospital physicians and surgeons were for the most part unpaid; Poor-law officers most piteously; surgeons in the services very badly; and young practitioners not at all. For seven years' hard work at the St. Marylebone Dispensary he had received one guinea, and a very distinguished London assistant-physician had found that his salary equalled that earned by the man who put the skid on the omnibus wheels at Holborn-hill. He considered that gratuitous work and its consequent dignity were subjects worthy of woman's consideration, and that ladies desirous of occupying a congenial sphere in the profession might ease the men's shoulders from upholding the work and dignities of unpaid appointments. Mr. Davy challenged the authorities to show reason why ancient coroners should call upon qualified house-surgeons and physicians to give their evidence without fee. Why should the Registrar-General or Commissioners in Lunacy expect skilled services for nothing? The lecturer warmly supported the Contagious Diseases Acts, and was pained at the nonsense which had been let off over vivisection. Practical experiments were as important to medical men as to the Royal Artillery on Dartmoor. In conclusion, he advised everyone to resign at once any and every thought of becoming a medical man unless he possessed three qualifications:—1st, independence; 2nd, an aptitude for, and love of, the profession; 3rd, the readiness to pay a heavy premium in this world for his prospects of reward in the next.

THE
TREATMENT OF SECONDARY AFFECTIONS OF THE HEART.

By J. MILNER FOTHERGILL, M.D., M.R.C.P.,

JUNIOR PHYSICIAN TO THE WEST LONDON HOSPITAL.

(*Concluded from p.* 446.)

It will perhaps best illustrate the subject of this paper to give one or two typical cases; and then to consider the points of diagnostic importance to be attended to in order to recognise secondary affections of the heart, and to discriminate between them and primary affections.

In the latter part of July, 1874, a retired Indian medical officer called on me and asked me to visit his wife. Being engaged that day, and finding it impossible to see her till the morrow, I made inquiries of the gentleman as to her condition. They were old friends of mine, and I knew the lady to be gouty, though she had never had a regular attack of gout in any of her extremities. He told me that his wife had got intermittency of the heart; that it had come on quickly, it not being more than ten days since it was first observed, and that it occurred every third beat very rhythmically. This did not look like true cardiac failure. On inquiring into the other characters of the pulse, he stated that the two beats betwixt each intermission were strong and well sustained. This was an important point, and cleared the diagnosis very satisfactorily. I felt no hesitation in giving it as my opinion that the intermittency was gouty in its origin. To some readers this may seem a bold diagnosis and an unverifiable hypothesis; but it was warranted by the symptoms and vindicated by the results. I gave him a prescription containing iodide of potassium and bicarbonate of potash, in buchu; ordered a slop diet and rest in bed until I could see her the next day. On visiting her the diagnosis was confirmed. The intermittency was already less regular, was no longer rhythmical, and the patient felt better for the treatment. In five days the intermittency had fled and the patient felt almost well, and in a few weeks all sense of illness had disappeared under a combination of iron and alkaline waters. Since then this lady has passed through a sharp attack of bronchitis without any evidence of cardiac debility. In forming the diagnosis in this case, I should not have felt justified in being so positive if previous acquaintance with similar cases had not prepared me for such a conclusion.

At that time I had another lady under care who had suffered repeatedly from suppressed gout, and been under various practitioners, all agreeing in their diagnosis. In this case there was much palpitation, attacks occurring most frequently during the night, when the sensation was that the heart was about to stop altogether. Under a restricted diet, nitrogen being but sparingly admitted, and potash with buchu being administered, great relief was experienced. It was, however, found impossible to get the patient to continue the restricted diet for long, and resumption of the usual dietary and neglect of the medicines always brought back the cardiac trouble, which went off on once more following out the treatment.

Mr. C——, a literary man of much mental activity, consulted me about his heart. He suffered from attacks of dyspnœa, giddiness, and oppression over the heart, which were increasing in force and frequency. There was also numbness down the left arm. This gentleman's father had died of angina pectoris, and he was much alarmed at his symptoms. It appeared that a few weeks only before the consultation he had been in the country and taken severe and prolonged walking exercise without any symptoms of cardiac weakness. He was gouty, and had recently been living well, eating much animal food under the idea that it was the most strengthening diet. A restricted dietary, with potash and buchu, soon relieved him from the attacks, and he has continued well since. This is now fourteen months ago, and he has had no return. When not feeling quite well, he falls back upon his medicine, which soon puts him to rights.

Mr. B——, a retired chemist, consulted me for similar attacks, and under a like treatment he also got relief forthwith, and has since been well as regards his heart troubles.

These are a few out of a number of cases which have come under my notice, in private and in hospital practice, which have presented like features, and which have got well under similar treatment. This latter is a point of much importance. Potash, as a muscle poison, in all its forms, is a powerful depressant of the heart, according to Botkin, of St. Petersburg; and Ringer speaks of the depressing effects of the iodide. If the heart had been primarily at fault there is every reason to suppose that the treatment would have been pernicious rather than beneficial; but being only secondarily affected, the effect of these measures, in improving the depuration of the blood and so doing away with the heightened blood pressure, was to relieve the heart and to disperse the symptoms of cardiac adynamy. It is not easy to say how the buchu acts in these cases. It has been said that it increases the amount of solids in the urine; but this, again, is denied. Certain it is that, in practice, the addition of buchu seems to add to the efficiency of the potash. It forms, at any rate, an agreeable vehicle, and goes well with iron. It is good practice to substitute potassio-tartrate of iron for the iodide of potassium on the relief of the symptoms; and this mixture of potash and iron may be continued with advantage, as a tonic, for some time in these cases. It is also desirable to prescribe mineral waters—Seltzer, Vals, Vichy, Couzan, and others—as a beverage to be taken permanently. With Marsala, claret, or a little gin or Schiedam, they are agreeable to the palate, and act efficiently in helping to remove the products of waste; the accumulation of which forms the condition designated lithiasis, commonly termed "suppressed gout."

The attacks known as gout at the heart are produced by the sudden rise of blood pressure from arteriole spasm and the consequent cardiac embarrassment. It is easy to see how severe and even fatal attacks may be thus induced. Disease of the aortic valves is also common in gouty individuals, and the secondary affections of the heart may be complicated with primary disease of that organ; and in these cases it becomes necessary to discriminate between the two elements of the case. It becomes desirable, in cases of combined secondary and primary heart trouble, to combine the treatment of each form, and to fit complex treatment to complex maladies.

In forming a diagnosis of secondary affections of the heart, and determining that the heart symptoms are really consequential to some prior and causal disturbance of the circulation, there are several points deserving of special notice.

1. The attacks of dyspnœa, palpitation, or sensation of heart stoppage are not induced by effort, but come on independently of any exertion. They not uncommonly come on during great quiet, and even when lying in bed. Not rarely they permit of active exertion, which does not tax the heart in this class of cases; whilst in primary affections of the heart effort always—or almost always, to be very safe—reveals the existing adynamy. A little active movement will render the evidence of true heart failure more pronounced, as I remember well in an old man who used to take a sharp turn round the house to illustrate how exercise made his heart palpitate; while in pure cases of secondary heart affection exertion does not induce the attacks.

2. The pulse is not that of cardiac debility: even when the pulse is very irregular there is a force about it which resists compression, quite different from the irregular compressible pulse of cardiac dilatation. There is indeed the sustained pulse of high blood-pressure in the midst of the irregularity, or intermittency. Not rarely, if the arteries are atheromatous, the irregularity is found along with a full sthenic and powerful pulse—a combination, once well noted, ever afterwards recognisable, though not to be described by words. It is a matter of no slight moment to become familiar with the pulse of these conditions. The feeling of the pulse here is not a mere formal matter, but a measure which often gives valuable indications and directs the line of investigation to be pursued.

3. The first sound of the heart is good usually—loud, clear, and of fair intensity. It preserves its muscular sound and is not simply valvular, and does not approach the second sound in character. When there is much hypertrophy the first sound is loud and long. Not uncommonly there is some reduplication of the first sound from delay in the contraction of one of the ventricles. On examination of the heart, it is found acting well and not giving evidences of lack of power. The rhythm may be disturbed; but there are not evidences of heart failure accompanying the disturbed rhythm.

4. The second sound of the heart is accentuated. This is a most important diagnostic point. In primary disease or debility of the heart this symptom is never found;* in the forms of heart trouble which are the consequences of some prior disturbance of the circulation, causing a rise of blood pressure in the arteries, this objective symptom is never wanting. The accentuation of the second sound will, of course, be more or less intense according to the rise in the blood pressure. It may be found at both the pulmonary and aortic valves. It is most distinct, however, at the aortic valve; and heard most loudly at the second right costo-sternal articulation. The semilunar valves are closed by the recoil of the elastic arteries; if then the tension in the arteries is increased, these valves will be closed with unwonted force, and their closure produces an accentuation of the normal sound. Such accentuation is ever found in the pulmonary valves when the mitral valve is diseased: here it is the measure of the engorgement of the pulmonic circulation. When heard at the aortic orifice this accentuation may be associated with aortic aneurism (Begbie), with general paralysis of the insane (West Riding Asylum Rep., 1873), or with the general rise of blood pressure in lithiasis. It is easy to separate these conditions. The Germans attach great importance to this objective symptom, as might be supposed from their general high estimate of signs whose existence and explanation are clear and rational. If the second sound is produced by the recoil of the elastic arteries, when the blood pressure is abnormally high this sound will be unusually loud. There is no ambiguity about a sign of this kind, and its logical clearness endears it to the Teuton mind. Hence they attach great and deserved importance to this accentuation of the aortic second sound in the diagnosis of chronic Bright's disease; under which circumstances a rise in the blood pressure and this indication of it are most commonly found.

By such means, then, are secondary affections of the heart to be distinguished from the primary affections of that organ. If the examination be made with sufficient care, and there also exist a fair comprehension of the subject in its entirety, the practitioner should be able to discriminate the exact form of the affection; and if there be also some actual cardiac debility, to allow for it, both in the diagnosis and in the selection of the line of treatment. Having decided that the cardiac troubles are secondary to some primitive affection of the vascular system, causing a rise of blood pressure, the principles of treatment are as follows:—

1. To improve blood depuration by removing the accumulated products of nitrogenised waste; and this can be best accomplished by a combination of measures. First: to cut down the nitrogenised elements of the food to the minimum, so as to lessen the production of waste products. Second: to administer potash or lithia in combination with vegetable diuretics, and so to aid in the elimination of waste by the kidneys. This latter action will be assisted by throwing the skin into action.

2. If there be present a certain amount of cardiac debility, the depressant effects of the above treatment may be met by the administration of digitalis along with them.

3. After immediate relief has been furnished it is desirable to administer alkalies together with iron for some time. Contrary to what is indicated in primary debility of the heart, the diet should be restricted, and the amount of nitrogen in the ingesta should be small.†

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* This accentuation is not to be confounded with the brief but loud second sound of unfilled vessels; often this is only pulmonary.

† The recent papers of Parkes, as to the effect of a non-nitrogenised diet upon the blood pressure, lowering it very remarkably, are very suggestive as to the diet of persons suffering from secondary affections of the heart. (THE LANCET, May 23rd and 30th, 1874.)

4. Active exercise in these cases is rather indicated than otherwise, and the increased oxidation induced thereby is beneficial, while the exertion does not act injuriously upon the heart.

The neurosal affections of the heart require a treatment of their own. What the indications for treatment are in this class of diseases will need another and concluding communication.

Lower Seymour-street, W.

ON SOME EFFECTS OF MODERN RIFLE PROJECTILES.

BY DR. HUGO SENFTLEBEN,
LATE STAFF-SURGEON WITH THE 61ST PRUSSIAN INFANTRY IN FRANCE.

IT is a well-known fact that each party in the late Franco-German war charged the other with using explosive bullets for small arms, in violation of the treaty proposed by Russia and accepted by most of the European powers, which forbade any explosive projectile weighing under one pound. Even the Prime Minister of Germany made such allegations the subject of diplomatic representation; and not only the French newspapers brought similar accusations against the Prussian soldiery, but I had myself, unluckily, to experience reproaches of the same kind on the part of French officers, when, after the last of the bloody encounters with the army of the Vosges, a Garibaldian colonel detained me as prisoner of war because I had remained single on the battle-ground to attend upon the wounded of both parties.

I have endeavoured in vain to find any scientific reasons stated in support of those angry recriminations, though I am not at all surprised to have heard them repeated by soldiers who saw the effect and judged from the appearance of hostile rifle projectiles when in the act of striking. It is, however, the great force of propulsion which modern rifles give to their elongated bullets, and the much more frequent skirmishing in mountainous districts, and the village and town fights, which offer numerous occasions for *ricochets* and *splitting* of *projectiles*, that give us an easy and natural explanation for many cases of reputed violation of a now *established* international law. The very destructive effects which are made in the animal body by the explosive bullets used in the chase of large game prove the wisdom and humanity of such a law; and when the journals of Lyons announced the arrival of a renowned lion-hunter from Algeria amongst Garibaldi's sharpshooters, the news was a little trying to those of his enemies who believed in the rumours of French faithlessness to the contract. But during the three days' hard fighting around Dijon in January, 1871, and at the subsequent surprise in Prauthoy, I have seen nothing that could confirm suspicions of the kind, though I frequently noticed balls that struck a wall split up and dispersed in pieces, as if they were exploding, like liquid metal falling from a height on stony ground.

The aptitude to change form and to break up into irregular and jagged fragments when hitting on a stone or metal, as steel, brass, or iron, depends not only on the initial velocity and the consequent strength of impact, at even longer distances, but also very materially on the composition of the ball. Pure lead, as it was used with the Austrian Lorenz rifle in 1866, the German needlegun of Dreyse, and the old French Minié muzzle-loaders, or those converted on the Snider principle into breech-loaders *à la tabatière*, splits much more easily than the bullet of the Chassepôt or others of the modern breech and magazine loaders, which are hardened by an alloy of tin (the Henry-Martini projectile, e.g., contains 1 : 12 of lead). The latter penetrate more easily the tissues of the animal body, and shatter—if their force of propulsion (i. e., initial velocity) and weight be equal—more readily the bones without changing their form, as Professor Longmore had sagaciously pointed out beforehand ("On the probable Surgical Effects in Battle in case of the Employment of Projectiles of a more Elongated Form"—*Army Medical Rep.*, vol. v., 1865). They resemble in this respect grapeshot, which is so much more destructive than the old round musket-ball. The reputed destructiveness of the Dreyse rifle projectile—the Prussian "langblei" (elongated lead)—depended, on the contrary, on its greater propensity to break up and hurt through its sharp-edged débris. I remember the case of an Austrian foot soldier from Servia, who was wounded at Koeniggraetz by a "langblei," and, with a fractured tibia, had been at some hospital in Saxony. Three weeks after the battle he came under my care at Berlin, walking into the ward with a stick in company with others. For some days he could scarcely be kept in bed, until he began to complain of violent pains and repeated hæmorrhage set in. There were two openings in the leg at the middle of the calf, showing entrance and exit of the ball. Four weeks after receipt of the injury I was called to see him, when he was nearly pulseless from loss of blood. An incision led into a large hollow filled with clots, fragments of bone (the tibia was broken through), and some sharp-pointed pieces of lead. The circular amputation below the knee, which I performed immediately, saved the man's life, who made a very quick recovery; and I found the posterior tibial artery injured and ulcerated for the length of nearly an inch by contact with those spiculæ of metal, which but for their dangerous sharpness would have been comparatively harmless. There are plenty of similar cases on record. The power of the hardened Chassepôt bullet may, however, act with very great effect on a bone without causing any deformity of the projectile. I saw a remarkable instance of this when in garrison at Belfort during the armistice. The surgeon in charge of the German soldiers wounded during the siege consulted me about a Landwehr artillery-man, thirty-nine years old, who had in a night assault been struck by a Chassepôt projectile, which entered his shoulder-joint from above at very short distance, and left the arm at the lower insertion of the deltoid muscle, without losing its shape. Two months had elapsed, and the patient was nearly exhausted by septicæmic attacks from destruction of the joint, which I found transformed into an abscess discharging incompletely through two or three fistulous openings at the usual points. I made an incision through the wasted deltoideus, emptied several ounces of stinking pus, and, on introducing my finger, found the articular head of the humerus broken off at the anatomical neck and forced like a wedge between the two portions of the longitudinally cleft diaphysis, which, being only partly divided, acted like a pair of pincers, and kept the detached fragment entirely jammed. With some difficulty I extricated the latter; there was no other necrosed bone, and the patient did so well that he was soon afterwards sent to Germany. The very elasticity of the fissured shaft proved that the fracture and impaction of so small a portion as the anatomical head was not due to morbid fragility of the osseous tissue, but to the extraordinary propelling power of the *hardened* bullet. So I have observed a Chassepôt penetrate both knee-joints, crushing the condyles, and cut it out unaltered in shape from under the skin of the outer joint.

Where greatly deformed or broken projectiles are found in wounds, a doubt may arise whether such deformation or breakage be caused by the ball expending its force on the bone, or whether it entered the body after rebounding from some harder substance, and becoming deformed or split up before striking the osseous tissue. The appearance of the entrance opening seems to be less important for deciding this question than the shape of the metal itself. Even soft lead bullets will seldom acquire so jagged and torn forms by impact on bone as they present when ricochetting from some harder metal or stone. Two very instructive cases of this kind came under my notice after the battle of Woerth, when some of the French wounded were sent up by rail to the fortress of Minden, where I was engaged in establishing a reserve hospital. Both soldiers had the humerus broken at its upper third in a very similar manner—a simple horizontal fracture with the projectile lodging. One was a Cuirassier belonging to those famous but unfortunate squadrons of Reichshofen, the other a little, fat, old woman-like Zouave, who lamented loudly when I cut out the ball, whereas the Norman horseman looked on the same operation with sombre and stoical mien. The unburied masses of lead were much like each other, quite shapeless, like a piece of molten metal thrown into water and suddenly cooled; the Cuirassier's was rather more flattened and jagged. Had these Frenchmen received the Prussian "langblei" direct from the rifles the fractures of their arms ought to have been splintered, judging from the deformity of the projectiles; but the lighter nature of the injuries, and the circumstances under which they were inflicted, pointed to an indirect course. The horseman's ball had evidently rebounded from his own or his neighbour's steel breastplate when they were charging; the other had been struck *par ricochet* in a skirmish between stone walls.

Injuries of the soft parts effected by deformed or split projectiles hitting indirectly must be very numerous in modern warfare. The frequent fights in the French vineyards favoured them particularly, and caused many of the slighter wounds. Before Dijon I had made quite a collection of such Chassepôt balls, altered in their shape in the peculiar manner which gives them the appearance of a mushroom, with broad stem and an overlapping flat top; this latter representing the compressed forepart, the former the posterior unchanged end of the projectile. Several of them were cut out from close under the skin, which they had just penetrated; and though their power of percussion had been nearly expended, the opening in the skin appeared always like a simple slit, not as an irregular or crushed punch-hole. The ricochetting soft lead bullets of the Dreyse and the French *tabatière* rifles showed, as a rule, a much larger amount of deformity, their original shape being often altogether lost; their weight and size being at the same time greater than the Chassepôt (the latter weighing only 380 grains against 480 and 530 of the former), the width of their channels and the laceration of the soft tissues they caused were consequently larger. On the third day of Dijon a non-commissioned officer of the 21st Prussian Foot, who had been, as skirmisher, lying flat on the slope of a railway embankment, came to our ambulance (Verbandplatz) with a wound in the lower maxillary region into which I could introduce two fingers, finding a rather large bag between the larynx and lower jaw, partly filled with blood-clots and torn muscle, but no foreign bodies. The patient, an examined student of Catholic theology, who was not yet consecrated as a priest, told me that he had been aiming his own rifle when something struck the side of his throat. Whilst I was still probing the entrance channel one of my assistants had removed the man's shirt, and pointed to a swelling over his shoulder-blade. The large deformed Minié projectile which I cut out over the lower angle of the scapula had nowhere touched a bone, but must have been flattened, before entering the body, on some hard substance outside.

It was a remarkable fact that the tales of French explosive bullets became so much more frequent in the latter part of the war, when those *tabatière* rifles with their soft lead bullets came into play. They were, however, circulated even at the commencement, when only the hardened but with high initial velocity cast Chassepôts were in use. There is no doubt that these latter may also split on hard substances from their strength of impact (the power of percussion they show in the animal body or any other softer materials), which, as is well known, increases in an inverse ratio with the square of the distance from which the rifle is fired. The greater initial velocity of modern rifles, owing to improvements in workmanship, in the material of barrels, superior grooving and lubricating, the shape of the bullet and the strength of the powder, to the relatively smaller weight of the former and the greater charges of the latter, has been identical with a growing perforating force of their projectiles, as I sketched out before the outbreak of the last Continental war, in a paper entitled "Zur Wundaerztlichen Waffenkunde," printed in the *Deutsche Klinik*, 1870, Nos. 4, 5, and 7. On the one part greater power to shatter bones is the consequence thereof, on the other an increased tendency to ricochet and hurt indirectly after deformation or breaking up into pieces. The corrective to this dangerous improvement of weapons must be found in the farther distances people keep from each other on the battlefield and skirmishing from behind coverings. The surgeon's aid in combating the more disastrous results of scientific arms must provide for careful examination of the wounds, prompt removal of foreign bodies, and the utmost conservative treatment on antiseptic principles.

The allegations which French surgeons made in the Crimean war—M. Scrive, for instance,—that the Russians had used explosive cylindro-conical bullets of copper, have never been proved; but the medical officers of the British army—as Longmore and Macleod—saw frequently cases of injuries through pieces of conical balls which had split on the rocky soil. The Prussian "Granatgewehr," a heavy rifle which throws a shell of about four ounces' weight, has never been made use of during the late or any former war. Explosive bullets containing a smoke-producing charge—as, for instance, thrown by the long-range Metcalfe rifle—may be very useful for judging distances; it seems, however, doubtful if they will be, under present circumstances, introduced into so-called civilised warfare.

The new Gras rifle of the French, an improved Chassepôt, seems to be in several respects a superior weapon. Besides a metal cartridge, made of *red* copper (which is the most ductile material to close the breech effectually—much more so than yellow copper or brass, as in the Boxer and other cartridges), a better kind of powder, containing less sulphur and soiling less the barrel, is used for it. From a different construction of the breech-chamber the initial velocity of the bullet is higher, though its weight has slightly increased and the powder-charge diminished. The bullet, it seems, is made of compressed lead, instead of an alloy, to secure hardness. From the *Spectateur Militaire* I give the following statements:—

	Gras Rifle.	Old Chassepôt.
Weight of bullet ...	25 grammes ...	24·50 grammes.
Calibre of bullet at the bottom ...	10·9 mm. ...	11·8 mm.
Length of bullet ...	27·75 mm. ...	25·30 mm.
Powder charge ...	5·25 grammes	5·50 grammes.
Initial velocity ...	455 metres ...	410 metres.

A German military periodical gives the weight of the bullet for the Mauser rifle as 25 grammes, equal to that of the Gras; the powder-charge of the German arm as only 5 grm. The initial velocities of the regulation rifle bullets in the German and Russian armies are stated as follows:—

Mauser	430·0	metres	per second.
Werder (Bavarian) ...	432·7	"	"
Berdan (Russian)	449·0	"	"

The Gras rifle appears, therefore, in this respect superior to them all. The absolute and relative number of rifle-ball wounds *par ricochet* depends, however, not only on the greater force of propulsion and percussion, but also on the quicker firing and greater number of bullets spent in modern warfare. In the report of the American Army Commission on modern rifles it was, some years ago, pointed out that the weapon of the future would be the repeating rifle, or magazine loader. Modern artillery is very destructive; but well-trained infantry will always remain the backbone of armies. The recent war proves that 90 per cent. of the killed and wounded were injured by rifle bullets; the infantry lost 17 per cent. of its men in killed and wounded, the other arms but 6 per cent.

EPIDEMIC OF HYSTERICAL EPILEPSY AND TETANUS.

BY STAFF-SURG. JOHN HUDSON, R.N., L.R.C.P. LOND. &c.
LATE SUPERINTENDENT OF THE EMIGRANT SHIP "EARL DALHOUSIE."

THE outbreak comprised eighteen cases—eight married and ten single women, ranging from seventeen to thirty-one years of age,—and varied in form and intensity from simple hysteria and fainting to strong convulsions and prolonged general spasms (complete opisthotonos). The varieties corresponded with the intellectual, moral, and physical characteristics of the patients.

The immediate exciting causes were—1st. The pre-existing case of Susan B——. 2nd. The first case (that of Mrs. S——) in the general outbreak of Dec. 28th, occurring at 2 P.M., in a violent and striking form, and arising from jealousy, in an excitable, epileptic subject; and seen or talked about by those that followed during the same evening. 3rd. The sympathetic influence affecting the community. 4th. The exciting effects of heat (82° to 85° in the shade) and climate in crossing the equator. 5th. Nymphomania, and the consequences of masturbation; this habit being no sooner admitted and the patient duly admonished than a total cessation of all the symptoms at once ensued.

The following is an abstract of a few typical cases.

Case 1.—Susan B——, aged twenty-two, of spare habit, intelligent, and healthy-looking, was found in bed prostrate and unconscious on the 5th December, 1874, (the day after going to sea). It came out that she had been to sea, as a girl of ten years, with her father as a ship master; that she became a mother at fifteen, and afterwards the subject of parental harshness and of restraint in a workhouse asylum. She was the victim of nymphomania. The attacks were long, strong, frequent, and of persistent character, being excited by sudden shocks—as from noises or flashes of light—and often, when in bed at night, without apparent cause, until they finally ceased with the habit which had induced them, having lasted from 5th December to 7th February, with various remissions or intervals of calm, rational, and good behaviour, alternating with threats and feigned attempts to commit suicide; the patient now being peevish, quarrelsome, perverse, deceitful; then pulling her hair and malingering, in order to excite sympathy. When delirious or ecstatic, or under the first effects of chloral hydrate, &c., her mind would betray signs of good and evil training, such as bad language and pretty hymns.

The general symptoms were intolerance of light, with a sense of "fire in the head," hyperæsthesia of left side of face, neuralgia, temporary paralysis and spasms of eyelids, face, neck, throat, &c., involving the muscles of expression, speech, deglutition, and voice, on one or both, but mostly the left side. During an attack or "fit" the convulsive action extended to the chest, the arms, and more or less to the whole body, lasting from a few minutes to half an hour, and merging into complete and general rigidity (opisthotonos), the body being arched backwards, so as to rest on the head and heels, but rarely inclined to the right side. This general spasm or tetanus usually lasted from ten minutes to several hours; in a few instances the patient remained stiff and unconscious, as in a state of catalepsy, for twenty-four to thirty-six hours.

This description of S. B——'s state of mind and of the nature of the attacks is applicable to the cases that follow, a few peculiarities only of each being subjoined.

Case 2.—Mrs. S——, aged twenty-six, of spare habit, pale, epileptic aspect, and lively disposition. This case, which took place on Dec. 28th, was the first of the general outbreak, and had been subject to some complaint for several years in Sydney. Excited by jealousy, &c. The case was remarkable for the violence and duration of the attacks, also for the delusions and vagaries, followed by the feigning and deception which she practised. Symptoms as in the first case, with greater intelligence and *colonial acuteness*, great agitation, subsultus tendinum, &c.; strong convulsions, extreme rigidity of the body, and, while ecstatic, fancying herself about to be buried at sea, and asking to be "lowered gently." Lastly, the stage of imposture having set in and being detected on Jan. 16th, 1875, she straightway recovered, and returned to her berth in the married compartment.

Case 3.—Mrs. Anna M. G——, aged thirty-one; of seven years' standing from trouble and uterine weakness (abortions, &c.); present attack severe, and brought on by sight of others in a weak and delicate woman.

Case 4.—Harriet W——, aged twenty-five, stout and *apparently* listless and phlegmatic, was one of ten cases which immediately broke out after the preceding (night of Dec. 28th). She was conspicuous for her moral and intellectual attainments. The fit commenced with syncope and hysterical screaming, followed by singing and talking (soliloquy) for an hour or more after a dose of chloral, &c. While reclining on the poop she had calm and lucid intervals alternating with a state of abstraction, in which were disclosed evidences of a moral and cultivated mind. At one time she was singing, in fine musical and feeling tones, a favourite song in German, as if it had been the secret of her life; at another, she was instructing an imaginary class of children in the art of singing; and anon I was impressed by her minutely expounding the Epistle of St. Paul to Philemon, gently exhorting her little pupils to "speak up," so that she might hear them. On Dec. 31st she was clear and calm, felt her mind active, and said "We don't so readily get over broken hearts." Strange as it may seem, all this was soon succeeded by disobedient and perverse conduct, threatening us with "more trouble before she had done"; and ending with a becoming apology on the 1st February.

The cases of Amy L——, aged twenty, Annie M——, aged twenty-one, Eliza H——, aged nineteen, arose in stout, robust, headstrong young women, of neglected training and education, the attacks being strongly marked with a predominance of the animal spirits.

The nine remaining cases occurred in young married and single women from twenty to twenty-five years of age, of excitable, hysterical constitutions, and in forms varying from vague fears and hallucinations to unconsciousness, extreme convulsions, and stiffness of the whole body. The immediate cause of all was probably emotional, and the nature of each apparently a reflex action of the nervous centres.

Contrary to a prevalent opinion in such cases, in no instance were the uterine functions or the general health materially affected, except from weakness. All ultimately recovered, and, indeed, I have only known one extreme case of this affliction to terminate in death—viz., that of a young lady, aged twenty-seven, who for the last six months of her sufferings was unable to endure the least sound or ray of light.

The treatment consisted in the administration of chloral hydrate, potassium bromide, henbane, valerian, and aperients; of bleeding to twenty ounces in one instance; of cold to the head, and of placing the patients on their beds on the deck for safety, &c.

CASE OF IMPACTION OF AN IRON STAPLE IN THE ŒSOPHAGUS.

By W. WATSON DOVE,

ASSISTANT MEDICAL OFFICER, SOMERSET COUNTY LUNATIC ASYLUM.

J. W——, aged thirty-nine, who has been an inmate of the Somerset County Lunatic Asylum since 1862, was noticed of late to have been getting very thin, and to suffer from loss of appetite. On inquiring what was the matter with him, he said that "he could not eat from pain and difficulty in swallowing, and thought he must have got something in his throat, but did not know what."

On examining him nothing could be seen by looking down his throat, but on passing a probang down the œsophagus it was stopped about half-way by some foreign substance. Not knowing what it might be, I withdrew the probang and examined his throat externally. I could feel behind the trachea, just below the pomum Adami, a hard lump, but could not distinguish its shape. I therefore thought it best to let him alone, and trust to the substance, whatever it might be, coming away of itself. He was accordingly sent to the infirmary on the 21st of August, 1875, and lived for the most part on beef-tea and arrowroot, occasionally trying to take solid food. A few days after he had been in the infirmary he told the nurse that he had swallowed a staple, but when questioned further, said "he didn't know what it was, but that he had swallowed something." On the 29th September last, whilst trying to eat some meat, he very nearly choked. The nurse at once put her finger down his throat and withdrew the meat, and with it an iron staple weighing four drachms five grains. Its transverse measurement was 1¼ in., and its greatest length 2⅛ in. It was much blackened and corroded.

The patient complained of a little pain the day after the staple came away, but was able to take solid food and apparently enjoy it.

On the 1st of October he told me that he had pulled it out of a wall in the airing-court, that he put it in his mouth convex end first, then turned it round and swallowed it points foremost. He is now doing well.

Presentation.—Dr. Elliott, the house-surgeon of the Bristol General Hospital, was lately presented with a handsome walnut Davenport and silver plate, bearing the following inscription:—"Presented to Dr. Thomas Elliott, by the officers, students, nurses, and patients of the Bristol General Hospital, on his resignation of the house-surgeoncy. Sept. 1875"; also, a pocket instrument-case.

A Mirror
of
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

LONDON HOSPITAL.

GASTROSTOMY FOR CANCER OF THE ŒSOPHAGUS.

(Under the care of Dr. Fenwick.)

The following notes were taken by Mr. S. D. Clippingdale.

Sarah B——, aged thirty-four, admitted April 16th, 1875. She stated that she had had good health until nine months ago, when she was suddenly affected with difficulty in swallowing. There was no pain until three months later. Since then solid food seemed to meet with a "stoppage at the pit of the stomach," and excited intense pain until returned; liquids produced no pain, but a choking sensation.

When admitted, the patient was emaciated and anæmic. She complained much of hunger, but more of thirst. A bougie passed into the œsophagus was suddenly arrested 15½ in. from the teeth. The abdomen was retracted. On full inspiration a number of small nodular masses, like enlarged glands, could be felt immediately below the ensiform cartilage. This part was tender, and was the part to which the pain during deglutition was referred. Milk taken was vomited immediately, and in consequence she was fed chiefly by enemata.

April 24th.—The vomiting continues. Enemata only retained when brandy is added.

May 26th.—Still unable to swallow solid food, and the power of retaining liquids varies at different times. Still fed chiefly by enemata.

June 7th.—A small œsophageal tube can now be passed; it passes through a painful stricture, and then enters the stomach. By means of this tube a meal of milk, eggs, and brandy is administered twice a day, and great relief afforded to the patient.

17th.—Has gained 2½ lb. in weight during a week. Pain is no longer produced by the passage of the instrument.

23rd.—The stricture now resists the passage of the tube, and even a smaller one could not be passed until a hypodermic injection of morphia had been given.

26th.—The smallest-sized tube, equal in diameter to a No. 7 urethral catheter, passed to-day with a little force.

28th.—No tube can be passed. Enemata are given, and retained about three hours.

Aug. 25th.—The enemata of milk and brandy, after a few days' use, were not retained. Dr. Fenwick ordered pepsine to be added. The injections so made were retained for some hours, and patient expressed herself as feeling greatly relieved. These enemata, however, were eventually returned as the others had been. Other plans for allaying the irritability of the intestinal mucous membrane met with only partial success.

Gastrostomy.—Aug. 30th: The patient becoming rapidly weaker, Mr. Waren Tay, after several consultations, and at the patient's earnest request, determined to perform gastrostomy. At 3 P.M. ether was administered, and the operation commenced by a vertical incision along the outer border of the left rectus muscle, commencing above at the margin of the costal cartilages, and extending downwards about two inches. The aponeuroses of the abdominal muscles and the transversalis fascia were next divided upon a director, and the peritoneal cavity opened. Mr. Tay found the stomach without difficulty, and the exposed part, which was free from disease, was attached to the abdominal wall as the intestine is in colotomy. Considerable hæmorrhage occurred when the stomach was incised, and two ligatures were necessary. An india-rubber tube was placed in the stomach through the wound, and retained there until the patient's death. After the operation another enema of milk and brandy with pepsine was given.

After-treatment. (For the following notes we are indebted to Mr. Rudduck, the house-surgeon.)—Aug. 30th, 8 P.M.: Patient complains of great thirst; temperature 96·6° F., pulse 88; the hands and feet are very cold. Ordered to be wrapped in cotton-wool. 10 P.M.: Mr. Tay introduced a little ice and about an ounce of milk into the stomach. She felt it going in, and says it satisfied her; it did not give her much pain. Another enema was given.—Aug. 31st, 1 A.M.: A little more milk introduced. Nurse says that given three hours ago trickled out afterwards. 8.30 A.M.: Has passed a quiet night. Temperature 98·6°. Says she feels better than she did yesterday. About half an ounce of warm milk and water put into the stomach. This seemed to excite a great secretion of gastric juice, as a large quantity trickled out. In about half an hour afterwards the nurse noticed that the dressings were soiled with the milk. 11 A.M.: Patient is very low; can scarcely articulate; pulse 124, very feeble. To have a brandy enema immediately. 12.30: Rallied considerably, though the greater part of the enema was returned. Mr. Tay introduced a little brandy into the stomach, but a good deal of it was forced out at every inspiration. 3 P.M.: As the food comes away so much, a piece of gutta-percha tissue was sealed over the orifice, and the tube left protruding through this. The tube was plugged with a catheter stilette, and the patient turned over on her right side, as she retains most food in this position. Temperature 98·6°. 5 P.M.: A little more food introduced. Patient seems sinking into coma. Pulse 144. The abdomen seems rather swollen. 7 P.M.: About the same quantity (about half an ounce) of brandy and milk introduced. 9 P.M.: Pulse extremely small. Patient a little delirious, evidently moribund. Died about 10 o'clock.

The autopsy was made eighteen hours after death by Dr. Sutton. The following notes are abstracted from the hospital register:—Body weighed 3 st. 7 lb. Temperature 68°. The incision in the stomach was found to be about the middle of the anterior surface. The lower end of the incision was close to the greater curvature. Its margin was adherent to that of the opening in the parietes. The peritoneum around was congested, and there was recent lymph on the right lobe of the liver and on the stomach. The stomach and liver were adherent by old adhesions. A mass was found at the lower end of the œsophagus; it was composed of medullary cancer, was about two inches thick, and extended throughout the coats of the œsophagus. About an inch and a half from the stomach the canal was blocked by a quantity of juicy soft débris. The rest of the œsophagus and the stomach were apparently of healthy structure. There were some commencing phthisical changes in the lungs. There were no noticeable changes in other organs.

ST. THOMAS'S HOSPITAL.

HÆMORRHAGE FOLLOWING TOOTH EXTRACTION.

(Under the care of Mr. Wagstaffe.)

For the notes of this case we are indebted to the kindness of Mr. H. P. Potter, house-surgeon.

A man, T. W——, aged thirty-three, was admitted into Leopold ward on Tuesday, August 10th, for hæmorrhage from the seat of a tooth drawn on the previous Friday. He gave a history of always bleeding freely from slight causes, and he stated that about twelve years ago he had a tooth extracted, after which he bled for eight days. The hæmorrhage was stopped with the actual cautery.

The tooth drawn on the 6th August was a large molar on the left side. As the bleeding was profuse, the patient had medical treatment outside the hospital for four days.

On the 10th August, in consequence of the hæmorrhage continuing, and as the ordinary means for its arrest had not succeeded, the patient was admitted. He was not much affected by the loss of blood, and looked healthy. The clots were removed from the mouth, and the bleeding surface discovered, which appeared to be the whole of the tooth cavity and the surrounding gum. Plugs of lint were used steeped in a strong solution of perchloride of iron, and the teeth pressed firmly together with a bandage beneath the jaw. This stopped the bleeding for several hours, but on account of the reappearance of hæmorrhage, the solid perchloride of iron was used, and with better effect. The latter, however, caused much irritation and swelling of the face.

August 13th.—Feels very weak; lost about half a pint of blood during the day. Patient takes a fair quantity of milk.

14th.—Bleeding very profuse; no good result from graduated pad and solid perchloride of iron. As the man was becoming very weak, the application of the hot iron was decided upon. This was done under the influence of ether.

15th.—Hæmorrhage ceased for twenty hours, but at the end of that time it reappeared.

17th.—Actual cautery used, which stopped the bleeding for eighteen hours.

18th.—Bleeding profusely at 2 A.M.; cavity firmly plugged with cotton-wool saturated with solution of iron; subcutaneous injection of one grain of ergotin every day.

20th.—No improvement in patient; blood can be seen to well up from the tooth cavity; face much swollen; occasional attacks of delirium.

21st.—Cavity plugged with gutta-percha, and afterwards with plaster-of-Paris, neither of which succeeded in stopping the bleeding.

23rd.—Patient has been losing about a pint of blood daily for the last three days. Has become very exhausted and pallid; speaks of noises in his ears and bright objects before his eyes. Ten grains of gallic acid given internally every two hours, and a subcutaneous injection of morphia at noon and midnight.

24th.—Less bleeding to-day. Takes a fair amount of nourishment.

25th.—Bled about five ounces this morning. Plugged with cotton wool and strong solution of perchloride of iron.

27th.—No bleeding for forty hours. Patient feels a little stronger, but has a very anæmic and peaked appearance.

Sept. 1st.—Commenced solid food.

2nd.—Up for the first time since illness.

5th.—Left the hospital.

Remarks. — Cases of prolonged hæmorrhage after extraction of teeth are sufficiently uncommon to make them of interest; and when the bleeding continues, as it did in this case, over so long a period (fifteen days), notwithstanding very active means being employed, the case then becomes alarming, both to patient and surgeon. It is worthy of notice that, in the present instance, the blood appeared normal in its coagulating powers, and therefore unlike many of the recorded cases of hæmorrhagic diathesis where the thinness and non-coagulability of the blood point to an alteration in its physical and chemical characters. Here it coagulated firmly and quickly. Throughout the case the pulse and temperature remained at their normal standard. Thirst was a marked symptom. It was found that the actual cautery arrested hæmorrhage for some hours; but, on account of its bringing away incinerated tissue, the results of its use were inferior to firm plugging with the strong solution of the perchloride of iron.

BRISTOL ROYAL INFIRMARY.

ACUTE RHEUMATISM, WITH HYPERPYREXIA, TREATED WITH THE COLD-WATER COIL.

(Under the care of Dr. R. Shingleton Smith.)

E. H——, aged thirty-nine, carpenter, married, admitted into the infirmary, Ward 5, on June 1st, 1875, with acute rheumatism. There was no history of rheumatism in his family, and it was his first attack. He had been getting about up till four days before admission, but had complained of pain in the back for two months previously. There was no known cause for the present attack, which commenced with pain in the right ankle; the left ankle then became affected, with redness and swelling; and on the day following the left knee and the wrist of the same side became painful, afterwards the right shoulder and wrist. Had been a Good Templar for two years past, but before that period was accustomed to drink freely.

On admission he was noticed to be a rather anæmic-looking but otherwise robust and well-nourished man. His temperature was 102°, the skin perspiring freely. He complained of pain in both ankles, left knee, wrist, and shoulder, and also in the right wrist and shoulder. There was considerable swelling of both ankles, and some effusion in the left knee-joint. Pulse 108, full and hard; breathing normal; no abnormal chest-sounds audible; tongue white and moist. He had been unable to sleep for three nights previously. Ordered blistering fluid to be applied to the swollen joints, and a saline mixture containing a drachm of citrate of potash with half a drachm of bicarbonate of potash to be given with tartaric acid, effervescing, every four hours.

The day following his condition was much the same; the morning temperature was 102·6°, the evening 102·4°. The urine was decidedly alkaline in reaction.

June 4th.—He was comparatively free from pain; the swelling of the joints had subsided; the urine continued alkaline. Morning temperature was 101·2°, evening 102°. He still perspired freely, and a copious crop of sudamina had appeared on the chest. Was ordered a chloral hydrate draught, with bromide of potassium at bedtime, as there was still little disposition to sleep.

7th.—Morning temperature 100°, evening 102·4°.

On June 12th the morning temperature was 102·2°. At midday he expressed himself as being no worse, was free from pain, could move the legs and arms without difficulty, was perspiring freely, and was covered with a very thick eruption of sudamina. The pulse, which on previous days had varied between 108 and 97, was now 100. There was no distress in breathing; the urine was still decidedly alkaline; had slept better since taking the night-draught. On examining the chest a decided systolic friction sound was audible over the base of the heart, but there was no increase of pericardial dulness. Six leeches were applied over the cardiac area, and he was ordered to continue with the alkaline mixture. At 6 P.M. (June 12th) the temperature had gone up to 105·8°, and at 9 o'clock it was 107·4°, at 10.30 it was 106·8°, and at 11 o'clock it was again 107·4°. The pulse was 136, and the respiration 44; delirium of a low muttering character was first noticed. Roberts's coil was then applied, and a stream of water, at a temperature varying from 42° to 46° Fahr., allowed to flow through it. The temperature of the patient was taken every fifteen minutes, and varied from 107° at 11.15 A.M. to 106·6° at 2.15 P.M., and gradually falling until 9.15, when it was 100·2°. The coil was then removed, and the temperature taken as before. At 9.30 P.M. it was 103·4°, and at 11.15 P.M. 102·2°. This was the lowest point reached. It then began to go up again. At 12 A.M. it was 103·4°, and rose till 4.30 A.M., when it was 106°. At 4.40 A.M. (June 13th) the coil was readjusted, the temperature of the water flowing through it being, at its entrance 44°, at its exit 57°. At 4.45 the temperature was 106·4°; this was the highest point. A gradual descent then followed till 9 o'clock, when the thermometer recorded 100·8°.

14th.—He was still delirious, but was free from pain. Pulse at midday 128, of fair volume and force; respiration 40; mucous râles heard over both lungs in front. There was some slight increase in pericardial dulness, and heart-sounds were indistinct. Faint double friction was audible. At 9 P.M. he was very desponding, and had a conviction that he would not recover. Six ounces of brandy had been ordered, but he refused to take any nourishment, on the ground that he would not break his Good Templar pledge; accordingly nutrient enemata were ordered. The pulse was much smaller and more compressible than it had been, and his feet were cold; the coil was therefore removed, after having been working continuously for twenty-eight hours. During the night his temperature varied from 100·8° at 10 P.M. to 103·2° at 5 A.M. The coil was at this point re-applied; and at 11.45 the temperature had sunk to 100°. All through the night the temperature, registered regularly every fifteen minutes, continued steadily at 100°; and on the 16th, at 12 P.M., it was 99·4°. He had taken his milk, and the brandy as well (but he was unconscious of the latter), without difficulty, so that the enemata were not repeated. He was very drowsy, and had a rather dusky aspect. The pulse was 120; respiration 32 (2 P.M.) The heart-sounds were more distinct; no friction-sound could be heard. There was slight increase of cardiac dulness; mucous râles were heard, especially over the left lung. The bladder was found to be distended, and the urine was removed with catheter; it was found to have an alkaline reaction, and to be free from albumen. He was ordered to take a mixture containing five grains of quinine, alternating with a carbonate of ammonia and ether mixture, every few hours. The coil was now discontinued at 2.30 P.M., having been applied continuously since 5 A.M. of the day before. Towards evening his temperature again rose somewhat, but declined to 100° on the following morning.

17th.—At midday he was still drowsy, but easily roused. Breathing much improved. Pulse 120, of fair volume and power; respiration 36. No articular pain or swellings, but both feet had become slightly œdematous. The urine was found to be slightly acid in reaction, sp. gr. 1016, no albumen. The coil had not been used since 2.30 on the previous day. Towards night the temperature again ran up.

18th.—At midday the patient was in a very apathetic condition, but expressed himself as feeling better. He wandered in his talk, and wished to be allowed to get up. 10 A.M.: Pulse 132; respiration 40.—2.15: Pulse 148; respiration 50.—4: Pulse 160; respiration 52. The heart sounds were obscured by mucous râles; no friction could be heard, and there was no increase of dulness. Behind, at lower part of chest, percussion note was less resonant than normally, particularly on the right side, but there was no bronchial breathing. An emetic powder of sulphate of zinc was given, but without causing vomiting. Twelve ounces of brandy was ordered. At 4 P.M., the temperature being 106°, the cold water coil was again applied to the back as before; at 4.15 the temperature was 105·6°, and at midnight it had fallen to 99°, after eight hours' application.

On the 19th it again rose from 99·8° at 1 A.M. to 106·9° at 3.30. Again the coil was applied, and the temperature fell from 106·9° at 3.45 to 100·8° at 2.15 A.M. on the 20th. At midday on the 19th he seemed very prostrate, had been perspiring freely, but there was no articular affection, and no complaint of pain. Face was rather dusky, and there was constant stupor. Breathing was laboured; mucous râles were heard over front of chest on both sides, and there was mucous rattling in the throat, but little tendency to cough, and no expectoration; respiration 40. A 2 o'clock pulse was 148, weak, dichrotous. He still took all his nourishment freely, including the twelve ounces of brandy.

Death took place at 2.30 A.M. on the 20th, the temperature having come down to 100·8°.

Autopsy, thirty-four hours after death.—There was no excess of fluid in the pericardium; both surfaces were covered with a layer of lymph, of the usual honeycombed structure and appearance, the two surfaces being bound together by soft bands of recent lymph, which could be torn through without difficulty. The muscular structure of the heart was found to be healthy. The endocardium was not affected, excepting that the auricular surface of the mitral valve had a row of small, firm, fibrinous, warty beads along its edge. The aorta presented unusual appearances for a man only thirty-eight years of age. It was universally mottled with yellow atheromatous-looking patches, scattered over the coats of the vessel along its whole length, from the aortic valves to the bifurcation into the iliac trunks. Thickened yellowish shreds could be peeled off almost everywhere, there being very little healthy structure anywhere to be seen. The arch of the aorta seemed rather dilated in its ascending portion, but no saccular dilatations were visible, no calcareous masses were present, and the middle coat seemed to be quite intact. The lungs were universally engorged, and the bronchial tubes full of mucus, but there was no consolidation. The kidneys were congested, and the cortical portion seemed to be rather mottled, as if in an early stage of fatty degeneration. The spleen and liver were normal.

Northumberland and Durham Medical Society. The annual meeting of this Society was held in the Library of the Newcastle-on-Tyne Infirmary on September 30th. The report of the Committee shows that the Society is in a flourishing condition. The number of members is 141. The work done during the session 1874–75, both in amount and quality, compares favourably with that of previous years. The following is a list of officers for the year 1875–76:—President: Mr. S. W. Broadbent. Vice-presidents: Dr. Arnison, Dr. Denham, Dr. Page, and Dr. Philipson. Secretary: Dr. Byrom Bramwell. Committee: Mr. H. E. Armstrong, Dr. L. Armstrong, Dr. G. T. Beatson, Dr. Burnup, Mr. Carr, Dr. Frain, Mr. G. B. Morgan, Mr. J. Hawthorn, and Mr. Russell.

Reviews and Notices of Books.

On Concussion of the Spine, Nervous Shock, and other Obscure Injuries of the Nervous System, in their Clinical and Medico-legal Aspects. By John Eric Erichsen, F.R.C.S. London: Longmans, Green, and Co. 1875.

In 1866 Mr. Erichsen published six lectures, which at the time attracted much attention, on certain obscure injuries of the nervous system, commonly met with as the result of shocks to the body received in collisions on railways. There were then to be found surgeons who went so far as to deny the existence of such a condition as that known as concussion of the spine. At the present time, however, although surgeons may differ as to the exact condition of a certain patient, or as to the prognosis of his case, we venture to state that none will be found who would deny that the gravest nervous affections may follow violent concussion of the body, even when at first the sufferer seemed to have escaped uninjured. This change of opinion, or rather increase of knowledge, is in a great measure due to the attention directed to the subject by Mr. Erichsen's former work. Such divergence of opinion as formerly existed concerning these injuries could only result from ignorance, and as these cases have so frequently given rise to litigation, no small discredit has been brought upon the profession by the public exposure of such extreme differences among medical men of equal eminence. It is therefore a matter for congratulation that such exhibitions are becoming more and more rare, and we think the thanks of the profession are due to Mr. Erichsen for the large share he has taken in preventing their occurrence by elucidating the nature of these obscure cases.

The present work consists of fourteen lectures, in which the six before published are included, not, however, without much alteration. Although a greatly increased experience has enabled Mr. Erichsen to speak much more positively as to the nature of the various conditions included under the name of concussion of the spine, he has in no essential point altered the views expressed in his former work.

The term "concussion of the spine," although undoubtedly somewhat vague, is useful in our present state of knowledge to indicate a certain condition of the spinal cord, and sometimes of the whole nervous centres, resulting from external violence, and "usually uncomplicated by any obvious lesion of the vertebral column." As Mr. Erichsen points out, it includes a variety of pathological conditions. Thus, the cord alone may suffer, or the damage may extend to the brain, and perhaps even to the sympathetic ganglia, and the injury may be followed slowly by hæmorrhage, by subacute and chronic inflammations, or by anæmia of the nervous centres. Exact pathological knowledge is still wanting as to all these conclusions, most of them being merely inferences from the symptoms. The reason of this is that few of the sufferers from concussion of the spine die directly from the effects of the injury, and those who never improve may drag on a miserable existence for years, and pass out of the hands of the surgeon who first saw them, and die at last under circumstances in which a post-mortem examination is not practicable. Thus, Mr. Erichsen says: "So rare are post-mortem examinations of these cases that no instance has occurred to me in hospital or in private practice in which I could obtain one, and, with one exception, I can find no record in the transactions of societies, or in the periodical literature of the day of any such instance." This one instance was under the care of Mr. Gore, of Bath, and was a most typical one in every respect. The patient walked from the train after the accident, but the symptoms of severe disease of the spinal cord set in gradually, and he died at the end of three years and a half. The cord was examined by Dr. Lockhart Clarke, who found signs of extensive chronic meningitis, and degenerative changes in the posterior white columns. With such meagre material as this before us, it is impossible for much to be said as to the pathology of these obscure cases, and Mr. Erichsen has of necessity made the present work almost purely clinical, and has illustrated it profusely with cases selected from his own practice. By a comparison of the symptoms of these cases with those which are recognised by all writers on diseases of the nervous system as being connected with and dependent upon chronic affections of the cord and its membranes, Mr. Erichsen clearly demonstrates the nature of the changes which follow a concussion of the spine, and may fairly be said to prove that, in at least a large proportion, chronic myelitis and meningitis are present. The greater part of the book is devoted to the consequences which may follow an apparently slight injury of the spine. We need not allude to the chapters on the symptoms, diagnosis, and treatment of those cases in which meningitis or myelitis form the most prominent feature further than to say that, although this part of the work is much amplified, and numerous illustrative cases have been added, it is in the main the same as was published in 1866, and is probably well known to our readers. In the present volume, however, Mr. Erichsen has added a chapter on the so-called "Spinal Anæmia, and especially Anæmia of the Posterior Columns of the Cord," as a condition following injuries of the spine. This condition in its extreme form is thus described:—

> "In the more intense cases of anæmia of the spinal cord there is paralysis more or less complete of sensation, and often quite complete of motion, in the lower extremities. Below a certain level in the dorso-lumbar region, and in the greater part, if not in the whole, the nervous system appears to be completely exhausted and its action almost entirely suspended.......The legs and feet are cold; there is no reflex sensibility or movement in them; they are not susceptible to the electric stimulus, either as regards muscular irritability or cutaneous sensibility. ...... Notwithstanding all this local exhaustion, it will be found that the sphincters are not paralysed, and the general health, though enfeebled, may be fairly good."

The condition is never fatal, and it is only by clinical inference that the idea as to the pathological condition has been arrived at. Mr. Erichsen considers it in many respects nearly allied to that condition which "for want of a better name we are apt to call hysteria," and which may also be developed as the result of severe nervous shock. These conditions are, moreover, undoubtedly aggravated by the mental worry of a lawsuit, and the patients frequently recover with great rapidity when they have received compensation for their injuries. But, as Mr. Erichsen justly points out, this does not by any means disprove the reality of the condition while it lasted. Speaking on this subject, he says:—

> "It is far too common a practice to treat this state either as being under the patient's control, or as being a condition of no material moment, inasmuch as it does not arise from permanent organic injury or disease. It is unjust as well as irrational to treat the condition as one of little moment. We only know it by its effects. We use the term hysteria to hide our ignorance of what the condition really consists. To me, I confess, the sight of a man of middle-age, previously strong and healthy, active in his business and in all the relations of life, rendered suddenly 'hysterical,' not merely for a few hours or days by some sudden and overwhelming calamity that may for the time break down his mental vigour, but continuously so for months, or even years, is a most melancholy spectacle, and is a condition that, to my mind, is an evidence of the infliction in some way of a serious and for the time disorganising injury of the nervous system, though happily that injury is not, in general, of a permanent nature, or attended by organic changes."

We fully agree with Mr. Erichsen in this view of the matter, and although the difficulties of detecting fraud and assessing damages in this class of cases must of necessity be greater than when some distinct organic lesion is present, we think a careful study of the excellent advice given by Mr. Erichsen will, in the vast majority of cases, prevent any error. The medico-legal aspects of these cases are treated of fully in a special lecture. Discrepancies of opinion as to diagnosis are now fortunately comparatively rare. It is in the prognosis that differences most frequently arise, and as long as lawyers attempt to obtain from medical men an exact statement as to the course of future events, such conflicts of opinion must and will occur. We cannot help thinking that these even are likely to be diminished by such a work as Mr. Erichsen's, containing as it does the honest and scientific conclusions from a very large experience, and illustrated as it is by numerous well recorded cases, which serve as guides to those whom fortune has not favoured with like opportunities.

Want of space prevents our noticing the interesting and philosophical lecture upon "Impairment of Vision, complicating Injuries of the Nervous System," and numerous other points of interest. Although, as the author points out repeatedly in this volume, the affections it treats of are by no means exclusively the result of railway accidents, yet these are infinitely the most frequent causes of them, and as such casualties are occurring daily in many parts of this country, no medical practitioner knows how soon he may be called upon to diagnose, treat, and afterwards be cross-examined upon such a case, and we can confidently state that under such circumstances he can have no better guide than Mr. Erichsen's work.

Etude Comparative des Diverses Méthodes de l'Exérèse. Par Ch. Monod. Paris: J. B. Baillière.

By the term "exeresis" the author means "ablation," so that this thesis refers to the different methods employed for the removal of new growths. He devotes but little space to the knife, the major part of the essay dealing with bloodless operations—e.g., the ligature and the écraseur, actual and galvanic cautery. Turning to the section devoted to the elastic ligature, as being the method most recently introduced (or rather revived) into practice, we find the author by no means sanguine as to its extended application, preferring, where the cutting operation is out of question, to employ the less prolonged and inconvenient operation by the écraseur, the merit of the introduction of which belongs to M. Chassaignac. He discusses at length the effect produced upon the several tissues by this instrument, and claims for it greater exemption from erysipelas and other surgical accidents than is afforded by the knife. The simple wire écraseur (or the *ligature extemporanée* of Maissonneuve) is less applicable from its smaller strength and its not so readily arresting hæmorrhage. After giving a historical and practical account of the various methods of cauterisation, the author concludes by summing up impartially in favour of one and all the methods of ablation here discussed in suitable cases, and dwells on the advantage of sometimes having recourse to a combination of the two. The essay is interesting as a careful historical compilation, but it cannot be said to contain any new facts.

The German Committee of the International Exhibition and Congress of Public Health and Means of Preserving Life, to be held in Brussels, held its first meeting at Berlin on Wednesday last, under the presidency of the Imperial Crown Prince.

THE LANCET.

LONDON: SATURDAY, OCTOBER 9, 1875.

The Introductory Addresses which annually usher in the winter session at our Medical Schools have again been delivered, and their public interest has once more invited the comments of our lay contemporaries. It must not be forgotten that the lecturer who delivers an "Introductory" addresses a double audience. He speaks to pupils, and he speaks to the public. The progress which has raised Medicine to the status of a public enterprise; which has brought it into intimate relation with the commonwealth and the national policy; which has developed it from a remedial agent dealing with the individual to a preventive service incorporated with the State; which has, so to speak, lifted it out of the category of personal interests and placed it in the circle of the social sciences, subsidiary only to Religion and Law; and which, therefore, as Dr. Barnes aptly put the case, invites or compels "those who have to give these addresses to select for their theme some of the wider and more general aspects of medicine," has not extinguished the claim of the student on the lecturer's primary attention. It is natural, and perhaps it is an advantage growing out of the existence of several schools in the metropolis, that the several gentlemen delivering introductory lectures may each take his own line; some treating the "opportunity" as especially available for the purpose of giving counsel to students, others as calling for something like a manifesto in the behalf of medicine and its professors, addressed to public opinion and designed to influence the Legislature and to promote the interests of the State.

A careful perusal of the addresses delivered in London on the 1st of October, 1875, will, we are convinced, satisfy any impartial reader that neither the "more general" nor the primary and personal objects of the "Introductory" have been neglected. The lecture by Dr. Robert Barnes at St. George's, for example, was a masterly and suggestive exposition of the salient points of interest arising out of "the relations of medicine to the public good." It abounds with forcible and instructive criticisms on the faults and anomalies of the position in which the science of health is left by the Legislature in its intimate relations with the law and its administrators. Not a few of the observations made by Dr. Barnes are deserving of the highest consideration by those with whom the redress of the grievances he points out—not personal or "professional," but public—practically rests. His description of legal precedent as too often "nothing more than error upon error crystallised by time," is worthy the attention of jurists, and suggests the only intelligible hypothesis upon which not a few of the wondrous contradictions and startling absurdities of medical jurisprudence can be understood or explained. The legal definition of the antiquated and meaningless phrase, "quick with child"; the unreasonable presumption of responsibility in the insane; the vague and arbitrary mode of taking scientific evidence in courts of justice, and "getting up" cases—which, as he pertinently remarks, has the effect of deterring "the best men from appearing as witnesses"—are topics upon which he is entitled to the hearing of all spirited and sagacious legislators: and by speaking out plainly he has done good service.

Dr. John Curnow, at King's College, on the other hand, dealt chiefly with the educational phase of the subject of the day, and it would be difficult to find a more complete and effective discourse on the progress and methods of medical inquiry and instruction. The vital importance of observation and demonstration, giving to each term a "concrete meaning," and the duty of carrying the study and "teaching in fatal cases from the bedside to the dead-house," are points upon which he strongly insisted, and which cannot be too strenuously urged. There are special reasons just now why the teachers in our schools should inculcate the universal necessity of a practical, direct, and inductive method of study. Pathological science is on its trial. It has to encounter formidable obstacles to progress in the parsimony of magistrates, the weakness of medical coroners, and the ignorance of lawyers. It is threatened with new perils by the spurious sentiment of humanity, which the excess of a few individual experimenters, with more zeal than knowledge, has unhappily produced. We entirely agree with Dr. Curnow, "that penal regulations should be demanded to restrict the advancement of any branch of scientific inquiry is surely to forget the lessons of history, and to ask us to return to the darkness and ignorance of the first fourteen centuries of our era, and which were only overcome when the 'giants of those days,' Descartes, Galileo, and our own Bacon and Newton, made the first onward step from the time of the early Greek and Roman philosophers, by applying physical methods to the investigation of natural phenomena, and by substituting the inductive mode of reasoning for that purely deductive plan which had alone been used in substantiating the truth of the mathematical sciences." It is no less true, with regard to the equally important and progressive inquiry in the departments of materia medica and therapeutics, that "one must shudder to think what vast harm may be done if this is checked by any legislative interference." As these topics of Dr. Curnow's address are strictly public and general, we trust they will elicit the sympathy of the lay press, and receive its support. To the student crossing the threshold of a scientific career we commend the address delivered at King's College as replete with information and advice of the highest value and moment.

Dr. Corfield, at University College, discoursed generally and eloquently on the value and importance of sanitary science; Dr. Stevenson at Guy's, Dr. Payne at St. Thomas's, Dr. Randall at St. Mary's, Mr. Lowne at Middlesex, and other lecturers, addressed themselves principally to the duties and privileges of the pupils among their audiences, and from the lips of each fell words of worth and wisdom. Dr. Payne struck a vein of great practical value when he defined the "true student" as distinguished from "a mere craftsman" by "the endeavour to cultivate his mind" no less than to acquire the technical knowledge of a profession; and Dr. RANDALL placed the prospects of the medical student on a legitimate basis, and applied the best incentive to a scientific course of study, when he indicated the probability that every medical practitioner would hereafter be actively and personally concerned in the work of "sanitation" and the preventive service of the State.

What an "Introductory" ought to be must, as we have hinted, be determined by the twofold aspect of the function to be discharged. As regards the student, there is the duty of directing his general method of study, explaining the curriculum required by the examining and licensing bodies, inculcating the necessity of preparatory knowledge and an earnest and persevering pursuit of the objects he proposes to attain, elucidating and enforcing the importance of information he may be tempted to think trivial, insisting on the indispensable value of clinical study, and exposing the danger and denouncing the dishonour of a recourse to the imposture of "cram." It is not less a duty to forecast the future, to stimulate the hope, and to excite the emulation of the student by pointing out the several careers of usefulness which lie open to him, and in either of which, with intelligence and industry, he may win an honourable reward. The adaptation of his particular studies to the end in view is also a theme of fitting gravity and moment. Just now there is, besides, the general obligation of directing all students to the special need of devoting attention to Sanitary science and the Preventive aspect of Medicine as an agent and a mission to search out and destroy the "seeds" and "causes" of disease. These topics, together with matters of interest peculiar to the school for which he speaks, must claim the lecturer's first attention, and may monopolise the whole of his time. The other aspect of the "Introductory" is that which constitutes the "opportunity." The professor enjoys an exceptional advantage—he addresses laymen, the friends of the new pupils, and he is tolerably sure of being reported and read by the outside world. He can speak to legislators, to social philosophers, to "authorities" whom on other occasions he may not hope to reach. It is fitting that full use should be made of the powers thus placed at the command of a lecturer chosen to act as the spokesman of his college or school. What he says will come with peculiar force, being spoken in the hearing and in the name of his faculty. This is an aspect of the "Introductory" which should not be disregarded either in the selection of a lecturer or in the treatment of his task. We think it does occasionally happen that the "opportunity" is not turned to the best advantage. An academic judgment on the politico-medical questions of the day is not easily pronounced, or obtained. It would have special weight in the Legislature and as a factor in the sum of public opinion. If there were sometimes previous deliberation and an understanding among the lecturers chosen to give the "Introductories" at the opening of the medical session, and a marked concord of opinion on public questions of policy was apparent, the delivery might be hailed as a new indication of professional thought, and it could scarcely fail to receive attention in the quarters at which it was aimed.

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THE approaching election of examiners at the Royal College of Surgeons of England is of unusual interest, not only to students and teachers, but to every member of the College who is concerned in the educational advancement of his profession and of the College. For many years past we have strongly contended that the examiners in Anatomy and Physiology should be distinct and separate from the examiners in Surgery and Surgical Pathology; and although there has been at times a member of the Council or of the Board of Examiners that has favoured this scheme, it was not until last year that any active steps were taken to carry it into effect. It has, however, at last been decided that the separation shall take place, and it only remains now to arrange the preliminaries to give the decision effect. The report of the Committee that was formed to consider the question has not yet been received; but it is, we believe, confidently expected that the alteration will come into operation at the November examinations. The prospect of this innovation will influence very greatly the results of the ensuing election. The retiring examiners are Mr. HENRY HANCOCK, Mr. LE GROS CLARK, and Mr. SAVORY. The first-named gentleman has determined not to seek re-election; the other two are candidates for re-election, and will, doubtless, be returned to the Board of Examiners, as they deserve. Both Mr. LE GROS CLARK and Mr. SAVORY have proved themselves to be good examiners, even though the latter gentleman has the reputation of being somewhat severe on crammed pretenders. The interesting question is, therefore, who will succeed Mr. HANCOCK? There has been, we believe, for some years a strong desire on the part of many members of the Council that Mr. ERICHSEN, whose experience as a teacher and examiner has been very large, should undertake the duties of examiner at the College. But Mr. ERICHSEN, like some other members of the Council, has persistently declined to accept an examinership until the separation above referred to should be completed. If, therefore, the arrangements are sufficiently far advanced to ensure the separation of examiners in November, Mr. ERICHSEN will doubtless be elected as an examiner in Surgery and Surgical Pathology. Should this event take place —and there does not seem to be a likelihood of any other candidate appearing—it will augur well for the improved nature of the future examinations of the College. The test will doubtless henceforth become more uniform and certain, even though it be made somewhat more searching. This is exactly what is wanted. Neither teachers nor students complain of the difficulty of the examination for the Membership or the Fellowship, but they strongly object to the system of marking and the manner in which the examinations are conducted. We shall continue to live in hope. The College has been roused to a liveliness of action that twenty years ago would have been deemed impossible; and now that the thin end of the wedge of progress has been well inserted into the traditions of conservatism, it may not require much force to drive it home, and the College of Surgeons may yet take a proud position as the educational centre of British surgery.

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THE reassembling of the metropolitan Medical Societies after the summer recess is an event always looked forward to with considerable pleasure, not only by those who make it their duty to attend regularly at the meetings, but also by the wide circle outside the pale, to whom the columns devoted to the reports of the proceedings form not the least interesting or instructive portion of their weekly reading. Although, for some reason unknown to those not acquainted with the intimate working of these bodies, their annual general meetings are held in the early months of the year, when the operations of each are in full swing, yet, as a matter of fact, it is convenient to assume that their annual sessions begin in October—an assumption borne out by the publication of their Transactions at the commencement of the medical year. It may not, then, be without profit if we dwell a little upon the value of these Societies, as judged from the work they have already completed, and in view of the mission they have yet to fulfil.

This is an age of association and co-operation; it is the era of societies. With the growth of science, societies for its diffusion and the intercommunication of observed facts have sprung up all over the world. For although the rise and development of the chiefest of these—the Royal Society—dates back to the days of HARVEY, the oldest of the Societies devoted to medical science only recently completed its first century of existence. The Medical Society of London, although it is thus the oldest established, is content to occupy a modest position in the rank, but withal a most useful and honoured one. The names of LETTSOM and of FOTHERGILL are perpetuated in it by the annual lectures and prize essays that are associated with them; and, beyond these special features, the weekly meetings of the Society are productive of much sound and practical discussion. The work done by this Society may not be so striking or so ambitious as that performed by those which have sprung up one after another since it was founded, but it is none the less to be valued on that account, and its roll of members shows that it is popular and appreciated. It is much to be regretted that no Transactions of this Society have yet been published; for, without a doubt, in the history of a Society's proceedings there is reflected the history of that branch of knowledge to which it is devoted. Where, for example, can one trace better the growth of the science of pathology than in the volumes published annually by the Society that bears its name? The Transactions of the Pathological Society have justly obtained a world-wide fame, for they are the storehouse of pathological facts of a quarter of a century. The impetus given to minute research by the "cell-theory" of SCHLEIDEN and SCHWANN, the dethronement of humoralism, the rise and decline of a purely "cellular" pathology, the ever-increasing knowledge of the intimate nature of morbid growths, the wider insight gained into the mode of development of tubercle and cancer,—these and a host of other advances in this department of study, which go to make up the science of pathology as it is at the present day, are to be traced in these interesting volumes. For the sake of science, it is a matter of regret that the scheme proposed two years ago for the re-issue of the volumes of Transactions, which were out of print, fell through from want of sufficient support; and it is to be hoped that the Council will again endeavour to carry out an object which should be encouraged by all who value the study of pathology as the real basis of rational therapeutics.

The Royal Medical and Chirurgical Society has always held, and will of necessity always hold, the chief place among our Medical Societies. For, apart from the advantages possessed by its inestimable library, which can well compete with the collection in Lincoln's-inn-fields, its Transactions embody some of the most valuable researches in medicine and surgery that have ever been published. Here are to be found memoirs which have given to the world new discoveries, and which embody the labours of men who have risen to the highest rank, full of original thought and wide research. The names of ASTLEY COOPER, BRODIE, and ABERNETHY grace its earlier volumes, and their work has been fitly carried on by their successors. As a Society for discussion it is, however, far less numerously attended than those which have sprung up after it; unless the subject be one on which there is much division of opinion—as was the case last session when Mr. ACTON's paper on the working of the Contagious Diseases Acts was read. The right, too, which the Society possesses of determining whether a paper should be read and published is one which is jealously kept, and on some occasions strictly enforced.

On the remaining Societies—the Obstetrical, Clinical, and Harveian—we have left ourselves but little space to comment. The first-named has now for many years been doing much to advance obstetrical knowledge, and has done not a little to place this department of medicine on a firm and distinct basis. The Clinical Society supplied a need which the more formal meetings and long memoirs of the older body did not furnish, and its proceedings never fail to be productive of much that is interesting and valuable. It has had the advantage of having been presided over, during the seven years of its existence, by the foremost physicians and surgeons of the day; and the discussions that take place at its meetings are often the medium of much that is of the greatest value in therapeutics and clinical observation. The objects and advantages of the Harveian Society were recently pointed out in these columns, and to that statement we have nothing further to add. We can only express a hope that the coming sessions of all these bodies will be productive of as much benefit as has marked their career in the past, and that they will continue to flourish on the broad basis of sound facts, and not on the insecure foundation of doubtful theories.

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THE very gradual decline of the health of Dr. JOHN HUGHES BENNETT, and his gradual retirement from his work, serve to break the sense of loss which affects all those who knew him, and especially those who have had the good fortune to stand to him in the relation of pupils. Apart from our preparation for this loss, it would really have been felt to be very great. Opinion will perhaps be divided as to the kind of work in which BENNETT most excelled. Some will regard him chiefly as a physiologist; others will think most of his contributions to pathology; while a third class will think that the best work of his life was his therapeutical work. But all will allow that JOHN HUGHES BENNETT cannot with any justice be left out of the history of pathology, physiology, or medicine for the last thirty years at least. True, he will not in all of these regions take perhaps a first place, though in one or two of them he will hold a most enviable position.

There are two meritorious points in the life and work of Bennett which seem to us to stand out in marked relief. The first of these was his aptitude as a clinical teacher; the second, his most admirable contributions to the therapeutics of pneumonia and phthisis. All men who studied in Edinburgh while Bennett was Professor of the Institutes of Medicine and Professor of Clinical Medicine will admit that as a teacher he had no superior; and the subject in which as a teacher he perhaps had no equal was that of clinical medicine. They will remember the searching ordeal to which both patients and students were subjected in his clinical wards; and if occasionally there was a slight tendency in the teacher to bully the students who were examining a case, this fault has been long since forgotten in the memory of his great services. Dr. Bennett's teaching in clinical medicine was a decided feature of the University of Edinburgh, though it has probably now many imitators both in England and in America. The system is worthy of being shortly described. Those students who were members of his clinical class, and were willing to undertake the examination of cases in the wards, gave in their names. Certain cases were assigned to them to be examined before Dr. Bennett and the class. Everything had to be done and all opinions had to be expressed on the spot—of course in such language as was not inconsiderate to the patient; they had not only to be expressed, but justified; and as Dr. Bennett's powers of diagnosis were very high, and his views of treatment very decided, there was not infrequently a sharp discussion between him and his pupils. The student was required not only to examine parts which he might suppose to be at fault, but to examine in rotation all parts of the system—the nervous system, the circulatory, the urinary, the digestive, &c. Every part of the patient's system was ransacked. Nothing could well be overlooked in such an ordeal, and the state of both the patient and the student was well ascertained by it.

Dr. Bennett's merit as a physician equalled or exceeded his merit as a teacher. By this we do not mean to imply that he was ever popular as a physician. As a matter of fact we believe he was not. But his teaching and his practice together have been the principal elements in the great reform of the practice of physic which everybody perceives. Many may be disposed to think that Bennett's most valuable labours in therapeutics were his more recent ones; embracing severe and exact inquiries into the action of mercury, of taraxacum, of podophyllin, of medicines which antagonise each other, &c. And these labours have undoubtedly done much to improve both our knowledge and our practice. But, in our opinion, by far the most valuable therapeutical work of Dr. Bennett was his treatment of pneumonia and phthisis. These ailments are not only important in themselves, but they represent two great classes of disease—the one acute, and the other chronic. And Dr. Bennett, more than any other man, has contributed to reform the treatment of them, and to overthrow the views which had ruled medical men for centuries. Dr. Graves wished for no other epitaph than the three words—"He fed fevers." Dr. Hughes Bennett could not have a better than this: He reduced the mortality of uncomplicated pneumonia to *nil*. He demonstrated, not only the dispensableness, but the injuriousness of the antiphlogistic treatment which had ruled the best minds of the civilised world for ages. Doubtless other physicians were working in the same direction even before Bennett. But he devised a treatment of his own which has given most brilliant results, and he adhered to it and to the pathological views on which it was based so steadily and over so long a series of years as to establish its truth, and so largely revolutionise the practice of medicine in acute diseases. Coming now to the work of Dr. Bennett in regard to the treatment of phthisis,—what praise could we give too much to the physician who taught us to treat phthisis, not antiphlogistically, but with fresh air and cod-liver oil? It is admitted on all hands that this praise is due to Dr. Bennett. We have come to the end of our space, and yet we have not professed to assign the value of Dr. Bennett's work in physiology and in pathology. Frankly, we would admit that we do not think that in physiology he has done any very great original work. He was an excellent histologist, and, independent of the pathological views on which his great reforms in practice were based, he made several very important additions to our pathological knowledge—as of leucocythæmia, fibro-nucleated tumours, &c.; but he will be remembered chiefly as a clinical teacher and a bold and principal reformer in the practice of medicine.

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Hitherto the work of the Port Sanitary Authorities appointed under the Public Health Act of 1872 has been so largely concerned with special measures for the protection of the kingdom against cholera that there has been some danger lest the ordinary detailed duties contemplated in the establishment of these authorities should suffer. It is useful therefore to be reminded—now that the fear of any new extension of cholera to our shores is, for the moment at least, at an end—of the more abiding duties which it is the function of Port Sanitary Authorities to fulfil. A Report, recently published, of the medical officer of health for the port of London, Dr. Harry Leach, relating to sanitary work done under his supervision during the half-year ending June 30th, 1875, excellently serves as a reminder. Previous reports of Dr. Leach have, in the main, been devoted to questions concerning the regulation of the port of London with reference to epidemic diseases, especially cholera. The present Report relates the details of half a year's sanitary work in the port, in the absence of any prevailing epidemic malady. It deals simply with the inspection of shipping and of the port for the discovery of sanitary defects, and the remedying of such defects. Having none of those episodes of introduction of cholera or small-pox from foreign ports or local prevalence of scarlet fever which called for the greatest energy and the coolest thought of the authority and its officers to meet successfully, this Report may fail in interest for the cursory reader; but it is perhaps the most important of the several Reports written by Dr. Leach, as illustrating the every-day sanitary work of the port. The Report, in fact, relates to the fundamental sanitary work of the port, the execution of which will form the true gauge of its health-administration. The essential character of such work consists in continuous detailed inspection for the discovery of sanitary defects, and equally continuous minute care for securing the removal of such defects when found, and the prevention of their recurrence. It is remarkable how successfully Dr. HARRY LEACH has set afoot sanitary action in the port of London. During the half-year to which the Report under consideration refers, no less than 7705 vessels were inspected; and of these, 923 were cleansed, and 43 had various structural alterations made mainly for improved ventilation and lighting of the between-decks. This amount of inspectorial work, it must be understood, does not represent the whole amount of work of the kind that it was desirable should have been done in the port at the time, but simply such work as it was possible to do with the limited staff which Dr. LEACH at present possesses. As part of the regular inspectorial work, Dr. LEACH has instituted an examination of the drinking-water supplied to ships. In the present Report he gives the result of the examination of the water on board 64 ships, chiefly coming from foreign ports. Of these specimens, 4 were very bad, 25 bad, 19 doubtful, and only 16 good. The bad and doubtful waters were wholly from foreign ports; and now that international action is so much in the ascendant in social and sanitary matters, it may be suggested that the water-supply of shipping might well form a subject for such action.

It would appear that the visits of the sanitary officers to ships, and their suggestions, are most willingly received, and that owners and masters readily co-operate with them. While, on the one hand, this bears witness to the excellent temper and judgment with which the Sanitary Authority and its officers have been exercising their functions, it proves also that those functions meet with the approval of the persons who are most affected by their exercise. What has been effected in the port of London as to detailed sanitary work must be practicable and ought to be required in other ports.

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IN the last part of LUDWIG'S *Arbeiten* for 1875, which contains the results of work done in his laboratory during the preceding year, Mon. G. ASP gives a very careful and complete account of the Anatomy and Physiology of the Liver. He first describes the cells of the parenchyma of the liver, which, he observes, are often destitute of a nucleus, but frequently also contain one, and sometimes two nuclei. He gives a beautiful illustration of them, in which the nucleus appears as a disc, which is hazy towards the centre from the accumulation of granules; around the granules is a clear area, which is surrounded by a double contour line. In some instances all the cells of the liver seemed to be destitute of nuclei; whilst in other instances only particular parts of the liver contained non-nucleated cells. As the animal in which he first noticed this absence of nuclei in its hepatic cells had been fasting for many hours, he conceived that it might be connected with the period of digestion; and to test the accuracy of this view, he starved a rabbit for sixty hours, then removed a small portion of the liver through a small opening in the linea alba, and closed the wound. The animal was then abundantly fed, and shortly afterwards was killed by bleeding, and another portion of the liver examined; but the results did not support his theory, as non-nucleated as well as nucleated cells were found in both conditions—in the fasting as in the well-fed animal.

M. ASP enters into minute details of the distribution of the finest biliary ducts. These, it has now been satisfactorily ascertained, do not, as was formerly supposed, end in blind extremities outside the follicles, but penetrate into their interior in the form of fine canaliculi, which groove the surfaces of adjoining hepatic cells. The inter-insular biliary ducts are lined, according to ASP, by a fine columnar epithelium, which rests on a striated tissue composed of connective-tissue fibrils and flat cells with fusiform nuclei; but he has not been able to convince himself that the cells, as HEIDENHAIN supposed, are a form of unstriated muscular tissue. From these a number of fine capillaries are given off, which, dipping into the substance of the follicles, still possess a wall, and are not mere spaces between the cells. Their wall is composed exclusively of the above-mentioned flat cells with fusiform nuclei, the internal layer of columnar epithelium and the outer layer of connective tissue having gradually ceased. The precise mode in which the biliary capillaries terminate cannot be said to be accurately known. With all ordinary injecting fluids a plexus comes into view; but if they are injected with a solution of alkanin in oil of turpentine, or with an alcoholic solution of gamboge, very remarkable appearances are produced, which are only explicable upon the supposition that the solutions thus made penetrate into the interior of the hepatic cells by filtration, though this cannot be held to disprove the existence of a cell-wall.

ASP corroborates the statements made by MACGILLAVRY that the hepatic bloodvessels are surrounded by perivascular spaces, as he has been able to inject them by the method of puncture.

Annotations.

"Ne quid nimis."

"SACRIFICIAL" LITERATURE.

WE must apologise for applying the term "literature," in default of a more convenient word, to a class of writing which is in no sense literate. The *Cornhill Magazine*, a periodical which started on its career under the highest literary auspices, contains in its current number a conspicuous example of the composition to which we allude. The title chosen is "Sacrificial Medicine," and the avowed purpose of the writer—evidently a very remarkable person—is to show that "a large part of the medical science of all past ages proves that the doctors and their patients valued remedies *in proportion to the price to be paid for them*, either in money or in suffering; in short, adopted freely the Doctrine of Sacrifice as applied to Medicine." The italics and capitals are the author's. This general purpose is supplemented by a design to prove that the "inductive science" does not rule in the sick room even now, and that both doctors and patients retain their faith in "Sacrificial Medicine." We scarcely know which most deserves attention in the strange paper that, in some mysterious way, has found a place in the *Cornhill*, the ignorance and perverse ingenuity of the writer, or the innocence of the presiding censor who allowed it to pass into print. To begin with, the word "Sacrifice," although emphasised with a capital letter, and described as a "Doctrine," is employed exclusively in its most ordinary sense; the idea being made to include everything nasty or disagreeable to the taste of the person having recourse to a remedy. The operation of swallowing a dose of castor-oil or assafœtida is a "Sacrifice," and an exemplification of the "Doctrine." That this is the fact will be evident from the peroration, from which we quote the following elegant extract:—

"To Homœopathy (as to many another kind of heresy) we probably owe somewhat of the mitigation of orthodoxy; and children, noticing the busts of Hahnemann in the shop windows, may be properly taught to bless this great Deliverer who banished from the nursery those huge and hateful mugs of misery—black founts of so many infantine tears—mugs of sobs and sighs, and gasps and struggles unutterable, from one of which Madame Roland drew the first inspiration of that martyr spirit which led her onward to the guillotine, where she suffered herself to be whipped six times running sooner than swallow the abominable contents."

This is how the article ends, and it is a fair sample of the style throughout. It is, in brief, a compilation of all the filthy and absurd nostrums which, as everybody knows, were prescribed by the ecclesiastical and lay charlatans of the dark ages. The story has been told a hundred times—with humour, and it forms the staple of comic medical literature. It sometimes even finds a place in an "Introductory"! But it is taxing the credulity of those of our readers who have not seen this article to ask them to believe that a writer in an intelligent magazine actually treats the subject seriously, and adds to his monstrous folly the signal impudence of describing the authors of these pestilent nostrums as the Gulls and Thompsons of the period, with the implication that the distinguished practitioners with whose names he makes free are only a few removes from the same depths of ignorance. The argument, if we may be excused for a moment so describing it, stands thus: In 1621 somebody recommended for hiccup, "a beverage, of which the chief ingredient is the flesh of a mummy.... Cannibalism [therefore] survived in medicine, and was approved by the faculty in Italy as well as in England down to a recent date"—with the moral that doctors generally are knaves and savages. A parallel exploit of reasoning would be that, because in a certain dark period the sovereign believed in swimming witches, and archbishops superintended the burning of heretics, monarchy is a delusion and religion a snare. It would not be worth while to notice this marvel of stupidity, except as a curious product of the dull season in a quarter where rank weeds are not commonly cultivated, but that interspersed among the select stories there are assertions so grossly and flagrantly false that they call, not for contradiction—that would be a work of supererogation,—but for indignant exposure as offensive to decency and discreditable to the magazine in which they have been permitted to appear. The writer has the effrontery to ask: "Did anybody ever find a medical man, in view of a patient's straitened circumstances, telling his anxious friends that the remains of the last bottle of his physic would answer as well as a new one, or that they might readily change it by adding a few drops of some fresh ingredient, instead of ordering another six ounces from the chemist, to be set aside in its turn half-used to-morrow? Or (what is still more to the purpose) did anybody ever hear of a case wherein the physician summoned for consultation (possibly at enormous cost) has given his honest opinion that the regular medical attendant of the patient has mistaken his case, and that the treatment ought to be altogether reversed?" And so on in the same strain, with the unblushing imputation that the consulting physician jumps into his carriage after pocketing his fee, and cheerfully quits the house of mourning, "aware he is losing the patient's chance of recovery by his wrong treatment." We have no words in which to characterise the mendacious calumny of these outrageous falsehoods, and we think the responsible managers of the *Cornhill Magazine* owe it to the public and their own repute as honest men to tender the amplest apology for the insult to a laborious and liberal profession and an honourable class of practitioners, which their periodical contains. It is needless to say that no consulting physician would retain the respect of his colleagues a single moment if he did not instantly correct any error he might detect in a case to which he was "called in." This is always done, and while it is not only unnecessary, but would be cruel to the friends of a patient, to declaim against the treatment previously adopted in the extremely rare case where a general practitioner has "egregiously mistaken" the malady or its cure, it is the duty of the physician to remedy the error; and, though he cannot recall the past, he is responsible for the future. No sensible person needs to be told that this is the course pursued by every qualified medical man, and the contrary imputation can be damaging only to the magazine in which it appears. The title of the paper should have been that which we have set at the head of this rejoinder.

SALICYLATE OF SODA.

THE *Berliner Klin. Wochenschrift* contains an article on the effects of the salicylate of soda as an antifebrile, by Dr. Moeli, of the Rostock University Hospital. According to Kölbe, the salts of salicylic acid possess no antiseptic properties, which has been confirmed by other observers, their preserving effects on organic matter being derived from the amount of free acid in them and proportionate to it. The trials of this at present in Germany rather fashionable acid as an antifebrile induced the author to try the salt as such, the presence of alkali being indispensable for the absorption of the acid into the circulation, and soda appearing preferable to potassa. The solution of salicylate of soda (the acid is obtained from this salt by the wholesale manufacturing process, and therefore the latter is not dearer than the former) is of a brown colour and unpleasant taste; the addition of extract of glycyrrhiza or some wine taken with the dose is therefore recommended. From four to five grammes of the salt is the usual quantity given every other evening in cases where the larger doses of the sulphate of quinine (1·5 to 2·0 grammes) would be required. Several cases of typhoid fever (altogether seven), in which the drug was used without the cold bath or any other remedy, showed after each dose a constant decrease of temperature (from 2° to 3° C.), lasting over twenty-four hours, combined with a diminished frequency of pulse. An increase in the quantity of urine was not observed in the twenty-four cases of miscellaneous febrile diseases in which the salt had been administered. In half the number a profuse perspiration accompanied the fall of temperature, as has been recorded by Buss, after the use of salicylic acid. In some cases, however, the salt effected a decrease of body-heat from 40·4° to 37·0° C. without any sweating at all. In four cases sickness and vomiting compelled him to use the salt solution as an enema, after which a distinct fall of temperature followed, though of less importance than after an application by mouth. Subcutaneous injections must be made with a neutral solution of the salt to avoid severe pain which follows after injection of the acid. The author insists on the usefulness of salicylate of soda as an antifebrile remedy in comparison with the antiseptic but not antifebrile effect of benzoic acid. This chemical body in both forms, as derived from the urine of animals, as well as the acid made of the natural resin, possesses, according to the late experiments of Professors Salkowski and Fleck, antiseptic properties even in a higher degree than salicylic acid. The latter, however, acts undoubtedly as an effective antipyretic. Antiseptic treatment begins to assert its importance and success no less in medical cases than in surgery.

CHILDREN IN THE SILK TRADE.

General reforms frequently involve special hardships. The circumstances of a particular class may be exceptional, and a change conceived in the interest of the many may press inconveniently on a few. It does not, however, follow that the rule ought to be relaxed so as to meet the exception. Commonly the exception may be made to conform to the rule. A difficulty of this kind is just now engaging the attention of the Royal Commission on the Factory Acts. The Chamber of Commerce at Macclesfield has, it appears, represented to the Commission "that the circumstances under which the silk trade is carried on are of so exceptional a character as at least to justify the further suspension of the section of the Act relating to the employment of half-timers and full-timers." A deputation, headed by the Mayor of Macclesfield, has since enforced substantially the same plea. It is alleged that the effect of enforcing the full provision of the Act must be "to throw out of employment a large number of children whose labour is essential to the continuance of the Macclesfield silk trade." It is by no means clear that the health and happiness of the children concerned weigh as much in the estimation of the Chamber of Commerce as the prosperity of the trade it is desired to protect. This is only natural. But the Commissioners will do wisely to maintain the larger and national view, as distinguished from the narrower and local. It may be true, although the evidence is by no means conclusive, that "in order to learn the manipulation of silk perfectly, children should commence at an early age," but if this be the fact, some better mode of instruction or improved practice must be substituted for that which blocks the path of physical reform. The moral and physical health of the rising generation cannot be sacrificed to the Juggernaut of trade. The children of the poor are in a peculiar sense the children of the State, and it is bound to exercise a strong paternal guardianship. The problem which awaits solution is, if possible, to combine the conditions of health and education with the requirements of industry. In all cases where the support of the family depends in part on the remunerative labour of its younger members, the task of finding a satisfactory solution is, no doubt, embarrassing. But the provisions of the Factory Acts must be carried out in their entirety—that is, so far as the essential principle of relief is concerned,—and we trust the Chamber of Commerce will everywhere make it their chief concern to remove obstacles rather than cast stumbling-blocks in the way of progress. The health—the future prosperity—of the nation is deeply concerned in the issue of the struggle between the needs of trade and the necessities of the population. Taking the lowest standpoint, and looking to the interests of the race, it is abundantly evident that the young of the human species must be, as far as possible, emancipated from labour—that is, labour which stunts the growth of body and mind, and issues in the development of an adult feeble in form, incapable of the higher functions of life, and reproducing in its kind a progeny impoverished by its own blighted growth, and in time contributing to a degeneracy which must end in national weakness and individual want. It is eminently short-sighted to oppose measures conducing to the improvement of the race, and it will hereafter be found a fatuous policy to sap the root from which prosperity must spring.

THE "DAILY TELEGRAPH" ON STREET ICES.

A few warning and suggestive remarks which appeared in The Lancet last week, on the subject of "Street Ices," have furnished a clever but hard-pressed leader-writer in the *Daily Telegraph* with matter for a column of agreeable banter. The didactic portion of his discourse is apparently designed to teach that ices are not bad in themselves, but injurious only when taken at ill-chosen times—for example, in the middle or immediately at the close of a meal. There is not, perhaps, much to which exception need be taken in this statement; but we offered no opinion on the expediency of eating ices—we only laid down that "cooling drinks and frozen eatables need to be especially pure and good in themselves," and our contemporary is obliging enough to confess that he thoroughly agrees with us. The objection we took to street ices was that they were not as a rule "pure and good." The *Daily Telegraph* is greatly scandalised by our remark that "the common street ice is a concoction of dirt and indigestibility." We are reminded that an ice is not concocted, or, as our contemporary curiously puts it, "subjected to any process of 'coction' or cooking whatsoever." We are also informed "that 'indigestibility' is not a tangible substance, susceptible of being made into a decoction by the addition of dirt." This is laborious, but it is not very intelligent humour. It is worthy of the journal which not long ago described "the shrine of Nike Aptera's Wingless Victory"; but it is not worth answering, further than to remark that "concoction" and "decoction" are different words, having diverse significations, commonly received and generally understood. If our contemporary will take the trouble—as we did before drawing attention to the subject—to examine the ices sold in the streets by hawkers with barrows, he will find they are not so simple as he seems to suppose. The gaudy colouring alone should have suggested reflections which might have warned a clever but unskilled writer from taking up the cudgels in defence of a danger he evidently does not realise and is not in a position to understand. We repeat, these cheap ices should be regarded with suspicion, and if the working classes have money to spare for such luxuries, they will do better to spend it in wholesome food.

PHOSPHATURIA.

The attempt of Dr. Prout to establish a "phosphatic diathesis," based upon the tendency to the deposition of earthy phosphates in the urine, was unsuccessful, and met with determined opposition on the part of other observers highly experienced in the pathological indications of the urine; and since Dr. Bence Jones showed in his "Animal Chemistry" that the quantity of phosphatic deposit depended almost wholly upon the alkalinity of the urine, the idea of there being such a constitutional state as "phosphaturia" has fallen into abeyance, much as the kindred "oxaluria" has. In fact, excess of these constituents has more properly been regarded as symptomatic of derangements in nutrition, and not as a primary disorder leading to grave changes in the organism at large. A monograph has recently been published by M. J. Teissier, of Lyons, entitled "De la Phosphaturie à forme Diabétique," the object of which is to show that there does exist a grave constitutional state signalised by polyuria, wasting, and other symptoms of diabetes without the presence of sugar in the urine, but with a large excess of earthy phosphates. The normal quantity of phosphates excreted in twenty-four hours is about ten to twenty grains, but in this affection the salt has been observed to reach from four to ten times that amount. The cases of phosphatic polyuria were first observed by M. Teissier *père*, two or three years ago, in which there were the constitutional symptoms of diabetes, with the passage of large quantities of urine, but no sugar; the specific gravity being low (about 1012), and the amount of phosphates being largely in excess of the normal. In one such case, in which there was as much as 450 grains excreted per diem, the patient was attacked with neuro-retinitis and subretinal œdema, *followed* by albuminuria. The albuminuria diminished, but the phosphaturia continued, so that the case is compared to albuminuria complicating diabetes. Another case is given in which traces of sugar as well as of albumen occurred in the course of the affection, but the excretion of phosphates persisted. The author inquires whether "diabetes insipidus" may not be phosphatic polyuria. It is worthy of note that Dr. Dickinson, in his recent work on Diabetes, records excess of phosphates in the insipid form of that disease.

M. Teissier further points out, in confirmation of his view (which he expresses very cautiously), that there may be a "phosphatic polyuria resembling diabetes," that this condition leads to grave disturbances of nutrition, notably cataract, in the same manner that diabetes does. He has analysed the urine in many cases of cataract, and in some has found excess of phosphates in the urine. He gives an outline of three cases of double cataract in which phosphaturia was present, in all of which operative interference led to ill results, and points out that in none of these cases was there any disease of the osseous or nervous system, while the fact of the cataract being double indicated some diathetic state. He affords no explanation as to the starting point of the affection, but contents himself with propounding the question that it may be due to over-acidity of the blood favouring the solution of phosphates in the economy, or to a morbid activity of the nervous system by which more phosphates are used up in the nutrition of the nervous centres.

GLASGOW CONSERVANCY.

THE medical officer of health for Glasgow, Dr. James B. Russell, has lately submitted to the Committee of Health of that city a very interesting memorandum on ashpits and privies. It is a history of the ashpit and privy question in Glasgow, and affords an instructive illustration of the difficulties which beset the carrying out of the simplest sanitary arrangements among local representative bodies. Until very recent years Glasgow ashpits and privies had an exceedingly unsavoury reputation. In 1863 the Committee of Health took the question in hand, and instructed Dr. Gairdner, the then medical officer of health, and Mr. Carrick, the master of works, to arrange as to the best principles on which ashpits should be constructed in various parts of the city. As the result of this instruction, the Committee were in effect advised to limit the size of the ashpits and privy vaults, and to cleanse them daily. Thereupon the inspector of cleansing, who appears to represent a different department, is called upon to fix the periods for the removal of the contents of the ashpits and privies, and he lays down the rule of practice that all box privies and small ashpits should be cleansed daily, and other ashpits and privies at an interval to be governed by their situation and the number of people using them. Having started upon this course for amending privy and ashpit nuisance, ten years pass, during which the practice of cleansing does not accord with the principles laid down for its performance, and in which the cleansing department of the municipal government is so conducted that the sanitary advantages to be obtained from structural improvements of privies and ashpits by the health department were not secured. In other words, the operations of the cleansing department were not governed by the sanitary needs of the city as represented by the health department, but by other considerations, so-called economic, and the latter committee found its most formidable and persistent opponent in doing its duties with respect to excremental nuisances in the very department which it might be presumed was primarily established to facilitate their execution. This is not an uncommon spectacle, we believe, among municipal committees this side of the Tweed. Manchester not long ago blundered in this way, but, if we mistake not, this city has now put the cleansing of its privies and ashpits under the control of its Health Committee, so that the cleansing may be in accord with structural improvements of the receptacle. Glasgow cannot well afford to do otherwise.

PERMISSIVE SHAM-SANITATION AND THE DEATH-RATE IN HULL.

WITH regard to population, Hull is about the tenth English town, while as a port it only yields in importance to London, Liverpool, and Bristol. It may be imagined, therefore, that the health of this large town, the population of which the Registrar-General estimates at 133,932 persons, is a matter of somewhat more than local interest. We therefore feel bound to call attention, first to the value apparently placed upon the health of the town by the Town Council or Urban Sanitary Authority of Hull, and secondly to the sanitary condition of the town as judged by its recent mortality statistics.

It appears from an apparently authentic list of provincial medical officers of health that the salary assigned to the medical officer of health of Hull, who also fills the post of port inspector, is £20 *per annum and fees!* That the post of medical officer of health of the town and port of Hull should be held by any medical practitioner must signify that a large proportion of the duties appertaining to such an appointment remain unperformed. The amount of fees is left to the imagination, but it is improbable that they are considerable. We are therefore forced to the conclusion that the Urban Sanitary Authority of Hull either considers that there is very little sanitary work to be done in the town, or desires that it should be done and not paid for, or is content that the necessary work should be left undone.

As regards the sanitary condition of the town, let us look at recent statistics on the subject. During the thirteen weeks ending 2nd inst., according to the Registrar-General's Weekly Returns, the annual death-rate in Hull was equal to 30·1 per 1000, and exceeded by 26 per cent. the average rate in eighteen of the largest English towns. The rate in Hull in the corresponding period of 1873 and 1874 did not exceed 27·5 and 26·7 per 1000. The death-rate during the past summer quarter in Hull from the seven principal zymotic or preventable diseases was equal to 9·6 per 1000, and exceeded by 48 per cent. the average zymotic rate in the eighteen towns. One more fact. The rate of infant mortality, measured by the proportion of deaths under one year to births registered, was 288 per 1000 in Hull last quarter, and was 30 per cent. in excess of the average rate of infant mortality in the eighteen towns. This comparison could be carried further with similar results. Judged by all the various tests supplied by the manipulation of the mortality statistics of Hull, the sanitary condition of this town is most unsatisfactory, even measured by the low average standard of health prevailing in our eighteen largest English towns. The existence of such a palpable sanitary sham as a nominal medical officer of health for this town and port at an annual salary of "£20 and fees," affords one of the most powerful arguments against the present system of permissive sanitation, a system which is apparently powerless to interfere with the waste of life now going on in Hull.

DISTENSION OF THE URINARY BLADDER MISTAKEN FOR AN OVARIAN CYST.

ONE of the most mortifying mistakes in diagnosis that can be made, and yet one that is by no means infrequent, is that in which an abnormally distended bladder is thought to be an abdominal tumour of importance. Misled by the occurrence of apparently free discharge of urine, the clinical observer has been known to diagnose a pregnant uterus when there was only hysterical retention of urine, and when the timely use of the catheter has caused the disappearance of the tumour and the pregnancy at once. Dr. Murchison records a remarkable case of enlargement of the abdomen in an elderly male, which was justifiably believed to be hydatid tumour of the liver, but which, on tapping, yielded twenty-four pints of urine. Another case has been recorded in *Le Progrès Médical* (May 15th), which is highly instructive. The patient was a female, thirty-two years of age, in whom menstruation had ceased for three months previous to her admission into Lariboisière Hospital, under M. Jaccoud; but there were no definite signs of pregnancy. Ten days before admission she experienced pain in the abdomen, which rapidly began to enlarge, and was soon followed by œdema of the lower extremities and genitals. There was a tumour in the median line, occupying the hypogastric and umbilical regions, reaching to four finger-breadths above the umbilicus, descending below into the pelvis. The cervix uteri was out of reach when vaginal examination was performed; and at first the opinion was that the tumour was ovarian, which was replaced by the hypothesis that it was a distended bladder, from its rapid growth, the pain at its onset, and the difficulty experienced in micturition. Catheterism yielded about a pint and a half of urine, and the bladder was thought to be completely evacuated. M. Jaccoud deferring a complete examination until the next day, the patient was seized in the night with dyspnœa, to relieve which the tumour was aspirated, and nearly eight pints of urine were drawn off, the last portions being blood-tinged. Before the operation the catheter had been employed, so as to be sure that the bladder was empty. Death occurred in six hours, the post-mortem examination showing a uterus between the third and fourth months of pregnancy, and great dilatation of the bladder and ureters. The seat of puncture was sought for in the walls of the bladder without success. No mention is made of the reason why catheterism failed to draw off all the urine.

SCURVY.

THE *Shipping Gazette* of the 29th ult. contains a special account of the official inquiry held at San Francisco on the 3rd ult. as to an outbreak of scurvy that occurred on board the ship *Bremen* on the outward passage from Liverpool. From this it appears that the ship was chiefly manned by coloured seamen, that the passage occupied 192 days, that many of the crew refused to take the lime-juice, although double allowances were served out to them, that fresh messes of vegetables were served out during part of the passage twice a week, and that in cold latitudes most of the watch were allowed to remain below. It appears also that many of the crew were unhealthy, or, at all events, unsound when they sailed from Liverpool, for one died of what is recorded as consumption about a fortnight after the commencement of the voyage, another man had fever of some kind, a third was down with dysentery, two others met with accidents, and a sixth, having chest pains, was treated, among other things, with mustard plasters before (as we hope) scurvy had commenced. The crew were short of bedclothing, but although the ship was manned by a Lascar crew no extra blankets were taken, and no canvas was served out to keep the men warm. The steward refused to show the books from which he quoted the quantities of stores served out, and the captain, although all this miserable sickness prevailed, did not think of putting into Honolulu or any port because "he had been twenty-eight years a shipmaster, and never put into any port but his destined port." The court was composed of the consul, three ship captains, and Lloyd's agent, but, strangely enough, there was no medical member. The captain's certificate was returned to him with the remark that he had failed to exercise the discretionary power vested in him as to running for another port, Honolulu being to leeward, and, with the trade winds, only six or seven days' sail. This, with a court wholly composed of nautical men, is the nautical aspect of the question. The sanitary aspect shows that all crews, and particularly coloured crews, should be examined before the ship sails, that with such men a special store of warm clothes and bedding should be provided. For it is really of more importance to Lascars than good food, that clothing suitable for coloured men should be supplied. It is not within our experience that coloured seamen, whether East Indians or Africans, as a rule refuse lime-juice; but the evidence does not show clearly whether the lime-juice was given out day by day, and mixed properly according to the terms of the Act; and the conduct of the steward in refusing to show his books is of itself very suspicious. Anyhow it is a disgrace to the present generation that any British ship should be thus decimated with scurvy.

A MAGISTRATE AND A MEDICAL WITNESS.

THE following report by *The Times* on Saturday last of the proceedings in a police case must be given literally:—

> "Patrick Barrow, labourer, was charged at Westminster, on remand, with an indecent assault upon Bridget Cronin, aged nine. Mr. Arthur Price, house-surgeon of Westminster Hospital, was put into the witness-box. Mr. Arnold, the sitting magistrate, asked him how it was that he had refused to inform a constable whether he had any evidence to give for the prosecution, when interrogated by the constable upon the matter? Mr. Price replied that he was not in the habit of giving evidence to police constables, but was at the service of the Court if required to give evidence in the usual way. Mr. Arnold thereupon intimated that the interrogation was by his desire, censured Mr. Price for his reticence to the constable, and asked him if he had any evidence to give for the prosecution. Mr. Price replied that such evidence as he could give would be in favour of the prisoner. Mr. Arnold then bade him stand down, and said that he 'did not require his services.' Barrow, who strongly protested his innocence, was then committed for trial."

The above report would be incredible if it appeared in any less trustworthy authority. It is disturbing to think that under the very shadow of the Houses of Parliament a magistrate should seek evidence in such a loose fashion, and instead of himself hearing a medical witness's testimony in the ordinary way, should make the reception of it depend on a policeman's report as to whether it was likely to be one-sided. Mr. Arthur Price was perfectly right in refusing to give his evidence to a police constable. Indeed, he would have acted very wrongly had he not so refused. If this is the habit of police-courts, or of the Westminster police-court, the less it is countenanced by medical witnesses the better. Our contemporary the *Examiner* devotes a leader to the incident, and it is most justly indignant at the conduct of the police magistrate. The prisoner has been since tried at the Middlesex Sessions and acquitted. There is every reason to believe that he would have been acquitted at the police-court if the evidence in his favour had not been disallowed.

THE MEDICAL EDUCATION OF WOMEN.

THE medical women question has received a speedy and decisive answer at Birmingham. It will be remembered that a deputation of women's rights advocates recently waited upon the Council of Queen's College and urged the desirability of making provision for the education of female medical students, backing up their suit with the hint that to admit female students would tend to popularise the College. It was very prudently remarked that the assent of the hospital authorities should be obtained before the scheme could be entertained. At length the Council have unanimously resolved to decline to admit women students. The Council were induced to come to this determination in consequence of the result of the joint action of the professors and of the medical officers of the General and Queen's Hospitals, to which we called attention last week, and from a subsequent resolution of the professors, carried by a majority of nine to three votes, that they (the professors) could not undertake the medical instruction of women students in Queen's College.

It would appear, therefore, that another door has been closed against the well-meaning but misguided females who are afflicted with the delusion that the arduous and responsible labours of medical life are not properly performed by members of the sterner sex. If we could but feel that the matter will end here, what a relief! But sooner or later other attempts will be made, at Birmingham or elsewhere, and it may happen that some aspiring institution desirous of "popularising" itself will in a moment of weakness accept the seductive offer, and the female aspirants to medical practice find another home.

THE DYSMENORRHŒAL MEMBRANE.

DR. P. FINKLER, of Kiew, has examined seven specimens of dysmenorrhœal membrane obtained from four patients. One of these was under observation in the hospital for three months. During that period she menstruated three times, and passed a membrane on each occasion. Dr. Finkler believes that the membrane is the mucous membrane of the uterus, inclusive of the blind extremities of the glands, but that in some cases the deeper layer of the membrane and the terminations of the glands remain in the uterus. The structure of the seven membranes examined was essentially the same, but with varying proportions of blood, round cells, and epithelium, and similar to what had been described before as the structure of the uterine mucosa during the early part of menstruation. The names "apoplectic," "villous," "inflammatory," which have been given to different states of the membrane by different authors, depend on the quantity of blood, and granulation or round cells, found in the tissue; the villous character of the membrane depends on strings of fibrine which, in some cases, appear attached to its inner surface. The membrane is the product of disease, and not of impregnation and abortion, as was shown by the case referred to above. Nor is it the product of the increased physiological action which takes place in the generative organs periodically; but it is the result of a pathological condition which is to be looked for in the character of its elements, in the great accumulation of granulation cells, many homogeneous, others granular, some nucleated; in the blood and fibrine found in the tissue; in the epithelium swollen, glistening, or lost in the flocculent outer surface of the membrane; persistence of the disease, its recurrence after cold, abortion, labour, acute inflammation of the uterus; the condition of the uterus itself, its false position, and abundant flow of mucus (often with acid reaction) from its cavity. All the membranes examined gave the amyloid reaction with iodine and sulphuric acid, and Dr. Finkler thinks this is probably the real pathological condition. The cause of the separation of the membrane he finds in the accumulation of granulation cells in the mucous and submucous tissue, and in the flow of blood, which in some cases takes place into the whole of the mucous membrane, and in others only into the deepest layer of it; in consequence of these two forces the mucous membrane becomes detached, acts like a foreign body, and excites uterine contractions.

THE KINGSTON GUARDIANS AND THEIR MEDICAL OFFICER.

WE are glad to observe that a most ungenerous attempt to oust the medical officer of the Kingston Union, Mr. Harris, from a position he has worthily held for many years has been frustrated by the good sense of the majority of the board of guardians, before whom the case was lately brought. The very utmost that could be urged against Mr. Harris was that he had committed an error of judgment in the treatment of a lunatic patient. "He delegated power to the nurse to use the strait-jacket" was the extreme charge that his principal accuser brought against him. Colonel Cole should consider the ruinous penalty which the adoption of his motion would have brought on a professional man. The loss of the appointment itself was a very little matter, but the dismissal would have attached a stigma on Mr. Harris as cruel as it was undeserved. With the exception of a clerical member of the board, Col. Cole found no one to support him in his ill-advised endeavour; the rest showed themselves unmistakably on the side of reason and justice, and denounced the proposal as "unchristian," and as "an unparalleled piece of effrontery," which is precisely the opinion we have of the attempt. Naturally the profession in the district received a rude shock on becoming acquainted with these proceedings. Mr. Harris's professional brethren lost no time in drawing up an address of sympathy to him, which has already received the signatures of nearly thirty medical men. Meanwhile the affront is likely to recoil on the head of the assailant.

A NEW YORKSHIRE INLAND WATERING-PLACE.

A Local Government Board inspector recently held an inquiry at Hovingham, near Malton, respecting an application from the Malton rural sanitary authority for power to borrow £1500, to be expended in the improvement of the drainage and water-supply of this village, which in a local paper is described as "a popular little inland watering place." It was stated that a considerable number of the villagers were opposed to the expenditure of this money, and that they had memorialised the inspector against the scheme; but at the meeting, which was well attended by the ratepayers, the opposition was but slightly represented. After considerable discussion, the inquiry was adjourned for amendments of the scheme, both as regards drainage and water-supply. The inspector suggested that the drainage-plan should be so altered as to carry the sewage further from the village, and to admit of its application to the land, or, if it be necessary, to empty it into the beck which runs through the village, to remove the point of its discharge lower down than the scheme proposed. With reference to the water-supply, the inquiry was postponed, in order to obtain analyses both of the water from the proposed source and from the wells at present in use. It would appear that the popularity of Hovingham as a watering-place must be of very recent date, as the population of the township of that name declined from 608 in 1861, to 587 in 1871. It augurs well, however, for the future prospects of the watering-place that its drainage and water-supply should thus early be dealt with. In most of the older watering-places these matters were too often left to look after themselves, until neglect created an absolute nuisance.

THE MIDDLESEX HOSPITAL.

The usual dinner of the students and friends of the Middlesex Hospital, held at the opening of the medical session, took place at St. James's Hall on October 1st, Mr. Campbell De Morgan presiding. The attendance was large and the evening was a very successful one, the speeches being remarkable for their good taste and feeling. The chairman, in proposing the toast of the Middlesex Hospital Medical College, remarked upon the present condition of the institution as a favourable contrast to former years. He remembered how that one session the total number of entries amounted to three and a half! The toast was coupled with the name of Dr. Greenhow, the Treasurer of the College, to whose unremitting energy and discretion much of the present position of the school is owing.

During the recess extensive alterations in the way of enlargement and improvement of the school-buildings have been undertaken. Mr. Foster, of Sidney Sussex College, Cambridge, has succeeded Mr. Heisch in the chair of Chemistry at the hospital.

"A COLONY OF LUNATICS."

At Gheel, a village in Belgium, there is a colony of lunatics under the care of Dr. Bulckens, and during the recent Medical Congress at Brussels it was visited by about forty members, who were greatly interested in what they saw and heard of the condition of these unfortunate people. The lunatics, who number about 1300 of both sexes, are not kept in an asylum, but board and lodge with the inhabitants. The patients come from all countries, and belong to all ranks of society, being accommodated according to their means. The more dangerous lunatics are placed in outlying isolated houses. The inhabitants are all more or less engaged in the surveillance of those who are quartered upon them. There is a depôt asylum and hospital to which cases of violence and urgent illness are sent. It has been suggested that the system would work well elsewhere. It would be interesting to learn whether this constant association with the demented tends to induce any form of mental deterioration among the villagers of Gheel.

OBSTETRIC NURSES.

It seems to be too generally fancied that any nurse will do for a lying-in woman. We see instances from time to time of the mischievousness of this delusion, lying-in patients drifting into bad conditions from the ignorance or the inefficiency of the nurse. A sad case has just occurred at Wrexham, in which a nurse of seventy years was awoke at six in the morning after a whole night's heavy sleep. She took it for granted that what her mistress wanted was a draught which had been prescribed. Without having any conversation with her, she took up an aconite liniment instead of the draught and gave it to her unfortunate mistress, who shortly afterwards died with all the symptoms of aconite poisoning. The nurse admitted frankly her mistake, and made no excuse for it. She was evidently too old for the work, and too exhausted to use her wits in the night. Even if the bottle had been marked "poison," it is quite probable that the same sleepy error might have been committed.

OUTBREAK OF ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

During the past week nineteen cases of enteric fever have been admitted into the Seamen's Hospital, Greenwich, from the *Cornwall* school-ship stationed off Purfleet. These make the number of cases received during the past fortnight amount to twenty, the first case having been admitted September 21st. The water employed on board the *Cornwall* is brought off daily by the ship's launch from a well or reservoir situate near the river. As the cases of enteric fever have occurred so simultaneously, we would suggest that the water-supply has probably become contaminated. At all events this should be the first step in the inquiry, which we hope will be of a most searching character. We understand that a case of enteric fever has also occurred on board the *Warspite*.

WORCESTER INFIRMARY.

We should be sorry to see the Executive Committee extricated from the difficulties which they have brought themselves into by medical men rushing to fill the vacancies created. At present there is only one physician to do the work. Two others have applied to fill the vacancy: one, Dr. Hunt, of Birmingham; the other, Dr. Woodward, of Worcester. Dr. Hunt, on hearing the circumstances which had led to the vacancy, withdrew his application. The Executive Committee have rejected a motion to call a meeting of governors to decide the question in dispute. They cannot be congratulated on the spirit they display in this controversy, which, if not satisfactorily terminated, may prove more disastrous to the institution than they think.

THE PUBLIC HEALTH ACT, 1875.

The Local Government Board has issued a circular to local authorities descriptive of the Public Health Act, 1875, and explanatory of the various amendments of the sanitary laws contained in the Act. The work of consolidation necessitated numerous minute amendments to remove obscurities in the Acts consolidated and to harmonise their provisions. Advantage was also taken to introduce certain amendments extending the powers and obligations of sanitary authorities. The circular describes in detail the different amendments, and forms a very important appendix to the Act of 1875.

MORTUARIES.

At the last meeting of the Metropolitan Board of Works a memorial from the Strand District Board was read, setting forth that owing to the want of mortuaries for the reception of the dead before burial the health of the living was greatly endangered. In many crowded localities it was difficult to obtain sites without compulsory powers. The memorialists, therefore, prayed the Board to introduce a Bill into Parliament conferring upon vestries and district boards compulsory powers for the purchase of sites for mortuaries. The memorial was referred to a special committee for report. Dr. Joseph Rogers has been most active in this matter, and whatever may be the issue of the present application, he deserves great credit for his well-directed efforts.

"SIN AND DIARRHŒA."

The Wednesfield Local Board have been perplexing themselves with the knotty question of the significance of epidemic diarrhœa. The ordinary views as to its relation to bad water, faulty drainage, and the like found some supporters. Mr. Wadley—described as a stout, robust gentleman—could not understand all the fuss made nowadays about the water question. When he was a young man he used to drink nothing but river water. He used take a cup and drink water from the side of a 'good jed dog' in the river." (Loud laughter.) Mr. Cooper cut the knot. He said that sin had brought disease into the world, and the Almighty permitted the outbreak of diarrhœa in their midst; neither doctors nor anyone else could prevent it. Mr. Cooper is not far wrong. Sin has much to do with diarrhœa, especially municipal sin, which permits a population to drink sewage, and then coolly satisfies itself with referring the judgment to the Almighty.

BOARD SCHOOLS AND SCARLET FEVER.

"A Medical Man," in a letter to the *Standard*, justly exposes the ignorance of a School Board visitor, who insisted on a child who had suffered from scarlet fever ten days, but who was feeling pretty well, returning to school. The writer says he has "often" been horrified at such indiscretions. This is one of the many ways in which children disseminate disease. This child was doubtless in an actively infectious state, and would be for a month or more after her return. The Board should take this matter into consideration. It is the opinion of the best judges that two or three months must elapse before a scarlet fever patient ceases to be capable of conveying the disease.

The annual St. Bartholomew's dinner was held on Friday, the 1st inst., in the great hall of the hospital, under the presidency of Professor Humphry, of Cambridge. The old students and visitors mustered more largely than on any previous occasion, upwards of 120 being present, and the company included Sir Sydney Waterlow (treasurer of the hospital), Drs. Carpenter, Acland, West, Black, F. J. Farre, Stenhouse, and Monro, Sir James Paget, Professor Abel, Mr. Savory, Mr. T. H. Hills, Mr. Holden, Dr. Andrew, Mr. W. H. Cross, and many others connected with this celebrated hospital and school. The duties of chairman were most ably performed by Dr. Humphry; Dr. Acland, Sir James Paget, and Dr. West were specially happy in their speeches, and the prandial and other arrangements of the evening were eminently successful, thanks to the administrative skill and genial activity of Mr. Langton.

A humane and wise regulation now prescribes that at our criminal lunatic asylums a separation should be made between two classes of inmates. Dr. Orange, the able medical superintendent of the Broadmoor Criminal Lunatic Asylum, shows in a recent report how beneficially the plan may be made to work. Those who belong to the class detained during Her Majesty's pleasure are to a great extent persons who have acquitted themselves honestly in their callings up to the period when they have become afflicted with insanity, and who then, under the influence of some delusion, commit a crime. Those, on the other hand, who have become insane whilst undergoing penal servitude are widely different. They are for the most part habitual criminals inured to crime and vice. It is only of late that an attempt has been made to separate these two classes, and already it has proved effectual in reducing insubordination and disorder.

The friends and admirers of the late Sir John Gray have determined to erect a suitable monument to his memory, in testimony of his ability, energy, and perseverance. To him the citizens of Dublin are mainly indebted for the pure water they at present possess. The deceased in early life practised as a surgeon, and to the sanitary and scientific knowledge thus acquired may be attributed the successful carrying out of the Vartry water-system.

The Artisans' Dwellings Act promises to work well. As is known, it places great power in the hands of medical officers of health—power which, however, we are quite confident will never be misused. The process of demolishing courts and alleys unfit for human habitation may be said to have commenced. The initiative was taken some time back in one of the eastern districts of London, and we now learn that Dr. Tidy, the medical officer of health for Islington, has, within the last few days, submitted to the Sanitary Committee of the Vestry a list of places in the parish to which the Act should be applied. The recommendations of the medical officer, happily, must be complied with, however obnoxious they may be to a few landlords.

Dr. Robert Barnes, as President of the Metropolitan Branch of the British Medical Association, gave a *conversazione* on Wednesday evening at Willis's Rooms. A large number of guests were present, including Professor Abel, Captain Webb, Mr. Hyde Clarke, &c., as well as most of the members of the Metropolitan Branch, and many other distinguished men connected with the schools and the profession. The band of the Royal Marines played a selection of music during the evening; many works of art, scientific instruments, photographs, &c., were shown, and the hospitality of the host was evidently very much appreciated.

The tenth annual report of the sanitary condition of Merthyr Tydvil has just been issued by Mr. T. J. Dyke, medical officer of health for the district, and who is known as an energetic sanitary reformer. The present report, although well arranged, presents no special features of interest. We are rather surprised at the large number of deaths from scrofulous diseases recorded. No less than 92 children and 146 persons above five years of age were carried off last year by maladies bracketed under the heading of scrofula. Wet subsoil and damp foundations to houses doubtless account for this special mortality.

Dr. Septimus Gibbon, medical officer of health for the Holborn district, in a report lately issued, again reverts to the subject of congenital syphilis, the mortality from which is increasing in the parish, although Dr. Gibbon believes that the returns do not represent one-tenth part of the disease prevailing. There can be little doubt that the loss of health and of life in London due to syphilis is alarmingly great. Sooner or later the Contagious Diseases Acts, which are proving so beneficial in garrison towns, will have to be extended in other directions.

Mr. J. S. Baly, medical officer of health for Leamington, reports that comparatively little sickness existed in the town during the greater portion of the year 1874. In the third quarter of the year diarrhœa was rather prevalent, but, excepting this, very few cases of zymotic disease came under notice. As Leamington is one of our most popular health resorts, we are glad to receive such a satisfactory account of its sanitary condition as that given in Mr. Baly's report.

In London, last week, 1401 deaths were registered, including 11 from measles, 113 from scarlet fever, 12 from diphtheria, 44 from whooping-cough, 25 from different forms of fever, and 145 from diarrhœa. Different forms of violence caused 46 deaths.

The Social Science Congress was opened at Brighton last Thursday under the presidency of Lord Aberdare. On Monday next Dr. B. W. Richardson, the president of the Health section, will deliver an address to the members.

ON Monday last Sir James Paget presided at the distribution of prizes to the successful students of the Dental Hospital of London. The ceremony was held at Willis's Rooms. The spacious new premises of the institution, together with the excellent teaching staff, will not fail to attract an increasingly large number of pupils.

THE examinations for the certificate in State Medicine, instituted by the University of Cambridge, have been held this week. We believe about twenty-eight names are on the list of candidates. We hope soon to announce the result of the examinations.

ENTERIC FEVER is reported to be increasing in one quarter of Glasgow. Numerous cases continue to be reported, some of a very severe type, although the mortality is as yet small. It is estimated that about 20 per cent. in this particular part of the city have been attacked with typhoid.

THE guardians and other officials of Cannock have been called to account by Dr. Ballard, on behalf of the Local Government Board, by reason of the unsatisfactory state of vaccination in the district.

Correspondence.

"Audi alteram partem."

MEDICAL EXPERTS IN THE DAILY PRESS.

To the Editor of THE LANCET.

SIR,—I trust you will allow me to notice a letter inserted in your last number signed "F. R. C. P.," especially as reference is made to myself in what I consider to be an uncourteous and unjust way, and I am duly entitled to reply to it.

Allusion is first made to a letter of mine under the "sensational" heading "Homicidal Lunacy." This refers to a letter entitled "Criminal Lunacy in Scotland," which I sent to *The Times*, commenting on the "Cambuslang Murder." The editor, however, thinking the term "Homicidal Lunacy" more appropriate, substituted it for the one I had chosen.

The *Glasgow Herald*, containing a fully detailed report of the case, was forwarded to me by my friend Dr. Browne. He was aware that the *Psychological Journal* [thus in original!—ED. L.], then passing through the press, contained a few remarks upon "Murders by Madmen," and I, therefore, naturally thought that it was sent to me to comment upon in my journal. This I should have done had not the report arrived too late and when all matter was in the press. I considered the case, however, to be of such importance in a medico-legal aspect that I decided to send my comments and opinion to *The Times*.

I did not for a moment suppose that anyone could have inferred from the words used in my letter, "to express an opinion," that I intended the opinion for Dr. Browne, who is one of the greatest living authorities in lunacy. I am sure there is no statement in my letter from which such inference could be drawn, and there was nothing further from my thoughts at the time. The opinion was *pro bono publico*, but "F. R. C. P." has put his own construction on my letter in order to serve his purpose and raise a sneer.

Tierney had been tried, found guilty of murder, and sentenced to death, the jury recommending him to mercy in consequence of the *excitement* which might have existed from previous attacks of insanity. From the wording of the verdict the case appeared to me to be one in which doubt existed in the minds of the jury. Such being the case, I had a perfect right, especially as I considered the verdict an unjust one, to express an opinion on the case.

I must remind your correspondent that lunacy is a subject of interest not only to the profession, but to the world generally, and the columns of the press are open for discussion in disputed cases of insanity.

I cannot imagine how your correspondent can be under the mistaken impression that a physician is *not* entitled to express his opinion in a case of lunacy except he has actually seen the lunatic. An opinion formed upon careful and deliberate analysis of the full details of a case is surely entitled to some consideration, especially as it is the special province of psychologists [thus in original!—ED. L.] to frequently base their opinion upon written statements.

It is, however, a great satisfaction for me to know that the Home Secretary, in his subsequent investigation of the case, formed the same opinion as that expressed by

Your obedient servant,

Cavendish-square, Oct. 5th, 1875. L. S. FORBES WINSLOW.

SYMPATHETIC OPHTHALMIA.

To the Editor of THE LANCET.

SIR,—In "A Practical Treatise on Diseases of the Eye," recently published for me by Messrs. Macmillan, there occurs the following passage, which forms part of my observations on the channel through which sympathetic ophthalmia may be excited in a previously healthy eye by injury to its fellow:—

"Mr. Vose Solomon accuses the optic nerve, but only on the ground that, in a single instance, sympathetic ophthalmia followed enucleation of the eye in a patient of his own, whose optic nerve, on account of some imperfection in the scissors employed, was bruised at the place of division, instead of being cleanly cut."

In writing these words, I believed that I was correctly stating the substance of a case which Mr. Solomon had himself communicated to me some years ago, and also the substance of his own inferences from the facts related. Mr. Solomon, however, repudiates both the circumstance which I have mentioned, and the opinion which I have attributed to him; and I am unable to lay my hand upon the written history with which he furnished me.

On referring to an article, mainly on sympathetic ophthalmia, which I contributed to the *British and Foreign Medico-Chirurgical Review* for January, 1868, and in which Mr. Solomon admits that his own views are correctly stated, I find that the incident of the contused optic nerve and the subsequent sympathetic disease is described in a passage which I translated from the *Ophthalmiatrische Beobachtungen* of Dr. Mooren; and hence it seems probable that my recollection has played me false, and that I have fallen into an error in attaching the name of Mr. Solomon to a statement which is in all other particulars correct. I have arranged with Messrs. Macmillan to add to the present list of *errata* in my book that the name of Dr. Mooren should be read instead of that of Mr. Solomon in the passage referred to, and I shall be much obliged if you will give publicity to this explanation, and will at the same time allow me to express, both to Mr. Solomon and to yourself, my regret that the necessity for so troubling you should have arisen.

I am, Sir, your obedient servant,

Wimpole-street, October 4th, 1875. R. BRUDENELL CARTER.

LIVERPOOL.

(*From our own Correspondent.*)

THE opening proceedings of the winter session at the Liverpool School of Medicine were on this occasion rendered additionally interesting by the presence of Prof. Humphry, F.R.S., who, at the request of the Council, kindly undertook to preside and distribute the prizes gained during the two previous sessions. The proceedings commenced with the reading of a report by the registrar of the progress of the school during the past twelve months. An important feature in the report was the announcement that, by the will of the late Roger Lyon Jones, a sum of £2000 had been left for the purpose of founding scholarships. It was also suggested that these scholarships might be devoted towards encouraging and assisting students to work for the higher degrees, such as those of the University of London.

Dr. Dickinson's introductory address then followed. It mainly consisted of an interesting and erudite sketch of the state of medicine among the ancients, the lecturer concluding with some sound advice to the students.

Professor Humphry, before handing the prizes to their respective recipients, offered some eloquent remarks on the subject of knowledge, the power of applying it, and the value of competitive examinations.

In the evening the annual school dinner took place at the Adelphi Hotel, under the presidency of Mr. Reginald Harrison, which was numerously attended, Professor Humphry being amongst the guests. One most melancholy event cast a gloom over the proceedings of the day. I allude to the death, at Manchester, of Mr. Michael Harris, previously a distinguished pupil at Guy's Hospital, and more recently (for the last two years) the deservedly popular Demonstrator of Anatomy in the Liverpool School of Medicine. He was justly described by one of the speakers as "a type of what a healer of men should be—courteous, pure, unselfish, an honourable gentleman." His untimely end (a victim, I hear it said, to the want of a holiday) is most deeply deplored in Liverpool by a large circle of friends.

Liverpool, October 4th, 1875.

NEW STUDENTS.

THE following is a return up to Thursday of the number of fresh students at the metropolitan medical schools this session:—Guy's, 89; University College, 75; St. Thomas's, 67; St. George's, 44; King's, 30; St. Mary's, 30; London, 27; Charing-cross, 24.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 30th:—

Harvey, T. Prickard, Pryland-road, Newington-green-road.
Kellard, J. T. W. Stenteford, Trafalgar-place, Stoke Devonport.

The following gentlemen passed the Primary Professional Examination on the same day:—

Alex. Anderson, St. Bartholomew's Hospital; Samuel George Betty, John Hopkins, and Henry Frederick Harvey, University College; Francis Wheeler Brown and Fredk. W. Dobson McGachen, London Hospital.

MR. C. P. LUKIS has obtained the Open Scholarship of £100 for one year at St. Bartholomew's Hospital.

THE annual general meeting of the Spring Gardens (late Medical) Club, S.W., will be held at the Club on Wednesday, 13th October, 1875, at 4 o'clock P.M.

DR. NEWHAM, medical officer of the 3rd District Winslow Union, has been awarded the extra payment for efficient vaccination for the fourth time.

COMPLAINTS having been made to the Denbigh Corporation that the veterinary surgeons they employ to inspect cattle brought into town place their hands in the mouths of diseased animals, and then straightway inspect sound animals, thereby carrying the infection on their hands, a resolution was passed requesting them to discontinue the practice.

THE drainage of Maidstone, at a cost of £30,000, has been decided upon. The plans are those of Mr. Angell, C.E., who will lay down twenty-seven miles of pipes, and conduct the sewage out of the town to a point where it will be filtered and subjected to the clarification of lime process. The solid matter will be retained in tanks, and the effluent water, in its clarified state, discharged into the Medway.

UNIVERSITY OF CAMBRIDGE.—Professor Humphry has given notice that the course of lectures on Practical Anatomy will commence on Monday, Oct. 11th, at 9 A.M., and be continued daily till Oct. 19th, after which they will be continued on Mondays, Wednesdays, and Fridays. The course on Anatomy and Physiology will commence on Thursday, Oct. 21st, at 1 P.M., and be continued on Tuesdays, Thursdays, and Saturdays. This course is intended for students of Natural Science, as well as for medical students.

OVARIOTOMY IN ITALY.—The Italian journals are still reckoning the number of cases of ovariotomy performed in Italy. It has now reached sixty-three. The operation was performed by Paolo Rossi, head surgeon to the hospital of Vicenza, but, unfortunately, was unsuccessful, the patient dying twenty-six hours afterwards.

AT the Hull Police-court, William Shepherdson, late secretary of the Hull Infirmary, was charged on remand with embezzling several sums of money, the property of the institution. Mr. Hodgson, who appeared for the prosecution, stated that the accounts of the institution were still under examination, and he applied for a further adjournment. Dr. Rollit, who appeared for the defence, offered no objection, and the accused was further remanded, bail—two sureties in £200 each, and himself in £400—being again accepted.

DEATH FROM CHLOROFORM.—An inquest was held last week on the body of a man whose death was found by the jury to have resulted from the inhalation of chloroform. It appeared that the deceased was taken into St. Thomas's Hospital with a dislocated arm, which was put right under chloroform. By some means the bandage got disturbed, and the joint again displaced, and at the patient's request chloroform was again administered in order that the limb might be once more restored to its position. Whilst the operation was being performed, however, the patient died.

THE Native Guano Company are not to be allowed to carry out their sewage scheme at Kingston without encountering serious opposition. The proposal to erect two immense sewage tanks—with an open evaporating surface—on the banks of the Thames has alarmed the inhabitants of Hampton Wick, on the other side of the river, who believe that the works will not only be an annoyance but also detrimental to their health. The question was discussed at a meeting of the Hampton Wick Local Board on Monday, and after the proposal had been strongly condemned by the City Solicitor, the matter was referred to a committee.

LOUGHBOROUGH INFIRMARY AND DISPENSARY.—On Friday evening last a testimonial, consisting of a handsome timepiece and a valuable gold chain, was presented to Mr. Henry Bennett Bailey, on the occasion of his resigning the post of house-surgeon to this institution, which he has held for nearly five years. The presentation was made to Mr. Bailey at the house of Mr. Arthur Eddowes, one of the consulting surgeons to the institution, by Mr. E. W. C. Middleton, on behalf of the subscribers, who expressed the esteem in which Mr. Bailey was held by all classes in the town, and the regret felt at his departure.

SUSPECTED POISONING OF HORSES.—The "Melbourne Argus" of May 4th says that, several valuable horses having recently died from inflammation of the stomach and intestines, the owners requested Mr. Graham Mitchell, V.S., to investigate the matter. From the post-mortem appearances, he suspected that something injurious had been given to the animals in their food, which, on being examined, was found to contain a large proportion of *Lolium temulentum*. Samples having been submitted to Baron von Mueller and Mr. Cosmo Newbery, these gentlemen confirmed the opinion given. As this seed is frequently found mixed with wheat and barley, it would be of importance to have this matter thoroughly investigated.

DONATIONS &C. TO MEDICAL CHARITIES.—Mr. Thomas Jessop, Alderman and ex-Mayor of Sheffield, has undertaken to pay £22,000, the whole cost of erecting a new Hospital for Women in that town.—Mr. James Tyrer, of Bournemouth, bequeathed £10,000 to be divided between several charities, amongst which are—the Royal Hospital for Incurables; the Liverpool Infirmary; the Liverpool Dispensaries, the Liverpool Northern Hospital; the Liverpool Southern and Toxteth Hospital; the Liverpool Hospital for the reception of persons suffering from infectious and contagious diseases; the Stafford Infirmary; and the Bootle Infirmary. The Annual Report of the Newcastle Dispensary acknowledges the receipt of £10 000 (less duty) under the will of Mr. Wm. John Hutchinson, £1212 16*s.* 10*d.* under that of Mr. James Pigg, and £200 (less duty) under that of Mrs. A. G. Watson, and a donation of £1000 from Mrs. Mather. The Newcastle-upon-Tyne Infirmary has received £1000 under the will of Mr. Benjamin Tulloch.

Medical Appointments.

Aldersey, W. H., F.R.C S.E., has been appointed Medical Officer for the Havant District of the London, Brighton, and South Coast Railway Provident Society, vice Stedman, resigned.

Boase, F., M.R.C.S.E., has been reappointed Medical Officer of Health for the Penzance Urban Sanitary District.

Brown, W., M.R.C.S.E., L.R.C.P.L., has been appointed House-Surgeon to the Royal United Hospital, Bath, vice Greensill, whose appointment has expired.

Burroughs, G. F., M.R.C.S.E., has been appointed Medical Officer for the Battersea District of the London, Brighton, and South Coast Railway Provident Society, vice Sutcliffe, whose appointment has expired.

Carey, E. G., M.B., L.R.C.S.Ed., has been appointed Resident Medical Assistant at the Dundee Royal Infirmary, vice Brock, resigned.

Cassan, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Surgeon to the Royal South Hants Infirmary, Southampton, vice Clark, resigned.

Charles, J. J., M.D., has been appointed Professor of Anatomy and Physiology at Queen's College, Cork, vice Corbett, resigned.

Denniston, Mr. J., has been appointed Resident Medical Officer to the Greenock Hospital and Infirmary, vice Carlyle, resigned.

Evans, L. D., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed joint Medical Officer to the Festiniog Slate Quarries, vice Thomas, deceased.

Fentem, P. S., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Northern Division of the Bakewell Rural Sanitary District, and the Baslow and Bubnell Urban Sanitary Districts.

Foster, Mr. W., of Sidney Coll., Camb., has been appointed Lecturer on Chemistry at the Middlesex Hospital Medical College, vice Heisch, resigned.

Grant, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parishes of Birsay and Harry, Orkney, vice Garson, resigned; and for the Parishes of Grœmsay and Hoy, vice M'Pherson, resigned.

Hammond, R. E., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Gorton Urban Sanitary District: £40 for one year.

Harris, J. A., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Chorley Rural Sanitary District, vice Rigby, resigned: £150 per annum.

Harsant, W. H., M.R.C.S.E., has been appointed House-Surgeon to the Bristol General Hospital, vice Elliott, resigned.

Hayes, P. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Medical Officer and Apothecary to the Cork Union Workhouse, vice O'Kelly, appointed to the Limerick Union Workhouse.

Heale, A. L., M.R.C.S.E., has been appointed House-Surgeon and Secretary to the Royal Hants County Hospital, Winchester, vice Smith, resigned.

Hingston, A., M.R.C.S.E., has been reappointed Medical Officer of Health for the Liskeard Urban Sanitary District: £20 per annum.

Joseph, Dr. J. R., late Surgeon to the Belgian Royal Mail Company, has been appointed a Surgeon-Superintendent in the Queensland Government Service.

Knox, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Southern Division of the Bakewell Rural Sanitary District, and the Bakewell, Matlock, North Darley, and South Darley Urban Sanitary Districts.

Maynard, J. C. M., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Black-boy Colliery, Bishop-Auckland, vice Canney, deceased.

Newham, Dr., has been appointed Registrar of Births, Marriages, and Deaths for the Winslow District.

O'Keeffe, M., M.D., has been appointed Professor of Materia Medica at Queen's College, Cork.

Oswald, H. R., M.B., C.M., has been appointed House-Surgeon to the Scarborough Dispensary and Accident Hospital, vice Elliott, resigned.

Paterson, W., M.D., has been appointed Certifying Factory Surgeon for Chorley, vice Rigby, resigned, and Medical Officer for the Chorley No. 1 District of the Chorley Union, vice Tobin, resigned.

Phillips, J. D., L.F.P. & S. Glas., L.M., has been appointed second Assistant Medical Officer to the Fisherton House Lunatic Asylum, Salisbury, vice Andrews, resigned.

Pink, T., M.R.C.S.E., has been appointed Resident Surgeon to the Royal Sea-bathing Infirmary, Margate, vice Richmond, resigned.

Procter, T., M.R.C.S.E., has been appointed a Resident Medical Officer to the York Dispensary, vice Mawson, resigned.

Renny, A. W., M.B., C.M., has been appointed Resident Medical Officer to the Royal Stirling Infirmary, vice Purves, resigned.

Sarjant, J., M.D., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer to the No. 2, or Ashburnham District of the Battle Union, Sussex, vice Simons, resigned.

Scobell, T. E., M.R.C.S.E., has been appointed Medical Officer of Health for the Ivybridge Urban Sanitary District.

Scotland, Dr. T., has been appointed Medical Officer for the No. 1 District of the Newcastle-on-Tyne Union, vice Nesham, resigned.

Thomas, W. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Llangonoyd District of the Neath Union, Glamorganshire, vice Davies, whose appointment has expired.

Thomson, E. W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Medical Aid Society, Macclesfield, vice Macmillan, appointed House-Surgeon to the Macclesfield General Infirmary.

Tobin, G., M.R.C.S.E., has been appointed Medical Officer for the Chorley No. 2 District of the Chorley Union, and Public Vaccinator for the Chorley and Coppull Districts, vice Rigby, resigned.

Treutler, W. J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Maresfield District of the Uckfield Union, Sussex, vice Cresswell, resigned.

Walsh, S., M.B., has been appointed Medical Officer and Public Vaccinator for the Brewood District of the Penkridge Union, Staffordshire, vice Crean, deceased.

Wilson, Adam, L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer to the Newcastle and Gateshead Provident Medical Society, vice Davidson, appointed Medical Officer to the Lead Company's Workmen's Medical Union, Alston.

Wilson, Alex. C., M.D., C.M., L.R.C.S.Ed., has been appointed Public Vaccinator for the Doncaster District of the Doncaster Union, vice Rigby, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Bellingham.—On the 22nd ult., at Castle-street, Dudley, the wife of J. Bellingham, M.R.C.S.E., of a daughter.

Hood.—On the 29th ult., at Bridge-street, Tow Law, the wife of Geo. Hood, M.D., F.F.P. & S. Glas., of a son.

Paterson.—On the 29th ult., at Brigg, the wife of Walter H. Paterson, M.D., of a daughter.

Sheldon.—On the 3rd inst., at Cornwall-road, Notting-hill, the wife of T. Sheldon, M.D., of a son.

Wilcox.—On the 21st ult., at Holly House, North Walsham, the wife of Wm. Wilcox, L.R.C.P.Ed., of a son.

MARRIAGES.

Gould—Wilson.—On the 21st ult., at St. Matthew's, Brixton, Henry Gould, M.R.C.S.E., of Northfleet, to Emily Florence, daughter of Charles Wilson, Esq.

Martin—Ward.—On the 4th inst., at Holy Trinity Church, Twickenham, the Rev. Septimus Martin, M.A., of Fairlawn, Twickenham (fourth son of H. Martin, Esq., of Southtown, Great Yarmouth), to Persis, youngest daughter of the late Dr. Martindale Ward, of Markham-square, Chelsea, sister of Dr. Martindale C. Ward, of Saltburn, Twickenham.—No Cards.

DEATHS.

Atkins.—On the 22nd ult., at Ottery St. Mary, Devonshire, Wm. Atkins, L.R.C.P.Ed., aged 58.

Bunce.—On the 29th ult., at Norwood, John S. Bunce, Ext. L.R.C.P.L., aged 59.

Harris.—On the 28th ult., at Manchester, Michael Harris, M.B., Assistant-Physician to the Children's Hospital, Pendlebury, near Manchester (younger son of Michael Harris, Esq., of Penbury-road, Lower Clapton), aged 26.

Lardner.—On the 21st ult., at Gillingham, Kent, Jason Lardner, M.R.C.S.E., aged 70.

Murray.—On the 29th ult., at Waterloo-bank, Oldham, Chas. Murray, M.R.C.S.E., aged 40.

Part.—On the 1st inst., at Camden-road, James Part, M.D., aged 66.

Ross.—On the 26th ult., at Hart-street, Bloomsbury, Geo. Ross, M.D., aged 58.

Tailer.—On the 7th ult., at Walton, Suffolk, Geo. W. Tailer, M.R.C.S.E., aged 59.

Tucker.—On the 1st inst., at Sligo, James Tucker, M.D.

Walker.—On the 28th ult., Joseph Walker, M.R.C.S.E., of Burslem, aged 69.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Fox: Atlas of Skin Diseases.
Mr. Spencer Watson: Diseases of the Nose.
Drs. Beard and Rockwell: Medical and Surgical Uses of Electricity.
Dr. Gordon: Fractures of the Lower End of the Radius.
Mr. Smith: Lectures on Nursing.
Mr. Wagstaffe: Human Osteology.
Dr. Winn: Materialism.
Cassell's History of England.
Ganot's Physics. Seventh Edition.
Dr. Black: On the Functional Diseases of the Reproductive Organs.
Dr. Bennet: On Inflammation of the Uterus.
Dr. Greenhow: On Addison's Disease.
Dr. Travis: Effectual Reform.
The Public Health Act, 1875.

Notes, Short Comments, and Answers to Correspondents.

Professor Bouillaud.

This Nestor of the Faculty of Medicine of Paris has just resigned his Chair of Clinical Medicine. Dr. Bouillaud is nearly eighty years old, and up to a late period went round the wards of the Charité Hospital with almost the energy of youth. The professor is highly esteemed in Paris, and is known abroad as well as in France for his labours respecting diseases of the heart. He still, however, remains a most active member of the Academy of Medicine and of the Academy of Sciences. Only a few days ago M. Bouillaud was at the Medical Congress of Brussels, where he met with a most enthusiastic reception.

Mr. Broome Pinniger.—The case is a very sad one; but the patient seems to have been chiefly at fault in not sooner seeking relief.

Insurance against Sickness.

To the Editor of The Lancet.

Sir,—I was rather surprised at not seeing any answer to "L.S.A.'s" letter on the above subject in your last week's issue. I should think there are a great many country medical practitioners who would gladly join such a Society. I, for one, would do so, and I should be glad to assist in establishing it; but I am afraid my duties would not permit me to take any active part. Still I should be happy to do anything that lay in my power.

I am, Sir, yours very truly,
Great Missenden, Oct. 7th, 1875. Jas. O. M'Creery.

Zeal and Knowledge in Chelsea.

The sanitary authorities of Chelsea are displaying unequivocal proofs of their zeal. They contemplate prosecuting the Imperial Gas Company, under the Public Health Act, for the "nuisance" arising from their works, although technically, we believe, the premises are in Fulham. We shall watch the result with much interest, because it is clearly of importance that sufferers from any nuisance should possess the power of enforcing its removal, although the location of the cause of offence may be outside the arbitrary boundaries of the district in which the sufferer resides. Meanwhile, how are we to account for the circumstance that the medical officer of health in Chelsea recommends that licences for twenty-nine slaughter-houses in the parish should not be opposed? Ought the fact that only twenty-nine instead of thirty-five applications have been made on this occasion to outweigh the consideration that every slaughter-house in an urban district is a source of peril to health and a public nuisance? The drainings of a slaughter-house cannot, under the most favourable circumstances, be safely allowed to pass into the common sewers of a densely populated district, and the effluvium arising from most of these places is in itself a serious cause of annoyance and injury. The knowledge that slaughter-houses ought always to be outside populous neighbourhoods should serve to direct the zeal of the officials of Chelsea into a useful channel. While they prosecute the Gas Company, they might with consistency and advantage oppose the licensing of twenty-nine local nuisances.

"Cheap Doctors."

To the Editor of The Lancet.

Sir,—The subject of private dispensaries being now an established fact beyond the criticism of journalism—as much so as special hospitals are,—a few words upon the relative benefits to patients and attendant may not be unacceptable at the present time from one who has devoted himself to that class of practice during the past seven years.

In the first place, ready money payment encourages independent feeling upon both sides, satisfying the attendant upon the immediate occasion, entirely disposing of the heartburnings upon the presentation of medical accounts; avoiding the dunning system of collection and the ungraceful contention at the County Court; diverting money from the prescribing druggist's counter to the more legitimate pocket of the legally and practically qualified medical man. Again, the fee being small, many of honest principles, who would otherwise add to the already overcrowded out-patient department of the hospital or parochial dispensary, are able to obtain relief within their means.

The physician or surgeon of a private dispensary obtains an aptitude of prescribing and rapidity of diagnosis only acquired by large and constant practice. If he is only devoted to his work, he is quickly appreciated, and readily acquires a large *clientèle*. My own dispensary has only been started since May, and I now prescribe for a thousand cases every week. My name is attached to my work, even as most men attach theirs to the book advertisements in The Lancet or daily papers, for the information of those whom it may concern. I am at all times willing to defer to the opinion of The Lancet as a guide in most professional matters; but at present neither The Lancet, Medical Council, nor the Halls or Colleges protect the qualified practitioner from the invasions of the druggist or gratuitous prescriber. These will only disappear before the accumulation of private dispensaries, as will also the poverty of too many of our members.

Your obedient servant,

October, 1875. P. V. Timothy, L.R.C.P. Lond., &c.

To the Editor of The Lancet.

Sir,—As I live in a district where the majority of my patients are able to pay only the very lowest fees, I was highly interested by the very sensible and practical letter of your correspondent, "S.," in the last number of The Lancet. I shall be very grateful if he will inform me as to the method of starting and conducting such a dispensary as his own, and specially as to the scale of charges, method of collecting the money, rules for attendance of patients, and any other information he may deem useful.

Yours obediently,

October 4th, 1875. M.D.

⁂ The letter of "S." was certainly not complete. The information asked for by "M.D." will, doubtless, be supplied by our correspondent.—Ed. L.

B.—A. by no means resigned the management of the case or the duty of using the forceps by calling in B. It would be a very awkward thing if, whenever a medical man called in another in an obstetric difficulty, he gave up the chief conduct of the case. It would be quite another matter if A. had asked B. to apply the forceps.

Dr. Broadbent's second lecture "On the Pulse" will appear next week.

Locked Heads in Labour.

To the Editor of The Lancet.

Sir,—The occurrence of locked heads is, I think, sufficiently rare in obstetric practice to call for a notice of the following case.

On June 5th, 1875, I was asked to attend Mrs. A——, aged thirty-three years, pregnant for the fifth time. On arrival I found the body of a dead child outside the vulva, and the head of another tightly packed in the pelvis. I soon ascertained that I could only overcome the difficulty by decapitation of the first child, and delivery of the second, and the head of the first. Dr. Tyndale Watson, of Tottenham, gave me his assistance, who, upon examination, concurred in my opinion. We procured the bass wire of a pianoforte, which, being a wrapped wire, made a very good écraseur, and the head of the first child was quickly taken off, and pushed out of the way. The second head was seized with forceps by Dr. Watson, and the child was born barely living. We failed to resuscitate it after an hour's perseverance. I removed the remaining head with forceps, the placenta with two cords coming away soon afterwards. The mother made an excellent recovery.

Your obedient servant,

West-green, Tottenham, Oct. 5th, 1875. J. Bunting, M.R.C.S.L.

The Scientific Congress of Gratz.

This is the time of the year for meetings of this kind. Those of Nantes and Brussels have been very successful, the latter being exclusively medical; but the meeting in the Austrian city of Grätz was of greater magnitude, for it comprised science in general, brought together savants from the whole of Germany, to the number of nearly two thousand, and was divided into a great number of sections. The members, including the fair sex accompanying them, were enthusiastically welcomed by the highest authorities of the land and by the learned of Austria. Indeed among the ladies was a female professor, named Dodel, whose presence was highly valued by the whole assembly. At the first general meeting, Sept. 18th, eloquent discourses were delivered by the most prominent men, among whom should be mentioned the Arctic explorer Weyprecht. Medical science has, as usual, a large share in the labours of this, the forty-eighth, Congress. Another Congress took place on the 14th of September at Carlsbad, exclusively intended for the members of the profession practising in watering-places.

A. R. C. L.—It would be unwise to let the boys return to school at present. There would be great danger of the rest being attacked.

Band Subscriptions.

To the Editor of The Lancet.

Sir,—The question as to whether medical officers "employed temporarily" with a corps, and not shown in the official monthly Army List as "attached," are obliged to pay band subscriptions or not, has again cropped up in this country. I may say that in most regiments the question seems to have been settled very fairly, and in accordance with the Queen's Regulations—viz., that they are liable to a monthly subscription to the mess, but *not* to the band. However, a correspondent, signing himself "Case in Point," writes as follows in the *Pioneer* of the 8th inst.:—"With reference to 'Surgeon's' letter in your issue of the 4th inst., a surgeon in the Bengal Presidency has just paid band subscription to a regiment while temporarily attached to a detachment of that regiment over a hundred miles from the head-quarters and band of the regiment. This was done by order of the general, confirmed by H.E. the Commander-in-Chief, pending reference to the Horse Guards on the subject." The writer should have said "temporarily *employed*" instead of "*attached*." We must carefully distinguish between the two terms, as the Queen's Regulations define them very clearly. For example, in sec. 7, par. 39 *a*, we read: "If their names appear in the Army List as attached to regiments, they will pay," &c.; and 39 *b*: "If not so attached, but employed temporarily," &c. This paragraph refers to *mess* subscription, which comes to about 10*s*. a quarter, and which no one objects to pay. It is to sec. 7, par. 52, referring to the band, that I wish to draw attention. It says: "The following contributions and subscriptions to the band fund are to be paid by regimental officers," &c. Now, a "*temporarily employed*" surgeon can in no sense be called a *regimental* officer, and therefore cannot be called on to pay band subscriptions. The common sense view of the question ought to be sufficient to decide it. A temporarily employed surgeon uses the mess for his own convenience, and should pay something towards the expenses; but the band is kept up "for the good of the regiment," so to speak, in which he can have but a temporary interest.

Yours truly,

India, Sept. 9th, 1875. Surgeon.

A Prehistoric Wooden Leg.

L'Union Médicale states that in an island in the Mississippi a human skeleton has been found supplied with a wooden leg. The latter was fixed to the trunk by leather straps and some bronze-looking metal, which had turned fossil. Thus it would appear that oak as well as metal were used in prehistoric times.

An Appeal.

To the Editor of The Lancet.

Sir,—Will you kindly allow me a corner in your journal to make an appeal to the charitable among your readers on behalf of the widow and family of a medical brother?

The gentleman referred to, after practising some time in South America, settled in the neighbourhood of Edinburgh, where he resided to the time of his death. This event took place somewhat suddenly several months ago, and he has left a widow and family of six children (the eldest but nine years of age) in very straitened circumstances. The widow is a native of Chili, and has no relatives of her own in this country. As there is no prospect of her being able to support herself and her family here, she is naturally very anxious to return to her own country and friends. It is with the object of assisting her to do this that the present appeal is made. It is not considered prudent to mention names; but reference is kindly permitted to Drs. Warburton Begbie and Joseph Bell, of this city; or to the Rev. J. Langwill, The Manse, Currie, near Edinburgh, the latter of whom, or the subscriber, will be most happy to receive contributions in aid of this charitable object.

I am &c.,

J. Jamieson, L.R.C.S. Ed.

52, Rankeillor-street, Edinburgh, Oct. 4th, 1875.

Enquirer.—The procedure is very unsatisfactory; but it is within the bounds of law. There is no specification of the maximum time that must elapse between a practitioner seeing a patient and filling up a death certificate. Our correspondent should send us a short letter for publication, detailing the discreditable connexion.

Medicus in Rure.—It would be more magnanimous not to make such a claim.

Gas-stoves.

To the Editor of The Lancet.

Sir,—Will you or some correspondent inform me which is the best form of *gas*-stove for warming bedrooms—whether that in which the pipe passes through pumice-stone, or that in which a reflector is used? Which is the best mode of cleansing water-cisterns?

Yours truly,

London, Oct. 1st, 1875. M. B.

Extreme Arctic Cold.

A French contemporary lately reproduced a paper read this year by Payer before the Geographical Society of Vienna "On the Influence of Arctic Cold." A few extracts from it may prove interesting. The author started on March 14th, 1874, on a sledge to make fresh observations on hitherto untrodden ice-fields. The cold on that day was 40° (Réaumur) below zero. After a time the spirit ration became as thick as oil, and had lost its stimulating properties. It was impossible to smoke. Cigars and tobacco were turned into ice. Pieces of metal which the travellers had with them had the same effect when touched as red-hot iron. Great cerebral disturbance took place, accompanied with extreme thirst, difficult to assuage. Every noise was transmitted a great distance. The senses of taste and smell were almost in abeyance. Mercury could be made into balls. The secretions were augmented, whilst perspiration entirely ceased. Some of the difficulties to be encountered by the members of our Arctic expedition may be imagined from this brief notice of the recital of Payer's experience. It may perhaps be necessary to state that Lieutenant Payer is an explorer of the highest veracity and honour.

Mr. G. Brenan is thanked for his offer, which, however, we are compelled to decline.

Case of Triplets.

To the Editor of The Lancet.

Sir,—I send you the following account of a case of labour that I attended, thinking it might possibly interest some of your readers.

At about half-past nine on Sunday morning I was called to attend a woman in labour. It was her second confinement, her eldest child being fifteen months old. On making an examination I found the breech presenting, and in a few minutes she was delivered of a living female child. On now tightening the umbilical bandage I found that there was more to come. When the uterus had recovered its repulsive power, and when the membranes were sufficiently low, I ruptured; the right hand and arm then came down, and I turned and delivered my patient of a second female child. On readjusting the bandage I found there was yet another; but I had to wait an hour and a half before the uterus recovered its contractile power. After a few sharp pains, the membranes being then sufficiently low, I again ruptured, and, as in the first case, found the breech presenting. By passing my index-finger round the upper part of the thigh, I delivered the woman of her third living daughter. The average weight of each child is 4 lb., and mother and children are doing well.

The case presented the following peculiarities:—In neither case did the head present. All were females. There was very little liquor amnii on rupturing the membranes of the first two; but with the last perhaps a gallon or more. The mother is light-complexioned and very delicate. I was with her about three hours, and after the labour was over I had the greatest difficulty in keeping her from sinking from the shock and exhaustion.

I am, Sir, yours sincerely,
Great Smith-street, S.W., September, 1875. G. F.

Nocturnal Medical Assistance.

This question has been mooted at Paris, and it has been stated that at St. Petersburg each district is divided into subdivisions, which latter are supplied with a nocturnal medical watch, where patients are treated gratuitously. The papers publish every morning the names of the doctors and pharmaceutists on duty. In Chili not only the doctors are mentioned, but likewise midwives. Every medical man is bound to take up the watch in his turn. Matters are carried so far in Valparaiso that an eminent physician who had refused to take his turn was expelled from the place.

Maunsell Memorial Fund.

The following additional subscriptions have been received on behalf of the above:—

Already acknowledged in The Lancet, Oct. 2nd ... £167 13 0

Professor Apjohn	£2	2	0	Michael Kernan, Esq., T.C.	£1	0	0
Dr. Andrews, Palmerstown	1	1	0	Dr. P. C. Little	1	1	0
Thos. H. Atkinson, Esq. ...	1	0	0	Dr. Henry, Pomeroy, Tyrone	1	1	0
Anonymous	1	0	0				
Dr. Barbor, Carlingford ...	1	1	0	Dr. S. Maunsell, 75th Regt.	10	0	0
Rev. James Baxter, C.C. ...	1	0	0	Professor William Moore...	1	1	0
Sir M. Hicks Beach	5	0	0	Dr. Mollan	2	0	0
Dr. James Brady	1	1	0	Dr. M'Swiney	1	1	0
Dr. J. W. Brady, Clara ...	1	1	0	Dr. Peebles	1	1	0
Dr. Berry, Mallow	1	1	0	Dr. Robinson, Fintona ...	2	2	0
B. Banks, Esq., Sec. Loc. Gov. Board, Ireland ...	2	0	0	Dr. Scully, jun., Hon. Sec., Co. Tipperary Med. Assoc.	1	1	0
Dr. Cranny	1	1	0	Dr. W. T. Stoker	1	1	0
Dr. Darby, Bray	2	0	0	Dr. Robert Swan	1	0	0
Dr. Evans, Dawson-street .	0	10	0	Robert Swan, F.R.C.S.I. ...	1	0	0
Fannin and Co.	1	0	0	Dr. Toler	1	1	0
Dr. Forrest	1	1	0	Henry Wilson, F.R.C.S.I....	1	1	0
Edward Fox, Esq., J.P. ...	1	0	0	Michael Webb, Esq.	0	10	0
Thomas Fry, Esq., T.C. ...	1	1	0	Dr. Welsh, Ballyshannon...	1	0	0
Dr. Hudson	2	2	0	R. Persse White, F.R.C.S.I.	1	1	0
Dr. Jennings	2	2	0	Dr. Stewart Woodhouse ...	1	1	0

Subscriptions will be received by Dr. Joseph Rogers, 33, Dean-street, Soho, London.

Ratepayers and Paupers.

To the Editor of The Lancet.

Sir,—Allow me to ask your readers for an explanation on the following subject. How is it that the ratepayers are burdened with burying the bodies of unclaimed paupers, when the medical schools throughout the kingdom are anxiously willing to buy them? On this point I can testify as to the accuracy of my statement, having been a surgeon to a workhouse and to an asylum. I am, Sir, yours faithfully,

Hanmer Dickson,
September, 1875. Late Resident Surgeon, Asylum, Bristol.

Isolation Indispensable.

It is satisfactory to learn that the recent outbreak of fever at Islington is now under control, and that the malady has assumed a mild form. But it is the reverse of reassuring to find that, notwithstanding all that has been proved and admitted with regard to the necessity of isolating cases of infectious or contagious disease, the parochial school buildings did not allow the authorities of Islington to take this obvious precaution. Nothing can excuse the neglect to provide adequate means of perfect isolation in all districts. It is a mere question of money, and the parsimony which refuses to discharge a public duty is deservedly punished by ultimate loss. The Local Government Board should do more than "inquire" into these cases. Unfortunately the Board is not armed with full powers of coercion. The national dread of "centralisation" produces grotesque consequences, and the feebleness of the Local Government Board is most conspicuous. Local authorities are meanwhile not one whit the less responsible to public opinion because they cannot be compelled to do their duty.

An Eleven Years' Subscriber.—A foreign degree cannot now be registered. We are not in a position to advise our correspondent on the subject.

The Influence of the Use of Wind Instruments on Chest Affections.

To the Editor of The Lancet.

Sir,—Being myself a cornet player, I read in your issue of Aug. 14th the remarks of Dr. Burq on the above subject with very great interest.

During the past five years I have taken charge of the bands of three regiments I have served with, and have, of course, had the sole treatment of the men when they have fallen sick. I cannot remember a single severe case of chest affection in a musician (in the cold season the sepoys are often attacked with pneumonia, which disease is more fatal to natives than it is to Europeans). The musicians in native bands are frequently undersized, both as regards height and chest capacity. It is a common thing for men who have been rejected for the ranks to learn some instrument, which they do very quickly, and then get enlisted for the band. There is one point I have noticed with both Europeans and natives, and that is, men who play wind instruments are generally to the front in athletic sports, particularly in running.

I began blowing with strong lungs, and feel they are now stronger; but do not consider myself able even to offer an opinion as to the effect likely to be produced on unhealthy lungs. If, as Dr. Burq contends, the blowing of wind instruments produces a healthy state of lung, then we have a mode of treatment which must prove very agreeable to most patients. I think there can be no doubt that heart disease is far from uncommon amongst those who play on wind instruments, and the most trying of all is the oboe.

I remain, Sir, your obedient servant,
India, September, 1875. Musician.

Dr. Bacon.—It is the same individual. It would be difficult to find two persons capable of such irrational nonsense.

M.D., L.R.C.P.—The practitioner is the best judge of such a question, especially in the case of old patients.

Treatment of Lymphatic Tumours.

To the Editor of The Lancet.

Sir,—I have just read with great interest in your journal of Sept. 4th Mr. Bradley's paper "On a New Mode of Treating certain Tumours of the Lymphatic Glands," and if the method will do what he promises, and is not attended by risks which can only be ascertained by enlarged experience, it will be a very valuable addition to our means of treating these obstinate affections. I am not quite sure, though, whether he is correct in calling it a *new* method, unless the using a new substance by an old way be a new method, in which case there might *possibly* be as many new methods as substances capable of being injected; or unless his experiments were made and conclusions arrived at before 1873; for if anyone will turn to page 457, vol. ii., of The Lancet for 1873, he will find an abstract of a paper by Dr. Luton, in which the same treatment of lymphatic tumours by injection is advocated, substituting iodic acid for iodine. Since reading this article on Luton's method, I have practised it in three cases, and with perfectly satisfactory results, my only doubt being as to whether the tumours might not have subsided spontaneously, though more slowly, if they had been left alone.

Mr. Bradley's paper, though, is a great deal more than merely the introduction of a new method; it is an epitome of the surgical treatment of almost all glandular enlargements of the neck connected with the lymphatic system, and, as regards private practice any way, some will doubt the propriety of the third rule. Yours obediently,
Blackpool, Sept. 28th, 1875. Wm. Hardman.

Mr. Led.—We must be excused from giving our correspondent any advice about cheap hair-dyes.

Mr. Bryant's address has been received, and will be published at an early date.

Mr. Jeremy Bentham's Remains.

To the Editor of The Lancet.

Sir,—Allow me to inform "A Correspondent" that the skeleton of Mr. Jeremy Bentham, dressed in a suit of his clothes, may be seen sitting in a glass-case in the anatomical museum of University College, London. Although the case is in a retired place away from public gaze, I believe there is no difficulty in obtaining permission to view the remains of the great jurist. It will be remembered that Mr. Bentham, who died in June, 1832, bequeathed his body to his physician and friend, Dr. Southwood Smith, for the purpose of dissection. Shortly after death Dr. Smith gave a lecture on the body in the School of Anatomy, Webb-street, Maze-pond. After this the skeleton was preserved, and eventually came into the possession of Sir John Bowring, who presented it to University College.

Your obedient servant,
October 4th, 1875. J. T.

The Grape Cure.

Wiesbaden, the well-known and lovely watering-place, has of late been, according to the views of gamblers, shorn of its greatest attractions. The roulette is gone; but some people have thought that a good opportunity had offered to organise in the autumn along the handsome colonnade every desirable comfort for the grape cure. When it is recollected that this mode of treatment has mostly to be carried out in dull and outlying villages, at a time of the year when fogs and damp are very common, it will be conceded that a gay city is far preferable. It is confidently stated that this novelty will be a great success in Wiesbaden.

J. W. B.—The powerful remedies mentioned should be taken only on the advice of a medical man.

Mr. Alfred T. Wilson.—An excellent work.

A Serious Matter.

To the Editor of The Lancet.

Sir,—In my letter published in The Lancet of July 24th, I offered to give the name of the gentleman who was attempting to pass the L.R.C.P. examination at Edinburgh by proxy to any of the examining boards of the United Kingdom who applied to me for it. I considered that some, at least, of the boards would have taken this precaution against being deceived by this man; but not so, for I have not been asked for his name by any one of them. I think this fact is worthy of note, but requires no comment to point out its significance. Your obedient servant,

A. Pearce Gould, B.S.

Gower-street, Bedford-square, October, 1875.

⁂ It seems the clear duty of the examining bodies to take up this matter. We are surprised that no attention has been paid to Mr. Gould's letter.—Ed. L.

M.D., (Manchester.)—MM. Deneffe and Van Wetter, of Belgium, have, we believe, testified to the harmlessness and efficacy of the intra-venous injection of chloral hydrate.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from — Prof. Corfield, London; Prof. Humphry; Mr. Erichsen, London; Mr. Gordon Brown, London; Dr. Broadbent, London; Mr. Harrison, Liverpool; Dr. White; Mr. Pigou, London; Mr. Timothy, Barrow-in-Furness; Dr. Gill, London; Miss Solomon, London; Mr. Casson, Hull; Mr. English, Port Elizabeth; Dr. Speedy, Dublin; Mr. Budham; Mr. F. Smith, Weston-super-Mare; Mr. Brenan, Hastings; Mr. Robertson, London; Mr. Watson Dove, Wells; Mr. Miller, Launceston, Tasmania; Mr. Beck, Cambridge; Mr. Hermon, Leek; Dr. Renny, Stirling; Dr. Haviland, Northampton; Mr. King, Ware; Mr. Beatie, London; Dr. Rogers, London; Mr. O'Shaughnessy, Kilmalock; Mr. M'Creery, Great Missenden; Dr. Crowe, Leamington; Dr. Grindles, Normanton; Mr. Payne, London; Dr. Hulme, Wigston; Mr. Hatton, London; Dr. Broom, Sheffield; Mr. Gibson, Loughborough; Dr. Redwood, Rhymney; Mr. Harris, Hackney; Dr. Dickinson, Liverpool; Dr. J. Jamieson, Edinburgh; Mr. Satchell, Tunbridge Wells; Mr. Bellenden, Sedgley; Mr. Dickson, London; Dr. J. R. Joseph, London; Mr. Armstrong, Newcastle; Mr. Fairlie Clarke, London; Mr. Gould, London; Mr. Bramwell, Newcastle; Mr. Grant, Maidstone; Mr. Jessop, Leeds; Dr. Fothergill, London; Dr. F. Robertson, London; Dr. Munroe, Hull; Mr. Oliver, Manchester; Dr. Winslow, London; Mr. O. Coleman, London; Mr. S. Jones, London; Mr. Percival, London; Mr. Tucker, Hitchin; Messrs. Oliver and Boyd, Edinburgh; Mr. Chippingdale, London; Dr. Lister, Newton-le-Willows; Dr. Bacon, Fulbourn; Mr. Roper, London; Mr. Fraser, London; Mr. Hawksley, London; M.D.; Landport; The Secretary of State for the Colonies; Medicus, Wolverhampton; Medicus in Rure; B. P.; A. K. C. L.; B.; Not a Yankee M.D.; J. W. B.; Musician; M. B.; P. V. L.; X. Y. Z.; F. M., Huddersfield; M.R.C.P.; Anti-Humbug; G. F.; Surgeon, India; A Country Practitioner; R. D.; Enquirer; An Eleven Years' Subscriber; &c. &c.

Letters, *each with enclosure*, are also acknowledged from — Mr. Cramer, London; Mr. Goncay, Watton; Mr. Bedford, Amersham; Mr. Barlow, Tow Law; Mr. Bennett, Birmingham; Mr. Hall, Lockwood; Dr. Barton, Aldborough; Mr. Richardson, Lytham; Mr. Harris, Hackney; Mr. Lilley, Glasgow; Mr. Cornish, Bridport; Dr. Williamson, Ventnor; Mr. Coker, Chale; Mr. Williams, Dowlais; Mr. Macauley, Kibworth; Dr. Bastian, London; Mr. Billingham, Dudley; Dr. Hardwicke, Highfield; Mr. Hay, Wolverhampton; Mr. Evans, Seaford; Dr. March, Rochdale; Dr. Morley, Sierra Leone; Mr. Nicholls, Hingham; Mr. Wainwright, Barnsley; Mr. Callant, Bridgnorth; Dr. Schmidt, St. Petersburg; Mr. Tomlinson, Maldon; Mr. Heginbotham, Burton; Dr. Newham, Winslow; Mr. Bunting, Tottenham; Zeta; Rho, London; M. F., Mile-end; M.D., Stanford; L.R.C.S.E.; A. J. B., Wigan; Medicus, Edinburgh; J. S., Manchester; Medicus, Manchester; Bulbus, Sheffield; Medicus, Halifax; Omega, East Harling; A. B., Margate; J., Oswestry; M.D., Leeds; Physician, Barrow; L. M., Derby; A. A., London; A., Huntingdon; H. R., Brandon; Alpha, Hackney.

Newcastle Chronicle, Western Morning News, Manchester Guardian, Local Government Chronicle, Welshman, Huddersfield Chronicle, Birmingham Morning News, Berrow's Worcester Journal, Cork Constitution, Record, Surrey Advertiser, East London Observer, Oxford Times, Metropolitan, Liverpool Daily Post, Weekly Rocky Mountain News, Tavistock Gazette, and *Oxfordshire Telegraph* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Oct. 7th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall.	Remarks at 8 a.m.
Oct. 1	30·02	W.	54	55	76	63	52	0·04	Overcast
" 2	29·71	W.	55	56	89	62	54	0·17	Overcast
" 3	29·93	W.	50	53	62	58	46	0·29	Raining
" 4	29·71	W.	58	58	77	67	52	0·25	Raining
" 5	29·96	W.	60	61	81	70	57	...	Cloudy
" 6	30·41	W.	46	49	94	64	47	0·09	Overcast
" 7	30·38	W.	49	51	...	...	47	...	Overcast

Medical Diary for the ensuing Week.

Monday, Oct. 11.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.
Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.
St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.
Metropolitan Free Hospital.—Operations, 2 p.m.

Tuesday, Oct. 12.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.
Westminster Hospital.—Operations, 2 p.m.
National Orthopædic Hospital.—Operations, 2 p.m.
West London Hospital.—Operations, 3 p.m.
Royal Medical and Chirurgical Society.— 8½ p.m. Dr. Dickinson, "On the Pathology of Chorea." — Dr. Greenhalgh, "On the Use of the Actual Cautery in the Enucleation of Fibroid Tumours of the Uterus."

Wednesday, Oct. 13.

Middlesex Hospital.—Operations, 1 p.m.
St. Mary's Hospital.—Operations, 1½ p.m.
St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.
St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.
King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.
Great Northern Hospital.—Operations, 2 p.m.
University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.
London Hospital.—Operations, 2 p.m.
Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.
Hunterian Society.—7½ p.m. Council Meeting.—8 p.m. General Meeting, when Mr. Jonathan Hutchinson will read a paper "On Varicella Prurigo."

Thursday, Oct. 14.

St. George's Hospital.—Operations, 1 p.m.
Royal Orthopædic Hospital.—Operations, 2 p.m.
Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, Oct. 15.

St. George's Hospital.—Ophthalmic Operations, 1½ p.m.
Royal South London Ophthalmic Hospital.—Operations, 2 p.m.
Clinical Society of London.—8½ p.m. Mr. Brudenell Carter, "On the

Saturday, Oct. 16.

Royal Free Hospital.—Operations, 2 p.m.
Charing-cross Hospital.—Operations, 2 p.m.

NOTICE.

In consequence of The Lancet being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—

Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

A Clinical Lecture

ON

THE PULSE: ITS DIAGNOSTIC, PROGNOSTIC, AND THERAPEUTIC INDICATIONS.

Being Lecture V. delivered at St. Mary's Hospital in the Summer Session of 1875,

By W. H. BROADBENT, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

Gentlemen,—I told you in my last lecture that there were three factors in the production of the pulse—namely, the heart, the small arteries by means of the muscular coats, and the large arteries by their elasticity. We considered chiefly the heart, on which, as I pointed out, depend the frequency, force, and rhythm of the pulse. I may here add that the indications afforded by the action of the heart are of importance chiefly in *acute* disease. But the action of the heart, and therefore the rate, rhythm, and force of the pulse is greatly influenced by the small arteries; on them, however, more especially depends the character of the pulse, which may be said to be determined by the peripheral resistance. I mentioned only one element in this peripheral resistance—the contraction or relaxation of the muscular walls of the minute arteries; but there is another element which must not be lost sight of, though the part which it plays is not definitely known—the degree of facility with which the blood traverses the capillary network.

On considering the results of relaxation and contraction of the arterioles on the pulse, we found that the following variations in character must necessarily accompany these opposite conditions. When we feel the pulse, if the arteries are relaxed the diameter of the vessel is increased and the pulse feels *large, quick* or *short,* and *soft,* the tension being low. With contracted arteries the converse obtains in each particular. The diameter is diminished and the pulse feels *small;* the blood passes through the vessels with greater difficulty and more slowly, and the pulse becomes *long;* the tension is high and gives it the character of *hardness.*

With regard to the effect produced on the pulse by the aorta and large arteries, I stated in my last lecture that they equalised the flow of the blood; they have, however, besides this, other and highly important effects, which are best shown by the sphygmograph, and to which I will now briefly call your attention.

The sphygmograph is invaluable as an exact means of observation, and has been a great means of educating us how to feel and properly appreciate the pulse—has, in fact, as I said, rediscovered for us the indications furnished by the pulse. It will never come into use in general practice, for it demands not only time and care at each application, but also a careful preliminary training. It is an instrument of precision and requires a skilled workman. The value of its revelations depends entirely on the intelligence which is brought to bear on its employment, and if carelessly used it can only lead to error. A good rifle is more sure to hit if the aim be good, but it is more sure to miss if the aim be bad. Completely different tracings may be obtained from the same pulse by variations in the pressure employed. The employment of the exact pressure which will best bring out the features of the pulse is a matter of skill, and, the amount of pressure required being an important item of knowledge, great uncertainty arises here. Moreover, not only is it in the operator that sources of error may arise; the instrument itself, by variations in its construction, may invalidate the result for all purposes of comparison. To interpret a tracing satisfactorily certain details respecting the sphygmograph producing it must be known, and much experience is required to render the tracings by different instruments comparable. Not only may there be inaccuracy in the determination of the force of the spring, but the size of the pad applied to the artery will make a difference in the amount of pressure required. The smaller the pad, the weaker must be the spring; and if a knife-edge be applied in place of a pad the results will be more delicate, and the pressure required to obtain a perfect tracing, or to compress the artery completely, will be still less.

I have some tracings here* (kindly furnished me by my friend and colleague, Dr. Mahomed, of whose skill and experience I am glad to avail myself), which I now pass round for your inspection; they afford examples of the normal form of pulse, of pulses of relaxed arteries with low tension, and of contracted arteries with high tension. In the normal pulse the first thing you notice is the line of ascent; this is sometimes sloping a little backwards, it terminates in a sharp apex, and then commences the line of descent. This portion of the pulse-trace has been called the *percussion* element. Sometimes, as in high tension, the line of descent is arrested immediately after its commencement, and the lever is kept up for a short period, or even again rises slightly. This shows that the artery remains full, the stream continuing. This is called the *tidal* wave. Lastly, you see, during the subsidence of the tidal wave, another elevation of the lever, which is especially well marked in pulses of low tension; this is caused by the *dicrotic* wave, and is due to the elastic recoil of the aorta.

The percussion element is somewhat exaggerated in these traces, from the fact that Dr. Mahomed has no spring over the writing lever; but it indicates the suddenness of the contraction, and as a means of recording this it is very valuable. The trace does not, however, exactly represent the movements of the artery, for when the percussion element is excessive, the writing lever is tossed up by the suddenness of the arterial expansion, and actually leaves the short intermediate lever which rests upon and follows exactly the movements of the spring which presses upon the pulse. The pulse has been described as consisting of three waves—the percussion, tidal, and dicrotic waves. The percussion and tidal are not, however, two waves, but two elements of the same wave. The distinction between these elements must be preserved, as each gives a character to the pulse; but the term "wave" is not applicable to the percussion element. This compound wave is entirely produced by the cardiac contraction, and is the chief wave of the pulse; it is that which in an ordinary way produces pulsation in the arteries, and it is only this portion of the pulse that we can usually feel. The cardiac systole produces pressure in all parts of the arterial system; this is not necessarily an onward movement of the blood, for if an artery be tied or compressed there is no onward movement at the point of obstruction, but there is still pulsation. There is, of course, onward motion of the blood in the artery when we feel the pulse; what we feel, however, and what the sphygmograph records, is not movement, but *increased pressure.*

But the entire force of the systole does not take effect in onward movement of the blood; part of it is expended in distending the aorta; and when systole ends the elastic walls of this vessel contract, and by their recoil produce another wave or increase of pressure in the artery—namely, that called the dicrotic pulse wave.

Dicrotism is a phenomenon of arterial relaxation and low tension. Under these circumstances the blood is passing freely and rapidly through the arteries; the heart, meeting with little resistance, contracts rapidly and suddenly; the aorta, like a spring in a position of rest, is exerting very little pressure on its contents, and yields readily to the sudden distending force, and the rebound, which itself meets with less resistance, is consequently greater. At the wrist what occurs is as follows: the artery, being relaxed, is completely flattened by the spring of the sphygmograph; then by the contraction of the heart it is suddenly filled, and as it is large and relaxed the movement is great, the lever is tossed up suddenly and then falls; in its fall it receives a slight momentary check by the distension caused by the tidal wave not passing off so suddenly as the percussion effect; and then comes the rebound of the aorta, producing the dicrotic wave at the wrist.

Dicrotism sufficiently marked to be of any importance can almost always be appreciated by the touch. For this purpose the three fingers must rest on the vessel in the lightest possible manner, and, attention being given, the dicrotic beat is felt like an echo of the principal wave. Dicrotism can be thus distinguished in most cases of severe pyrexia, in the early stage of typhus, through a great part of enteric fever, and very frequently after fatigue, bodily or mental.

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* It is not necessary to reproduce them, as the characters of the sphygmographic tracing are well known.

Hyperdicrotism is said to be present when the dicrotic wave appears in the upstroke of the trace: the dicrotic wave is overtaken, so to speak, by the percussion of the next pulsation, the fall of the lever being intercepted before it has reached its lowest point. It is simply a phenomenon of excessive frequency of pulse, with relaxation of arterioles. When with extreme frequency there is extreme weakness of the heart's action, the trace becomes *monocrotous* and the pulse fluttering—a condition of fatal prognostic significance. Conversely, if the tension be high, the systole is prolonged because of the resistance in the aorta; the aorta, already tense, cannot yield much, it cannot, therefore, rebound. At the wrist the artery is small, and is not easily flattened. The percussion wave is consequently not so high; the tidal wave, on the other hand, is more sustained, and there is little or no dicrotism on account of the constant distension of the aorta.

Another effect of the elasticity of the aorta is the delay in the transmission of the primary wave of pressure to the wrist. If a system of rigid tubes be taken to represent the arteries, with fenestræ covered by membrane introduced into the system of tubing, one near the heart, the other near the termination of the tubing, and two sphygmographic levers be placed over these membrane-covered openings, the two levers will be seen to rise simultaneously at each contraction; whereas, if the same observation be made with elastic tubing, a considerable interval will elapse between the movements of the two levers: the greater the distance they are apart, the longer will be the interval between their respective movements. This experiment explains the cause of the delay in the pulse at the wrist, which, as you know, is not perfectly synchronous with that in the carotids.

The effect of loss of elasticity in the aorta is seen in the senile pulse, which is characterised by a long tidal wave and a diminution in dicrotism; but, although the pulse is long, it is not hard, but is readily compressed. This character distinguishes it from the pulse of high tension.

Relaxation of the arterioles is induced physiologically by external warmth, exercise, fatigue, &c.; pathologically, by pyrexia &c.; experimentally, by various agents—nitrite of amyl, alcohol, Calabar bean, &c.;—contraction, by cold, renal disease, gout, lead-poisoning, digitalis, &c. But this is not the place for the discussion of such causes. I must, however, give the characters of the pulse resulting from a combination of different modes of action of the heart and different conditions of the minute arteries, enumerating the principal states of system in which each form of pulse is met with. I exclude here heart disease, as the pulse of the different valvular and other diseases of the heart will form a separate study on some future occasion.

The action of the heart being frequent and powerful, and the minute arteries being relaxed, the pulse will of course be *frequent* and *strong*, but *large, soft, short,* and *dicrotous.* When well marked this is the full and bounding pulse of medical writers, but the degree varies greatly. The pulse will have these characters during and just after exercise, especially when there is perspiration; in most pyrexias; in the early stage of most fevers and of acute rheumatism; in pneumonia.

If the heart is weak, but beating rapidly, while the arteries are relaxed, the pulse will be *frequent, weak, soft* and *short, dicrotous,* or perhaps *hyperdicrotous,* or, in an extreme case, *fluttering* and scarcely perceptible. You will observe that I do not say large, for a certain amount of *vis a tergo* is required for this. The pulse described is found in states of debility, more especially when febrile; in the later stages of fevers, in the typhoid state so-called; it is the usual pulse of the moribund.

When with frequent and forcible action of the heart the arteries are contracted, we have the *frequent, small, incompressible, long* pulse. It is met with during rigors, in the early period of acute gout, in acute renal dropsy, in many cases of scarlatina (constituting a difference between scarlet fever and most other fevers), in peritonitis and enteritis, in pleurisy also, and in meningitis.

When the heart's action is weak and the arteries contracted, the pulse becomes exceedingly small, and is often spoken of as "wiry" or "thready," or the former epithet is employed when with a very small artery there is some strength. This pulse is present in its most pronounced form in general peritonitis with collapse, but I have found it in the last stage of phthisis, and in pulmonary gangrene.

It is not my intention, however, to discuss the state of the pulse in acute disease; I wish rather to dwell in greater detail on the state of the arteries in the absence of acute disease; for the study of these conditions has afforded me some of the most valuable knowledge acquired in the course of years of observation and experience; more especially is this true of the recognition of the condition of tension and the causes of its variation.

(To be concluded.)

An Address
ON
MEDICAL STUDY AND EXAMINATIONS.

Delivered at the Liverpool School of Medicine,

BY PROFESSOR HUMPHRY, F.R.S.

[THE Medical School at Liverpool has undergone considerable alteration and enlargement. A new anatomical and pathological museum has been built, physiological and chemical laboratories have been added, and the dissecting-room has been much enlarged.

At the opening of the session on Oct. 2nd the chair was taken by Professor Humphry, of Cambridge. There was a large attendance of medical men and other residents in the town, as well as of medical students. The introductory address was delivered by Dr. Dickinson, who gave a summary of the history of medicine. Before distributing the medals and prizes Professor Humphry, having complimented Dr. Dickinson on the able and interesting manner in which he had made the leading figures of olden times to pass before them, and shown the part which each had taken in forwarding the great science of medicine, and had presented their examples to those who were to enter upon the same career, spoke as follows.]

It is now our pleasant duty to turn from the good and great of the past to the good and hopeful of the present, and to confer the tokens of honour and reward upon those who were most successful in the good fight of last session's work. I say upon those who were most successful, for let it be borne in mind that it was a contest in which all were more or less successful; none were losers; all were winners, forasmuch as all came out of that contest better men than they went into it. True, it was not possible for each one to boast that he was able

Æἰὲν ἀριστεὺειν καὶ ὕπειροκον ἐμμεναι ἀλλων—

("To aim at highest honours, and surpass
His comrades all");—

but it had been possible for each one to do what was far better and more important than to surpass his comrades all—viz., to surpass himself. It was especially a contest in which

"'Tis better to have fought and lost
Than never to have fought at all."

Indeed, it was in some respects better to have fought and lost, provided the student had fought well, than to have fought and won; for he who had fought and lost had, at any rate, the advantage of being able to measure his own strength more advantageously than he who had won could do; and he would also have learned a lesson of humility, inasmuch as he would have found that there were others better than himself, and he would derive the stimulus of finding that further effort was necessary to win in the race of life. I would therefore seriously advise all who are commencing the session's work to determine to enter these lists, not for the purpose of beating others so much as for the higher and better purpose of beating themselves—not with the idea of winning the prizes commonly so called, but with the intention of winning the much more important prize of self-improvement. Everyone who tills his mental ground well, who digs deep and sows good seed, though he may fail to reach the treasure which he possibly has more immediately in view, will be certain to gather the more valuable treasure of a good and productive harvest, and will go away with joy bearing his sheaves with him. If it be a truth, as it undoubtedly is, and one of those great truths which are too little appreciated, that virtue is its own reward, so is it no less a truth that good honest work, work of all kinds, and especially good mental work, is its own reward; indeed, the best and highest reward that accrues to it is that which is inseparable from it, which grows of necessity out of it, and which results partly from the satisfaction of increased knowledge gained and of the consciousness of increased power and opportunity for usefulness. For there can be no question that the love of knowledge is one of the distinguishing features of man, one which is graven deeply in his character, and which is common to all mankind. No savage, no human being, however low and degraded, is altogether without it. Nay, it would seem from the biblical record to have been regarded as constituting a weak element in man's nature, and as presenting a side in his character upon which the tempter might most surely and fatally assail him; and this is represented, not as a feature in the character of man only, but as being perhaps even more marked in woman. Nor are we to understand that this refers to that low kind of love of knowledge called inquisitiveness or curiosity; but that it was the desire for an acquaintance with the higher things that concern our destiny, for the knowledge of good and evil, which furnished the opportunity to loosen man's resolves and to shatter his obedience. However that may be, of this I am certain, from much observation of men and manners, that nothing contributes more assuredly to steady, quiet happiness in life than a love of knowledge and the means, which may almost always be found, of gratifying it. This inherent love of knowledge we should take as a cardinal fact in considering how best to conduct education. We should take it for granted that in every one of our pupils this important and hopeful feature exists; and the great problem in education is, how to carry on efficient teaching without weakening this feature—how to give instruction sufficient to meet the growing needs of civilisation without damping and extinguishing this spark which is so essential to give warmth and life to the whole. I believe it is to be done in one way, and one way only: and that is, by associating ideas with the facts taught; by taking care not simply to communicate facts, but to communicate with them their relations, purposes, and surroundings, their being's use and end; for these constitute the life and power of facts, these give them their interest, and give to those who acquire them the power to use them. Without these adjuncts the learned in facts is like a builder encompassed by masses of material but unable to employ them because he is ignorant of their properties and relations. True the builder cannot work without the materials; neither can he construct without a knowledge of the materials, however abundant they may be. The most successful teachers have ever been those who enlisted the interest of their pupils by giving life to their subjects: in other words, who enlivened the details of their descriptions by the association of ideas and views; who not only taught facts, but taught with them what really constitutes the knowledge of the facts, and this knowledge gave pleasure and satisfaction and power to the hearers. It is this kind of knowledge which is power; and rarely will students be found careless and inattentive to it. When the teacher observes that his pupils are dull, reluctant listeners, he will do well to consider whether the fault does not, in part at least, lie in his method of teaching, in the absence of that kind of information which gives interest to the subject and forces the student to take interest in it; and when the student drags heavily along his path, and fails to find objects of interest to excite his attention and exercise his thoughts, he may depend upon it that the deficiency is in the direction or alertness of his mental vision. There are flowers and fruit enough along the way if he can but take the trouble to perceive and gather them. One of the great difficulties in carrying out this kind of teaching and learning is undoubtedly to be attributed, at the present time, to the examinations. Here let me not be misunderstood. I do not undervalue examinations. I have already advised you to go in for the competitive examinations in your school; and I believe that examinations form an important, indeed an essential, element in education. They, together with the preparation for them, tend to clear the mental atmosphere, and give precision, strength, and availability to knowledge in a way that can be effected by no other means. At the same time, like most other good things, they are liable to be mingled with some alloy; and that alloy is the evil known to be engendered under the system which is implied by the expressive and comprehensive little word "cram." Now cram is the filling or stuffing the mind with facts undigested—a *rudis indigestaque moles*,—without their being shaped and sorted and appropriated, and accompanied with that kind of knowledge which, as I have just said, constitutes the life and power of the facts and gives them their interest. Hence the study becomes dreary, dull, and repulsive. How inexpressibly lamentable is it that such a study as that of medicine should, by any possibility, have terms of this sort applied to it;—a study in which the best and most interesting features of physical science are concentrated upon the elucidation of the highest and most interesting of physical objects, and that not only in its ordinary and natural state, but in its abnormal and morbid conditions. There can be no question that the highest of all the physical studies is the study of the aberrant or abnormal conditions of the human body considered in relation to physiology on the one hand, and to pathology and treatment on the other; unless it be that which may, indeed, be regarded as a division of the same subject, and which, in a growing civilisation, is the most important division—that, namely, which relates to the prevention of disease. That such a study should become dull and repulsive is scarcely conceivable, and would seem to require a prodigious amount of bad teaching and bad study and bad examining to make it so. Yet, alas! we know that this is too much the case—that too many men learn no more of it than they are compelled to do, and learn that little heartlessly, grudgingly, and unwillingly. That this is so is, to my mind, the serious and discouraging feature which now confronts us in medical education, and indeed in all education. How to prevent or diminish it is the great educational problem of the age; and for the solution of this problem we must look first of all to the improvement of the examinations. Examinations are a rapidly increasing force in this country. They are becoming the masters of education. The students will learn, and the teachers must teach, with reference to them. Such, therefore, as are the examinations, such will, of necessity, be the teachers, and such will be the students. The improvement in the style and character of education must begin with the examinations; and the great improvement required in them is that to which I have already alluded—namely, the making them tests, not simply of facts acquired, but also of the knowledge of the facts and of the power to wield them. We want, not simply a knowledge of practical facts, but (which is a very different thing) a practical knowledge of facts. I am well aware of the great difficulty of conducting examinations so as to effect this, and to give a stimulus in the right direction to teaching and study. Herein is shown the ability of the examiner as well as the thorough knowledge of his subject. What I say on this matter is the result of much experience in examinations, passive, active, and neuter. In the passive sense I underwent an unusual amount of examination in my early medical career, and, though I recognised their good influence, I used heartily to long for the time when I should be absolved from their tyranny and be at liberty to range freely in the pleasant pastures of medical study. Actively, I have had my share in conducting examinations, and I live in a place where education and examinations enter largely into our thoughts and duty, where, in short, they form the staple article of business; and I have always been impressed with the great difficulty of conducting examinations well, and have been by no means satisfied with my own efforts to carry out my desires. As a neuter, I have, in the capacity of a member of the General Medical Council, had the opportunity of visiting and reporting on medical examinations in each of the three divisions of the empire; and though I am glad to testify that the examinations which I had the honour to visit were on the whole well conducted, still I was impressed with the difficulty of so conducting them as to exercise a high influence on education, and to give the required stimulus to teachers and students—the stimulus to enable and induce them to teach and study in that higher manner which constitutes real education, and which carries both interest and power with it. I think the tendency, in anatomy especially, is to lay rather too much stress upon minutiæ of detail, and to regard too little the teleological bearings. This, perhaps, is partly to be attributed to the dissociation of physiological from anatomical teaching, which has, I think, tended to exert an evil and depressing influence on the latter. I have always been thankful that when I commenced the study of anatomy the influence of John and Charles Bell had not altogether paled before that of their more exact but less enlivening successors. Whatever view may be entertained on such a point as this, I feel that it is now more than ever necessary to watch examiners and examinations narrowly, and to enlist the highest ability and wisdom in fashioning this, which is the very corner-stone of the educational edifice. The importance of this subject must be my excuse for dilating upon it; but time presses, and I will return to the more immediate business of the day. Some of you are about to enter into practice or are practitioners already. It is a trite piece of advice to you that you should remain students still; but I can give you no better. Foster carefully the flame of the love of knowledge in yourselves by feeding it with good fuel. It will contribute to your happiness more than almost any other thing. It will tide you over the many vexations and trials and disappointments incidental to professional life, and carry you above them in a level of quiet composure. The varied studies of medical men—such as botany, chemistry, physiology, &c.—give them the advantage over other men that they are more likely to have acquired a taste for some branch of science or reading which they can fall back upon as a resource in times of leisure; and I always remark that those are the happiest in whom this is the case. Though it is true that the disturbances and uncertainties appertaining to professional life are great distractions from the pursuit of any settled course of reading, yet these very uncertainties, attended with frequent intervals of unoccupied time, render it peculiarly important that there should be some favourite study to resort to which may prevent the desultoriness of habit and thought which the irregularities of our daily life have a special tendency to promote. Of all our studies, pathology is the one which I would particularly recommend as advantageous from a professional point of view, both on account of the interest which attaches to it and the vantage-ground which it affords. Nothing can give greater assurance and solidarity in the diagnosis and treatment of disease than a good knowledge of the characters of the disease. Work at it microscopically. Read the standard treatises on it. Work carefully over the good and well-selected specimens in the pathological museum in this school before you leave it. Do the same with any other museum that may lie in your path. Do not despise the information to be obtained from specimens because they are in bottles. There is a vast deal to be learned from them. An hour or two daily may be more profitably spent in examining these specimens in bottles and reading the histories associated with them than perhaps in any other way. This is a source of knowledge second only to the examination of the bodies of those whose cases you have watched during life. In no direction is so large an amount of knowledge allowed to run to waste as in pathology, whether we regard the neglect of post-mortem examinations or the neglect of opportunities afforded by pathological collections. They are the weapons which death offers us to turn against himself, and we too much fail to take advantage of them. I am not, however, so anxious to suggest the particular line of study as to urge upon you to make some subject—some branch of literature, philosophy, or natural or medical science—your resource in the hours of leisure from active and engrossing professional occupation.

To you who are entering upon the session's work in the school I can do no better than endorse what you have heard from Dr. Dickinson. Your work is to be your pleasure, and will be so if you are going the right way to work. Let not the pass-examinations be too much in your thoughts. They are meant to be a terror to evil-doers, and not to the good; and in the preparation for competitive examinations, if your first object is to improve yourselves, they can be no trouble to you, and you cannot meet with disappointment. You have great advantages here. Your school is equipped with the appliances and means of practical study in the most approved manner as few other schools can boast, and remember that the credit and success of the school depend upon your good use of them.

After all, it is signally true of knowledge as of all other treasures, that the life of a man consisteth, not in the abundance of the things which he possesses, but in the motive which guides him in the use of them—the polar star around which his thoughts and actions revolve. What that polar star should be there is no need for me to tell you. Your own consciences will prove infallible pointers to it.

CASE OF MENINGOCELE ASSOCIATED WITH CERVICAL SPINA BIFIDA, CURED BY ASPIRATION.

By JAMES F. WEST, F.R.C.S.,
SENIOR SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

The occurrence of meningocele is not common, but less frequently do we meet with cases of this kind where there was not only a bony deficiency behind the foramen magnum, with protrusion of the membranes of the brain, but also, concomitantly, absence of the lateral arches and spinous processes of nearly the whole of the cervical vertebræ. Aspiration of the tumour on two occasions had the effect of causing its diminution to a great extent, and ultimately led to a closing of the aperture of connexion between the inside of the skull and the cavity in the interior of the meningocele.

The child lived eighteen months after the two operations, its death being caused by chronic hydrocephalus. Whether the hydrocephalus, which certainly did not appear to exist at birth, was caused or aggravated by the closure of the communication between the skull and the meningocele, it is of course impossible to say. At any rate hydrocephalic fluid began to accumulate in the ventricles very rapidly after the second tapping; it was probably in consequence of there being no outlet for the secretion at the back of the skull, as there formerly had been, that one so soon began to notice the great increase in the size of the head, due to the expansion and separation of the cranial bones, and the bulging of the membranes through the fontanelles. The *modus operandi* of the cure of the meningocele was, as I believe, a deposit of fibrous material, the result of inflammation at the neck of the sac, which occluded the opening into the skull. This was proved by the fact that at the post-mortem examination, after I had absolutely cut away the tumour altogether, none of the cerebro-spinal fluid escaped from the aperture. Further than this, the sac of the meningocele, from which I had once during life drawn off four ounces of fluid, was found at the time of the child's death to be so contracted that it would barely contain a couple of peas.

Very possibly the hydrocephalus, from which the child died at the age of twenty months, had its commencement prior to the operation, but that it was intensified by the paracentesis is more than probable. If, as Morgagni has observed in spina bifida attended with hydrocephalus, the enlargement of the head has been known to undergo a considerable diminution after the casual rupture of the tumour of the spine,* one can readily understand how an opposite condition, such as the removal of the sac of a meningocele or spina bifida, may tend to the increase of the hydrocephalic secretion within the skull, and to the consequent enlargement of the head.

Aspiration was, I believe, a perfectly justifiable proceeding, inasmuch as it was clear that there was neither cerebral nor cerebro-spinal material within the sac of the meningocele. Had there been reason for suspecting the presence of either a portion of the brain or spinal cord in the meningocele, I should not have thought of any operative procedure.

It is very likely that I might with safety have removed the tumour *en masse* with the écraseur after the second tapping, but as the child was evidently gradually sinking from chronic hydrocephalus, I could see no advantage in resorting to any further operation.

On May 17th, 1872, Mrs. X——, a delicate fair lady, aged twenty-five, was delivered of a female child after a natural labour. The mother, who had been weakly from her birth, was of a highly nervous temperament, and had a peculiar habit of rolling up her eyes while speaking, so that only the conjunctivæ could be seen. She had been confined once previously (Feb., 1870) of a healthy child, and in May, 1871, had suffered from a serious miscarriage at the fourth month, the placenta being retained and the consequent hæmorrhage having weakened her greatly.

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* De Sed. et Caus. Morb., epist. 7, art. 9.

Family history.—She has three sisters, who are all delicate, and two brothers, who are said to be hale strong men. Her father looks well, but her mother is a fair, delicate-looking woman, and has had much illness. Her husband is a man of high mental but weak physical organisation, who has a winter cough and occasional hæmoptysis; his only brother has also suffered from phthisical symptoms.

The child, whose history I now proceed to narrate, was rather small; its neck was much shorter than natural, and the occiput seemed close to the shoulders. Behind the foramen magnum in the middle line was an opening into which the point of the forefinger could easily be introduced, and pendant from the back of the neck, and evidently proceeding from the opening in the skull, was a tumour, the size of a small orange; the swelling was fluctuating, translucent, and appeared to contain clear fluid only, and no solid contents; it became larger and more turgid when the child cried, but was small, soft, and flaccid when the child was asleep, and at no time was there any impulse when the hand was applied over it. The child's legs and arms were very diminutive; the thumbs were turned inwards over the palms, and the feet inverted so that they would probably in time have become varoid; the fontanelles were open to their usual extent, but no hydrocephalus was obvious at the date of birth. I diagnosed the case as a meningocele complicated with cervical spina bifida, and that opinion was shared by my friend and colleague, Mr. Furneaux Jordan, who saw the patient with me on June 21st, 1872. As there was no brain-substance, constituting encephalocele, within the sac, an operation to evacuate the contents of the tumour was considered justifiable; and, it having been consented to by the parents, to whom the risk was fully explained, I punctured with a small aspirating trocar on June 26th, and drew off two ounces of clear, straw-coloured fluid, which I judged to be cerebro-spinal. When the fluid contents were evacuated, one could clearly make out that not only was there a large opening into the skull, but that also all, or nearly all, of the laminæ and spinous processes of the cervical vertebræ were wanting. Collodion and a pad of lint were applied at the point of aspiration.

No bad symptoms followed the operation, but the tumour filled up again very soon, though its contents seemed less fluid and translucent.

On July 5th I again aspirated the tumour, and evacuated four ounces of yellowish, opalescent fluid. Great febrile excitement followed this second operation, and for two days the child was in considerable danger. The fluid contents did not again accumulate, and gradually the tumour diminished in bulk and increased in firmness, until it felt somewhat like a small fatty tumour, which retained the same size and appearance when the child cried and under all other circumstances.

Soon after the child was born the head began to enlarge, and the fontanelles to be very open.

Aug. 7th, 1872.—Mr. Wm. Adams, of the Great Northern Hospital, saw the patient with me, and the question of removing the tumour with the knife or écraseur was discussed, but as the hydrocephalus was on the increase, and the child's condition was very feeble, we decided that it was not likely to be of any permanent benefit to the child, and therefore that we could not recommend the operation to the parents.

Iron, cod-liver oil, and wheat phosphates were in turn used, with occasional alteratives of grey powder and rhubarb. Locally, spirit lotions and then gentle pressure were employed, but in spite of all treatment the head gradually enlarged, as will be seen by the following table, which shows the measurement of the circumference, and also the antero-posterior measurement of the head, from the root of the nose to the top of the cervical tumour.

1872.	Circumference.	Antero-posterior measurement.
Sept. 20th	17⅝ in.	13 in.
„ 29th	18⅛ in.	13 in.
Oct. 5th	18½ in.	13¼ in.
Oct. 10th	18¾ in.	13½ in.
„ 19th	19 in.	13½ in.
„ 22nd	19⅛ in.	13⅝ in.
„ 26th	19⅜ in.	14 in.
Nov. 6th	19¼ in.	14 in.
„ 27th	19¾ in.	14 in.
1873.		
Feb. 9th	21⅛ in.	16 in.
March 1st	21 in.	15½ in.
„ 6th	21 in.	16 in.
„ 28th	22 in.	16¾ in.
April 29th	21⅝ in.	16½ in.
May 13th	22⅜ in.	16 in.

During the succeeding six months the head increased but little; the frontal suture united, but the anterior fontanelle bulged widely. The child never had convulsions, but gradually got weaker, and passed away quietly on January 22nd, 1874.

I made a post-mortem examination, with the assistance of my dresser, Mr. Whitby, on the following day. The body was dreadfully emaciated: length 26½ inches; circumference of thorax, 14 inches. The hands were firmly clenched, with the thumbs directed across the palms. Circumference of head, 22¾ inches; antero-posterior measurement from meningocele to superciliary ridge, 17½ inches. The fold of the neck was quite lost at the back, and there was a tumour, about the size of a pigeon's egg or a small walnut, springing from just below the occipital protuberance in the middle line. There were circular patches of ulceration extending down to the cranial bones, in the right frontal, left parietal, and occipital regions, which had evidently been caused by pressure on those points. The tumour was first excised; no fluid escaped when the child was laid on its back, except a little blood from the aperture in the occipital region of the skull. The scalp being removed, the sagittal suture was found ossified, but the coronal and lambdoidal sutures were entirely membranous. On the membranes being punctured, only a few drops of blood oozed out; but on the lateral ventricles being opened, about two quarts of a pale clear serum escaped. The skull-cap, which was so thin that it could in most places be cut with a scalpel, being removed, the longitudinal sinus was found to be of a very large size and full of black blood. The internal surface of the base of the skull measured 6 in. by 5⅝ in. The lateral ventricles were so expanded that the cerebral substance enclosing them was only from a quarter to half an inch in thickness. The cerebrum itself was pale, soft, and diffluent; the cerebellum was moderately healthy, but there was a little fluid beneath the pia mater on the left side.

Condition of parts through which the meningocele escaped.—An opening, measuring 2 in. in length by 1 in. in width, extended from the foramen magnum backwards almost to the occipital protuberance. The posterior arches and spinous processes of the six upper cervical vertebræ were entirely wanting, and the spinous process of the seventh was deficient. The dura mater extended from the interior of the skull into the opening; but no portion of the cerebrum, cerebellum, or medulla spinalis was contained in the sac of the meningocele. The meningocele itself was as large as a walnut, was covered with fine, thin, light-coloured hair, and on section was found to consist of thickened skin and cellular and fatty tissue, with a small cavity in the interior, large enough to hold one or two peas. There was no communication between this small cavity and the interior of the brain, for none of the hydrocephalic secretion flowed out when the tumour was cut off and the child placed on its back, so as to allow the fluid if possible to gravitate towards the aperture at the base of the tumour.

Birmingham.

PHARMACEUTICAL SOCIETY OF IRELAND. — At a meeting of the Council of this Society, held on the 6th inst., four examiners were appointed to examine in the following subjects:—Latin, English, and Arithmetic: Dr. E. W. Collins. Materia Medica and Botany: Dr. W. G. Smith. Pharmaceutical and General Chemistry: Mr. H. Draper. Practical Pharmacy: Mr. R. Montgomery. Two of the examiners, Drs. Smith and Collins are, we understand, sons of members of the Council, the former being the son of the Vice-president of the Council, Dr. Aquilla Smith.

NOTES OF A CASE OF TINEA TONSURANS.

By J. THEOPHILUS BECK, B.A., M.R.C.S. Eng. &c.,
SURGEON TO THE WESLEYAN HIGH SCHOOL, CAMBRIDGE.

One of the pupils of the above school was submitted to me for examination and report as to the contagiousness or non-contagiousness of an affection of the scalp from which he was suffering. The boy had been sent to school with an assurance from the medical attendant of his family that no fear of contagion existed; and he supported this opinion by the fact that he had seen three cases of the same kind that had progressed to *entire* loss of hair, the hair, however, after a time growing again, and that other members of the respective families of these patients had not contracted the disease. A request was received from the parents of the lad that, if the patches of baldness extended, so as to become unsightly, he might be furnished with a wig, and his hair shaved off.

On examination, I found the patient a weakly lad, anæmic, and with defective appetite. There was a history furnished with him of three or four attacks of rheumatic fever, and on examining him I found a systolic mitral bruit. The rheumatism was attributed to defective asssimilation.

In consequence probably of his repeated illnesses, he was somewhat behind the other boys of his age in intellectual acquirements. He was exceedingly anxious to learn, and was a well-disposed lad, and all these circumstances rendered it desirable, if possible, to keep him at school.

I found on examination that the hair of the head generally was black, somewhat coarse and profuse in quantity, extending low on neck and forehead, fine dark hairs reaching to the eyebrows. There were ten or twelve bald patches, varying in size from a shilling to that of a halfcrown piece. The partings extending from one patch to the other were wider than natural. Some of these patches were white, but most of them appeared to have a thin brownish-yellow film, and had growing on them a few thin pale hairs, in marked contrast to the general quality of the hair. No complaint of itching or uneasiness. Some of the hairs extracted from the bald patches and their immediate neighbourhood, and submitted to microscopical examination by Dr. Wilson, demonstrator of anatomy, and myself, were found to be infested with the mycelium and spores of the Tricophyton tonsurans.

I considered that I had a case of tinea tonsurans, and gave the following opinion: that, although the fear of contagion was not so great as in other forms of tinea, yet that unrestrained intercourse with the other pupils was not free from risk. I therefore recommended a separate bedroom and entire isolation during the first week or two of treatment.

I was anxious, if possible, to save my patient from the annoyance and discomfort of losing his hair and wearing a wig—a matter of no small moment to a boy exposed to the witticisms and practical jokes of his schoolfellows. I therefore attempted, in the first place, to establish a line of demarcation between the healthy and unhealthy parts by extracting the hairs on, and a quarter of an inch around, the bald batches, and the same width on each side of the partings. This was a most tedious undertaking, and tasked alike the patience of the surgeon and the endurance of the patient. To give the boy credit, he bore it manfully and uncomplainingly, cheered by the hope of retaining his natural wig. After a few days the whole of the diseased patches were completely isolated. At the same time the hair was washed with a lotion of sulphurous acid and glycerine, and oil of cade and glycerine was applied to and around the patches by means of a stiff toothbrush. Glycerine was ordered in these lotions, with a view to prevent the dissemination of the spores of the fungus through the atmosphere. I then ordered the tincture of iodine to be applied night and morning for a fortnight, after which an ointment of bichloride of mercury was used. No fresh patches appeared after the commencement of the treatment, and by the end of the term I considered my patient cured, and contented myself with recommending a stimulating wash of ammonia and cantharides to be used during vacation to hasten growth of new hair.

On his return to school I had the satisfaction of finding that the cure was permanent, and that, instead of my patient having been reduced to a state of complete baldness, there was a growth of strong black healthy hair on the lately diseased patches.

I may add that my patient took syrup of iodide of iron and cod-liver oil while he was under treatment.

Cambridge.

CASE OF ANEURISM OF THE ARCH OF THE AORTA SIMULATING INTRA-THORACIC TUMOUR.

By FREDERICK ROBINSON, M.D., F.R.C.P.,
SCOTS FUSILIER GUARDS.

I thus venture to designate a case which, while illustrating the difficulty which besets an accurate diagnosis between aneurism of the arch of the aorta and morbid growths or deposits in the anterior mediastinum, presents some exceptional features of interest and instruction in a clinical point of view.

William F——, aged forty-one, an unmarried soldier of sixteen years' service, all passed on home duty, was admitted into the Regimental Hospital on the 24th May. He was known to be a man of intemperate habits, much addicted to drink. From the circumstance of his being a tailor by trade, and as such employed in the workshop with short intermissions during the whole of his military career, he had escaped that close observation as to health and habits which men on duty in the ranks are subjected to by medical officers and the military executive.

The occupation of the patient and mode of life are points to be borne in mind, inasmuch as the usual marked compression of the heart and arterial trunks (as well as of the lungs[*]), arising from the very defective make of soldiers' tunics, had in this case, it may reasonably be inferred, nothing to do with the origin of the malady. More probably habitual intemperance, as Dr. Peacock observed in this class of disease, by causing degeneration of arterial tissue, may have engendered the complaint. Possibly also syphilis contributed to this result, as the patient was under treatment in the year 1866, for a period of thirty-nine days, with the primary disease followed by secondary symptoms. Mercury and iodide of potassium were the remedies employed. This was the only admission into hospital of any consequence during the man's lengthened period of service, and there is no ground for believing that the constitution was left impaired by a disease which originally was not of a severe form,[†] and proved readily amenable to treatment.

The following were the symptoms on the morning of the 24th May:—Uneasiness referred to the top of the sternum; a fixed pain within the chest in this locality, not of severe character, nor extending down either arm or pectoral region in paroxysms; and dysphagia, so far as to make the passage of solid food uncomfortable but not impracticable. He prefers therefore liquid nutriment, which he swallows without any difficulty or limit as to quantity. Ordinarily there is little perceptible dyspnœa when quiescent, but if the patient move about or cough—as he does almost invariably when called upon to answer a question—the breathing is somewhat raucous. This condition subsides again, and he is able to respire easily and without distending the nostrils. There has been orthopnœa for a month past, obliging him to have his head raised a good deal in bed, and preventing rest on either side. The cough is not troublesome when he is perfectly still, but the least movement brings it on. It is rather loud in character, may be termed "tracheal," but is certainly not "brassy" nor high-pitched. No aphonia. The attacks of cough are usually followed by expectoration of thick mucus, like that seen in the after-stage of bronchitis. Has never had hæmoptysis. The man's aspect does not indicate much suffering, and is not suggestive of malignant disease. He is of sanguineo-lymphatic temperament, of healthy countenance, free from puffiness, and when he coughs the face becomes red without actual lividity. No difference in the pupils. The veins of the neck are distended on the left side. The right temporal artery cannot be distinctly felt. Firm pressure on the trachea causes slight pain. Nothing abnormal in the appearance of the chest, which is well formed, and, in common with the rest of the body, tolerably muscular.

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[*] The evil consequences of tight collars and waists in causing heart affections or kindred disease have been sufficiently well known and commented upon by army surgeons. I am not aware that their influence in generating phthisis has elicited the like notice and condemnation, possibly because the results are less immediate and obvious. To myself, on grounds that with the present generally received views as to the origin of tubercle it is superfluous to enter into, such obstacle in the due performance of the function of the lungs has appeared to play a very important part in the causation of a disease lamentably frequent in the Foot Guards.

[†] Whether the syphilis was a hard chancre the records of the case do not show. The contrary is inferred, and also that some slight skin affection resulted.

On percussion, there is clearly-defined, "board-like" dulness over the upper half of the sternum, taking in an area which may be covered by the palm of a man's hand. This space extends more to the right side, and there includes fully an inch of the sternal ends of the first three ribs. No impulse felt, nor sound of any kind audible. Heart's sounds clear and regular, but feeble. Respiration in the right lung anteriorly indistinct; in the left lung throughout somewhat weak. Posteriorly on the right side there is dulness on percussion, from the inferior angle of the scapula downwards. Loud bronchial breathing in the supra-spinous space. Lower down the respiratory murmur is weak, with some loose crepitation. No pain is felt in the upper part of the spine, nor soreness on pressure there. The pulse is the same at both wrists, feeble, regular, 80.* The extremities are cold, and the surface of the body covered with damp perspiration. There are no enlarged glands in the axillæ or elsewhere.

The patient distinctly says that his complaint came on gradually, was not preceded by any strain or injury, and that its duration has not been longer than a month. As regards the latter point, his statement must be taken with some reservation, as he might wish to avoid censure for concealment of illness during a lengthened period. No gastric disturbance.

The symptoms pointed manifestly either to aneurism of the arch of the aorta or some morbid growth springing from or independent of the lung; and, after weighing all the symptoms, it appeared to me that the preponderance of evidence was in favour of the latter class of affection, notwithstanding its comparative infrequency. Hence it was diagnosed.

The patient was ordered a stimulating draught of ammonia and ether every second hour, together with strong liquid nutriment, and a moderate quantity of wine. As he complained of want of sleep for the last few nights, he was ordered in the evening, his pulse having improved, a sedative draught of tincture of henbane and camphor mixture. He passed a better night, and would have slept well were it not that the cough awoke him several times. His breathing was tranquil and not at all noisy on the morning of the 25th; but, as usual when he answered questions, coughing came on. A pellet of thick mucus was brought up at the end of each seizure. The coldness and dampness of the skin remained the same, and the pulse was as weak as on the morning of admission. He passed a very restless, sleepless night on the 25th. His intellect was disordered, he talked incoherently, and endeavoured to get out of bed several times. This excited condition came on during the after-part of the day and in the evening. The visiting medical officer, bearing in view the patient's past mode of life, considered such symptoms rather indicative of commencing delirium tremens. An opiate took no effect at the time; but on the morning of the 26th he was composed and rational—in fact, his condition was the same as at the like hour on the previous day. In the afternoon he was again restless; cough not more frequent than ordinary; faculties clear. About 10 P.M. he turned faint, asked for a glass of water, and, before he was able to drink any, fell forward and expired. He was sitting up in bed at the time.

Autopsy, fourteen hours after death.—Body muscular, well proportioned and nourished; no abnormal appearances of any kind. Intercostal and pectoral muscles red and firm. A thick layer of fat covered the sternum. On raising this bone it was found at the upper part to be closely adherent to a structure which resembled to the eye and touch a tumour, occupying the anterior mediastinum. It was yellowish-white in colour, oval and flattened in form, and imparted to the fingers the feeling of a somewhat lobulated fatty tumour. It was a little overlapped by the lungs, and the part visible was about the size of a closed fist turned upwards. There were about fourteen ounces of dark-red serum in the right cavity of the chest, and the inferior margin of the lung, adjacent to the pericardium, was blood-stained on the surface. The lower half of the lung (right) rather compressed against the spine.

On laying open the supposed tumour, about a teaspoonful of bloody serum escaped, and it was then apparent that the structure was an aneurism undergoing spontaneous cure, and far advanced in such process of reparation. It was of the class designated "false," the wall being formed of an agglomerated mass of enlarged bronchial glands, dense cellular tissue, and fat. The sac was in some places three-quarters of an inch thick. Filling it completely lay a large ball of decolourised laminated fibrine, firm as a piece of muscle. This weighed nearly thirteen ounces. The whole aneurism, when removed, was about the size of a small cocoa-nut, flat on the surface beneath the sternum, and convex elsewhere. Further dissection showed that it sprang from the arch of the aorta at its centre. The aperture was a slit through which a sixpenny piece could easily pass, and its margin was smooth and rounded. The surface of the aorta throughout was studded with patches of atheroma in an early stage, there being no calcareous deposit anywhere. Just above and behind the aortic valves a true aneurismal dilatation also existed—a pouch capable of holding a filbert. The pericardium was in a state of extreme tension, and on making a small puncture, a jet of dark bloody serum was ejected. The entire quantity could not be ascertained, but it was considerable. The heart then exposed was rather larger than normal, loaded with fat at its base, the surface pale, and greatly corrugated. The organ presented altogether a blanched, sodden appearance, such as might arise from its lengthened suspension in fluid. The inner structure of the viscus was firm, red, and tolerably healthy, as were the valves.

On careful examination, a small ulcerated opening, capable of admitting a probe, was found in the depending portion of the large aneurismal sac, near its junction with the aorta. This opening communicated with the pericardium, about an inch below the root of the aorta. The right lung floated when placed in water. It was rather congested at its base, and, when cut into, the bronchi showed evidences of chronic inflammatory action. The apex was puckered, shrunken, and solidified. On laying it open, cretaceous masses and fibrous bands showed that tubercular disease had existed, and that nature had effected a perfect cure. The other lung was quite healthy. Masses of fat, and glands much hypertrophied, surrounded the roots of these organs. The epiglottis was enlarged and thickened. The liver was a good deal enlarged and fatty. Both kidneys were increased in bulk, congested, and presented indications of incipient Bright's disease.

Observations.—In this case, perhaps, it may be conceded that the diagnosis, although, strictly speaking, inaccurate, was in some measure borne out by the physical and general symptoms, as well as by the condition of the contents of the thorax seen *in situ;* but that, rather from the comparative infrequency of thoracic growths weighed against aneurismal than any distinctive signs pointing to the latter affection, a more correct inference might have been drawn as to the true nature of the disease. The period during which the man remained under observation was short—but three days; and he was very reticent as to the past.

A point of interest lies in the immediate cause of death. We find Nature interrupted in her process of reparation when very far advanced; a small chink of communication with the pericardium opened out, and a gradual draining of serum established. My own conclusion is that this oozing commenced immediately before the patient's admission, and that the consequent exhaustion and alarm led him to seek relief at the hospital. Life would appear to have been extinguished by a mechanical process—the cessation of function by pressure of fluid and consequent paralysis of the heart.

A question now presents itself as to the origin of effusion into the right cavity of the chest. The state of the corresponding lung and absence of pleuritic deposits negatived any conclusion that the fluid depended on either source, while it differed from that ordinarily met with after lesion of those structures. It corresponded, however, exactly in character with the contents of the pericardium, and my opinion is that a condition of exosmosis obtained, and that the over-distended pericardium for a time thus relieved itself into the cavity of the chest. The portion of lung in contiguity with the heart was stained with blood on the surface, and over it probably the liquid flowed. A careful examination failed to detect any other aperture through the aneurismal sac by which its contents could have passed.

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* A sphygmograph was not at hand, and the opportunity of obtaining a tracing of the pulse was lost.

This case illustrates well the fact, noticed by Dr. Sibson in his very instructive tabulated records of Aneurism of the Thoracic Aorta, that such disease of the vessel at the centre of the arch causes less suffering to the patient than affections of the ascending and descending portions of the artery. The difficulty in diagnosis, too, must be proportionately enhanced. The system, it would seem, can accommodate itself there to the presence of a growth of large size, and with comparatively small discomfort to the patient, provided the body be well nourished. I assume that this condition helped to lessen the man's distress, the aneurism being protected by fat on all sides from pressure.

I have looked over the Transactions of the Pathological Society, and cannot find a case similar in all its bearings, clinical and pathological, to the present. In none were the characteristic symptoms of aneurism of the thoracic aorta so obscure or absent altogether.

Claverton-terrace, St. George's-road, S.W.

NITRITE OF AMYL IN NERVOUS CEPHALALGIA.

By R. A. DOUGLAS-LITHGOW, L.R.C.P., &c.

Some six years ago I had my attention first directed to nitrite of amyl, and as this therapeutic agent is at present receiving great attention from the profession, I wish to make known one of its effects which I have found almost specific; and I do so more especially as I am not aware that the action of nitrite of amyl in nervous headache has been recorded recently. As will be seen, I lay no claim to the discovery myself. I think it was in 1869, whilst reading a number of the *Edinburgh Medical Journal*, I observed a remark made by the late Sir J. Y. Simpson, in the report of one of the meetings of the Edinburgh Obstetrical Society. He said he had found the inhalation of two drops of the nitrite give immediate relief in cases of nervous cephalalgia, however severe. From that time to this I have been in the habit of so using it, and, where due care was taken in the selection of cases, I have never known it fail to produce entire and almost immediate relief. In several instances I have had to increase or repeat the dose, but, as a general rule, two drops have been sufficient.

I place two drops on the palm of the patient's hand, and quickly diffusing these with my finger over the palmar surface, I tell her to cover her mouth and nose with her hand, and to inspire deeply and quietly. No time should be lost after the nitrite is dropped on the hand, as it evaporates rapidly. The patient should be seated while inhaling, as the peculiar effects of the nitrite are produced almost instantaneously, and may occasionally alarm a very nervous or hysterical female. Fortunately these symptoms last a very short time—generally less than two or three minutes,—and with their cessation the pain almost invariably ceases. Two drops may be given as a draught in water, instead of by inhalation, but I have found the latter mode much more satisfactory.

Dr. B. W. Richardson, to whom the profession owes almost everything concerning the true physiological action of this peculiar agent, says it is one of the most powerful relaxants of vascular tension we possess, and, bearing this in view, we can easily account for many of its physiological effects. I do not, however, propose to discuss these here, but I may just mention that, in addition to the "flushing of the face" which invariably results after the administration of nitrite of amyl, patients generally complain of great throbbing in the temples, "fluttering of the heart," and a feeling of breathlessness, as if they were "dying away." Some describe a sensation of "tingling from head to foot," and several have experienced pains in the limbs analogous to cramp, while in other cases every object seems to have acquired a bright yellow hue, such as sometimes results from the use of santonine. These severer symptoms, however, are by no means common.

Used as I have just recommended, I don't think there is the slightest risk in its administration; but, owing to the temporary palpitation of the heart produced in most patients, care should be taken in administering it in cases of organic cardiac disease, &c. Should any excitement or other alarming symptom occur, cold affusion to the head, face, and chest, with a free supply of fresh air, are the proper means to use, but I have never had occasion to do so. The nitrite (which is cheap) should be procured from reliable makers only, and, as an economic suggestion, I recommend anyone using it to preserve it in a stoppered glass bottle, having an additional glass cap-cover.

North Brink, Wisbeach.

REMOVAL OF A BULLET FROM THE HEAD SEVEN MONTHS AFTER ITS RECEPTION.

By ROSSLEWIN MORGAN, M.D.,
STAFF-SURGEON, ARMY MEDICAL DEPARTMENT.

I was consulted on the 12th of June, 1875, by a Chinese coolie, named Cheng Aboy, aged twenty-five years, who had a bullet firmly imbedded in the frontal bone, about three-quarters of an inch below the hair and midway between the coronal suture and a straight line drawn across the superciliary ridges and nasal notch, and about a quarter of an inch to half an inch to the left of the mesial line. The bullet was received during the Shanghae riots, in a fight between the Chinese and Malays, in December, 1874, seven months before he sought medical aid. It took an oblique direction, and was evidently a ricochet. When extracted it was triangular in shape, the base directed downwards and to the right side, the apex upwards and to the left. Its length was three-quarters of an inch, breadth half an inch, depth about half an inch, weight one ounce and three-fifths. Its external surface which was in contact with the integument was rough and rounded, its inner surface which was in contact with either the brain or its membranes, or possibly with a false membrane, was flat, rough, and coated with the clay which was used as a plug for it; its apex and inferior margin were imbedded beneath the os frontis; its base was partially free; it was covered over by the skin except a small spot in the centre, from which a thin unhealthy discharge issued.

I first tried to move it by a silver probe, but without effect; I then dissected up a circular portion of the skin, which I slit through with scissors in three directions, and being thus enabled to reach its base with an ordinary artery forceps (a bullet forceps being inapplicable), with a long-continued steady pull succeeded in extracting it. During the operation he became faint, but was revived by a little weak brandy-and-water.

The wound was dressed with a pledget of lint soaked in carbolic oil (one part to forty), which was retained *in situ* by a bandage; had a dose of castor oil, and a cold lotion constantly applied to the head.—5 P.M.: Has rather feverish skin; hot and dry tongue, coated; pulse quick and rather full; oil had not acted.

June 13th.—Febrile symptoms abated; tongue slightly coated, but soft; pulse 93; slight pain in back of head and neck; there is a hole in his forehead more than half an inch deep, over which the skin is contracting; no discharge; lint coated with healthy pus. Carbolic oil dressing continued, and cold lotion to head; ordered an ounce of castor oil, as the previous dose did not act; gets his usual diet—viz., rice and vegetables with some curry.

14th.—Interior of wound healthy-looking; has had no headache or other urgent symptoms; tongue clean; pulse regular; bowels acted freely; wound dressed as before; lotion continued.

15th.—Removed some clay from the wound, which was cleaned out with a sponge and tepid water, and dressed from the bottom as before. General health pretty good.

16th.—Wound covered with florid healthy granulations, secreting laudable pus. Health continues good.

17th.—Removed a little clay from the wound, which is progressing favourably. Dressed as before.

19th.—Cavity of the wound filling in by granulations from the bottom. Health good.

24th.—Improving.

28th.—Improving. Wound dressed as before.

July 3rd.—Cavity of the wound filling in rapidly. Same treatment continued.

11th.—Continues to improve.

20th.—Cavity of the wound almost filled in; and the man, who has continued to enjoy good health since a few days after the extraction of the bullet, has resumed his ordinary occupation, and is quite out of danger. The integument will never completely cover over the wound. A silver plate, carefully adjusted, is now all he requires.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

ANEURISM OF LEFT FEMORAL ARTERY IN HUNTER'S CANAL; LIGATURE OF FEMORAL ARTERY; CURE.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR the following notes we are indebted to Mr. J. W. Hunt.

W. G——, aged thirty-six, was for some years a surgeon in the navy. About a month before admission he had noticed an abnormal pulsation in the left popliteal space, but it was not till January 28th that he discovered certain signs of an aneurism. Up to this time there had been no pain in the leg and no œdema. On Jan. 31st he was seen by Mr. Erichsen, who recommended digital compression, which was commenced on the same day, and continued, with intervals, for the six following days. The periods of compression during the seven days varied from six to twenty-six and a half hours, the average length of time for each day being about fourteen hours.

On Feb. 7th the patient was admitted into the hospital, under the care of Mr. Heath. He was a strong, healthy-looking, well-nourished man. He had previously suffered from scarlet, typhus, typhoid, intermittent, and yellow fevers; the latter being accompanied with albuminuria, which had never entirely left him. There was no history of syphilis. Patient lay in bed with his leg bent at an angle less than 90°. A distinct pulsation was visible in the lower two-thirds of the left thigh, most intense at a point about seven inches above the upper border of the patella. Above this point the impulse was in a forward, and below it in a backward direction. Pulsation was expansile over an area the limit of which could not be exactly defined, but which measured approximately 4½ inches from above down, and 7¾ inches from side to side. Pressure on the femoral artery above caused an entire cessation of the pulsation. No distinct tumour could be felt. There was slight throbbing felt in the site of the aneurism. There was no œdema, and no discolouration of skin over the swelling. The only cause to which the patient could ascribe the aneurism was a severe fall about forty days before admission.

At 11 o'clock (shortly after admission) a tourniquet was applied at Scarpa's triangle, and continued till 10.15 the next morning, when, no improvement being perceptible, the tourniquet was laid aside, and extreme flexion was tried. Ordered five grains of iodide of potassium every six hours. Extreme flexion was discontinued on the morning of the 9th of February, the patient having complained of great pain in the situation of the aneurism. This pain was partly alleviated by subcutaneous injections of morphia. By this treatment the aneurism was much reduced in size, and the pulsation rendered very much less tumultuous. On the 9th, at 10.30 A.M., digital compression, sufficient to arrest entirely the flow of blood, was commenced, and continued for twelve hours. Temperature 98·8°; pulse 108. After the discontinuance of compression the tumour was certainly harder, though the limits were not diminished. On the 10th extreme flexion was again resorted to, and continued till the following morning, when digital compression was resumed and kept up for eleven hours and three-quarters, the patient suffering as much pain as before. No change was observable in the aneurism. On the afternoon of the 12th the tourniquet was reapplied; but the patient was unable to bear it more than eight hours. On the 13th and 15th digital compression was again resorted to, the leg being placed in the position of extreme flexion in the intervals, but with no good effect; and on the 17th Mr. Heath decided to ligature the artery. The patient having been anæsthetised by nitrous-oxide gas, followed by ether, Mr. Heath tied the artery in the usual way, with a strong catgut ligature, pulsation being immediately arrested in the tumour. The wound was washed out with a carbolic-acid lotion, and the edges brought together by four silver sutures, an interval of about one inch being left below for drainage. The part was covered over with cotton-wool, and the leg bandaged in flannel and fixed by sand-bags in a flexed position. At 5 P.M. the temperature of the left foot (taken between the toes) was 103·5°, and of the right 107·5° (?); at midnight that of the left was 93·5°, and of the right 97·8°.

Feb. 18th.—Pulse 108; temperature 100·8° F. Patient complains of much pain in the thigh. No pulsation to be felt in the tumour. Temperature of the two legs about equal.

19th.—This afternoon the wound was dressed for the first time. There was some offensive discharge from the lower part, and the edges were inflamed. One of the sutures was removed, and the wound dressed as before. Temperature 102·2°; pulse 124. Temperature of right foot 99·8°, of left 102·4°.

20th.—Patient complains of a great deal of pain. Expression anxious; face pale, cheeks flushed; tongue covered with thick yellow fur. Pulse rapid and weak; temperature 100°. Patient vomited a little. The discharge is purulent and offensive. There is a blush for one to two inches all round the wound, with distinct sinuous and raised margins. Two or three glands in the groin are enlarged. No pain in the back.

22nd.—Two sutures were removed yesterday, and the wound poulticed; the last suture was removed this morning. The edges of the wound are glued together with pale granulations, and are separated about half an inch. Here and there pus has escaped from the deeper parts. The blush is still red, and has extended to the middle line of the thigh behind. The thigh is swollen and tender. Pulsation has not returned since the operation. The edges of the wound were brought together with strips of plaster, and simple cold-water dressing was applied. The blush was washed with nitrate of silver, twenty grains to an ounce. The healing of the wound was retarded for some time by a burrowing of matter deeply amongst the muscles at the outer part of the thigh, which was ultimately overcome by a careful application of pad and bandage.

24th.—Patient has much improved. Temperature 98·6°; pulse 96. Blush not extended. The wound still discharges a good deal. No pulsation to be felt either in the aneurism or in the posterior tibial artery.

From this time the patient continued to improve, though slowly. The blush gradually disappeared, and the discharge grew less, the wound granulating up from below. The wound was dressed with an oakum pad.

March 11th.—The wound is reduced to a linear granulating sore, except at the upper part, where a small amount of pus can be squeezed out. The tumour is hardly to be felt.

17th.—There is still a slight discharge, but the wound is healing up rapidly. No sign of the aneurism is visible to the sight, but a slight swelling can be made out by the touch. There has been no return of the pulsation, either in the aneurism or in the posterior tibial artery. The patient left the hospital to-day.

One of the most interesting features of this case consisted in the rapid development and very indefinite outline of the aneurism; in fact, no distinct edge of the tumour could at any time be felt. The results of the various methods of palliative treatment adopted were at first promising, but, as frequently occurs, did not prove permanent, and had to yield to the ligature, which eventually proved successful.

GUY'S HOSPITAL.

CHLORAL AS A LOCAL APPLICATION FOR ULCERS.

(Under the care of Mr. R. CLEMENT LUCAS.)

ON visiting the wards with Mr. Lucas on Thursday, the 7th inst., we saw several patients on whom a solution of hydrate of chloral had been used as a local application to ulcers, and the results appeared to be sufficiently satisfactory to be worthy of record. Mr. Lucas commenced the use of chloral among his out-patients in August last, for cases of sloughing wounds and fetid ulcers, and, being pleased with the result, he has since given it a somewhat extensive trial in the wards. The effect of the local application of chloral appears to be that of a powerful stimulant and disinfectant; it has no soothing or sedative effect upon the part to which it is applied, but, on the contrary, gives rise to considerable pain, which lasts some time; nor does it, even when used over a very extensive surface, ever become absorbed in sufficient quantity to act as an hypnotic. Whether it is taken up into the circulation or not matters little, since the quantity used as a local application is so small compared with the dose administered as an internal remedy, that were the whole of the drug applied to find its way into the blood, the quantity absorbed would still be very much less than that of an ordinary sleeping-draught. Its local application is, therefore, eminently safe and free from the dangers which sometimes follow the use of opium lotion or carbolic lotions long continued. Mr. Lucas has used solutions of various strengths, that which he has found most useful being a solution of four grains of hydrate of chloral in an ounce of water. The application of a lotion of this strength is, as we have just stated, often attended with considerable smarting, which may last a quarter of an hour, but the smarting becomes less at each subsequent application. In cases where the patients have complained much of the smarting, the lotion has been diluted to the proportion of three or two grains to the ounce. The treatment of foul sloughing ulcers by means of chloral lotion has been attended with great success, the surface of the sore quickly cleansing and assuming a healthy appearance, whilst the subsequent healing has advanced with a rapidity in some cases quite astonishing.

In Lydia ward we saw a stout, florid woman, aged fifty, who had suffered from varicose veins for twenty years, and from ulcers for ten years. The ulcers for which she was admitted on Sept. 8th had been open for four years. At the time of her admission there were two irregularly oval ulcers occupying the front and outer side of the left leg. The anterior one was nearly seven inches in length, by three inches and a half in breadth; the second, situated behind this, was two inches and a half in length, by three-quarters of an inch in breadth. The surfaces of the sores were deeply excavated, and sloughing in parts, whilst the edges were thick, raised, and everted. Under the use of chloral lotion the ulcers quickly became sweet and clean, and the cuticle spread over them with very great rapidity, even while the surfaces of the sores were still considerably below the level of the surrounding skin. The smaller ulcer was completely healed within a fortnight, and at the time we saw the patient all that remained of the large one was a small fusiform patch of healthy granulations, about half an inch in breadth and two inches in length, upon which a blue line of cuticle was rapidly encroaching.

In the same ward there were several other cases of ulcers of less severity that had been treated in the same manner, which presented an equally favourable appearance, and also a case of suppurating cyst of the tongue, for which a gargle of chloral hydrate (two grains to the ounce, sweetened with syrup) had been prescribed as a disinfectant.

In Lazarus ward there is a patient who has suffered from varicose ulcers for ten years. He is a corn-porter, fifty-four years of age, and is accustomed, when at work, to drink five or six pints of beer a day, besides indulging to intoxication at least once in every week. When admitted, his legs were much swollen and inflamed, and the ulcers deeply excavated, sloughing on the surface, and reeking with offensive odours. There was an ulcer on the inner side of the left calf, two inches and a half in length by one inch and three-quarters in breadth; the edges were thick and everted; at the upper part there were high granulations, and below a sloughing surface. On the right leg there were two elongated and irregular ulcers: one on the outer side, five inches in length by two inches in breadth; and one on the inner side, four and a half inches in length and from half an inch to an inch in breadth. These ulcers were deeply excavated, and in a foul and putrid condition. After the application of chloral lotion for a few days, the sores presented a clean and healthy appearance, all putrescence and bad odour had vanished, and cuticle began rapidly to spread over their surfaces. On the 7th inst., about three weeks after admission, the ulcer on the left leg was reduced to one inch by half an inch, and was a healthy healing sore. The large ulcer on the outer side of the right leg had healed, with the exception of two small portions, one at the lower part and one in the middle; and the ulcer on the inner side of the same leg was healthy and healing, and reduced to three inches in length by half an inch in breadth.

We also saw a boy in the Accident ward who had met with a severe injury in front of the knee, causing extensive sloughing of the integuments in front of the joint. In this case chloral lotion had been used from the first, and had acted favourably in cleansing the wound.

WARNEFORD HOSPITAL.

CASE OF ARTIFICIAL RESPIRATION IN PARALYSIS OF RESPIRATORY CENTRES.

(Under the care of Dr. HOMER.)

SOME remarks were recently published in this journal on Artificial Respiration in Paralysis of the Medulla Oblongata. The following case, for the notes of which we are indebted to Mr. Geo. W. Crowe, M.B., house-surgeon, bears upon the same subject.

George M——, aged sixteen years, bandsman in the militia, was admitted on June 17th, 1875. Had been ill one month. Had been a strong lad until May 16th, 1875. On that day he marched with the band about two miles, but he complained of headache and sickness, and was sent home. Next morning he felt quite well again, marched with the band about three miles, played all day until 4.30 P.M., when he again felt so ill that he was sent home, supported by two men. He was kept in bed for one week, when he was sent to the Militia Hospital, and remained there until the date of his admission to the Warneford Hospital.

On admission, he was very weak, semi-conscious, but answered questions when roused. The body was much emaciated, and the belly retracted. Temperature 99·5°; pulse 86; respiration 18; pupils normal; urine healthy. He moaned a good deal, and complained of severe pain in back of head and neck. This was much relieved by ice-bags. He became quite conscious on the fourth day after admission, and said he did not remember coming to the hospital. Pain in the head much better. After three days the pain in the head returned, and the patient complained of pain also in the back of the eyes. He again became partially unconscious, with slight delirium at night. Got out of bed several times in the absence of the nurse. He became quite conscious again in three or four days, but again had a relapse after a few days. He continued in this state, with periodical intervals of consciousness, until July 25th. The bowels were very costive, and vomiting was a constant symptom throughout.

On the 25th of July Mr. Crowe was hastily summoned at 2.45 P.M. The nurse said that she had left the ward for a few minutes, leaving the patient rather better than usual, but on her return he seemed much worse, and was moaning a good deal, and crying as if in severe pain. The patient was found with a flushed face, and quite unconscious. The veins of the forehead were much distended, and the pupils contracted to the size of a pin's head. The pulse was full, rapid, and regular; the breathing very quiet and slow. In about a minute all respiration ceased, and the face soon became quite livid. The heart continued to beat strongly. Dr. Wilson, medical officer of health for Warwickshire, happened to be present at the time, and agreed in the decision to try artificial respiration pending the arrival of Dr. Homer. Dr. Wilson kindly assisted in maintaining artificial respiration, and in a few moments the lividity began to disappear, and in a minute the face had quite regained its normal hue. In about five minutes the pupils suddenly dilated widely, but still continued insensible to light. The artificial respiration was continued without intermission for two hours and a half, and in the meantime Dr. Homer had arrived and ordered a turpentine enema. This, however, was not retained, owing to relaxation of the sphincter ani. At this time it was noticed that there was well-marked priapism. After two and a half hours the artificial respiration was temporarily discontinued, and in two minutes the pulse had risen in frequency from 120 to 140 beats per minute. In five minutes the heart's action had become intermittent and the face intensely livid. Artificial respiration was now resumed. (During this interval it was proved by several tests that there was no attempt at natural respiration.) In one minute the lividity had quite disappeared, and the pulse fallen to 120, with no intermission. At 5.30 P.M. artificial respiration was again discontinued, and not resumed for seven minutes. The same sequence of events occurred, except that the pulse rose to 150, and there was a loud systolic bruit at the apex of the heart. At 6.20 artificial respiration was again discontinued. The pulse at this time was 116, slightly weaker than before, but still pretty strong and regular. The temperature was 96°. After seven minutes artificial respiration was resumed, and kept up for an hour. It was discontinued at 7.30, but recommenced in five minutes, as the heart's action had become very intermittent. A 7.50 it was again discontinued, and not resumed for ten minutes. In five minutes the heart's action became intermittent; it then became regular again for about a minute, and again intermittent. The beats rose in frequency till the end of the fifth minute, when they began to get slower, and at the end of the tenth minute had fallen to 48. The face became almost black, and the veins of the neck were much distended. Artificial respiration was now resumed, and the lividity again disappeared, but more slowly than on the previous occasions, as the admission of air to the lungs was impeded by accumulation of mucus in the air-passages. At 8.20 P.M., five hours and thirty-five minutes after artificial respiration had been commenced, it was determined to finally discontinue it. In three minutes the pulse fell to 60, the heart's action gradually becoming weaker, with systolic bruit, loudest at the apex. In ten minutes the heart's action was sluggish and irregular, and there were only 20 beats per minute. The heart-sounds continued audible for fifteen minutes, but after this interval no sound could be heard.

Autopsy, forty-three hours after death.—Only the head was allowed to be examined by the parents. The legs showed signs of rickets. A portion of the inner table of the skull, about the size of a shilling, was deficient, near the coronal suture. The membranes showed nothing abnormal. A small amount of fluid escaped on removing the skull-cap. The vessels were not much distended. The ventricles were all very much dilated with a straw-coloured fluid, and there was a little pus in each of the posterior cornua. The lining membrane of the ventricles showed gelatinous degeneration. The medulla and cerebellum were softer than usual, and there was a small patch of tubercle on the latter where in contact with the medulla.

Remarks.—There are several points of interest in the above case. First, that life can be prolonged for a considerable time by means of artificial respiration. In this case the patient was kept alive for five and a half hours, when in the natural order of events he would have died in a few minutes, and no doubt the artificial respiration could have been successfully maintained for a considerably longer period had not the case been considered quite hopeless. Again, this case shows that the blood can be perfectly reoxygenated by means of artificial respiration after a total absence of all respiration for ten minutes. And, thirdly, though the rule laid down is, that in cases of suffocation or non-admission of air to the lungs from other causes, the ventricular contractions cease before the expiration of five minutes, yet, in the above case, the last ventricular contraction was fully fifteen minutes after all respiration had ceased.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

This Society met for the first time after the recess on the 12th inst., when the chair was taken by the President, Sir James Paget. The attendance of Fellows and visitors was unusually large, attracted, doubtless, by the paper of the evening, which occupied upwards of an hour in delivery. The subject of the paper was the Pathology of Chorea, and it will be seen that Dr. Dickinson does not accept the theory of embolism, and that he describes widespread changes—chiefly of hyperæmic nature—in the nerve centres similar to those which he has met with in diabetes. The meeting was prolonged for half an hour, which allowed of the delivery of excellent speeches by Drs. Broadbent, West, and Hughlings Jackson. At the commencement of the proceedings, the President laid upon the table the new volume of the Society's Transactions. We observe that there is already a very long list of papers to be read in the coming session.

A paper by Dr. W. H. Dickinson on the "Pathology of Chorea" was read. At the outset the author remarked upon the need of accumulated observations in the present state of the pathology of the nervous system, before it would be possible to know the progress of any disease from its origin to its termination. He then proceeded to describe the morbid appearances found in seven fatal cases of chorea. The cases were related, as nearly as could be judged, in the order of their acuteness, those being placed first in which death ensued earliest.—Case 1. A girl aged ten years, had acute rheumatism one month before; systolic murmur at apex; no palpitation, but pain in left chest and spine. The attack of chorea lasted two days, terminating somewhat suddenly, death being preceded by acute pain in lumbar region. There was found thickening of edge of mitral valve, with vegetation on its auricular border. Intense injection, both arterial and venous, in brain and cord, most marked in the corpora striata, the arbor vitæ of the cerebellum, and in the dorsal region of the cord. Traces of perivascular erosion widely distributed, and the central canal of the cord was greatly dilated (measuring one-seventh of an inch in diameter in the lumbar region), and distended by débris of blood and by serous exudation. — Case 2. Girl aged ten years — third attack, the first of which, four years previously, had been very severe. The present attack lasted twenty-one days, the temperature reached 104·5°, and there was a faint systolic murmur. The mitral valve was beaded. In the nervous centres there was similar evidence of congestion, both arterial and venous, especially in the corpora striata, with the addition of superficial hæmorrhages, and exudation around the arteries of the corpora striata. In the cord, besides injection, there were numerous periarterial erosions in the dorsal and lumbar regions, especially in the grey matter.—Case 3. A boy aged seven; death on the twenty-fourth day. Vegetations on mitral valve. Injection of vessels of brain of every class, most about optic thalami; some extrusion of corpuscles. Injection of cord, and hæmorrhage into grey matter of dorsal and lumbar regions, symmetrically with regard to the two sides.—Case 4. A girl aged eight; chorea following fright received three days before; no cardiac murmur; death in a typhoid condition fifty-seven days after the fright. Engorgement of veins of brain, chiefly on surface and in substance of corpora striata. Injection and erosion of the cord, with large hæmorrhage (visible to naked eye) in the anterior cornu in the cervical region, and smaller hæmorrhages elsewhere.—Case 5. Duration fourteen days. Venous injection of brain, especially of corpora striata, wherein were also periarterial exudations. Arteries in convolutions near Sylvian fissure, surrounded by blood-crystals and débris. Injection and scattered erosions of cord. "Sclerosis" of grey matter in dorsal and cervical regions, placed with bilateral symmetry.—Case 6. Female, aged fifty-four; since last attack, thirteen days; two preceding attacks, the last a year ago. Recent injections, such as in other cases, of bodies at floor of lateral ventricles and of cord. Older changes, periarterial degenerations, and scattered spots of "sclerosis" in *substantia perforata*, and convolutions at beginning of left Sylvian fissure.—Case 7. Duration four years. Spots of "sclerosis" numerously set in *substantia perforata*, and grey matter of corpora striata, symmetrically with regard to the two sides. In cord, large exudations into the grey matter and fissures, chiefly in the cervical region. In speaking of so-called "sclerosis," the author pointed out that the term was misleading, since there was no induration, the change consisting in small round or oval translucent spots, about one-hundredth part of an inch in diameter. Having given the above summary of fatal cases, he stated that it was enough to show that the changes were remarkably constant in kind and place. In *kind* the changes were all (allowing sclerosis to be so) directly connected with vascular disturbance. The injection was general to vessels of every kind, but most marked in the arteries; when the sources of exudation or of hæmorrhage could be determined, they were always arterial; the degenerations were usually periarterial, and the spots of sclerosis similarly placed. The first visible change would seem to be injection or distension of the arteries, this being succeeded by extrusion of their contents, to the irritation or injury of the surrounding tissues. In *place* the changes affected both brain and cord; the cord perhaps the most severely. Whether in brain or cord, the changes on the two sides were generally symmetrical, both being often affected at the same spot in the same manner, and nearly to the same extent; and in instances where no symmetry was apparent, a tendency to it could be traced, as in the existence of vascular distension on one side corresponding to hæmorrhage on the other. The parts of the brain most usually attacked lay between the base and the floor of the lateral ventricles in the track of the middle cerebral arteries—the substantia perforata, the corpora striata, and the beginning of the Sylvian fissures. In the cord the changes attained their maximum in the posterior and lateral parts of the grey matter and in the upper portions of the cord. Regarding arterial repletion as the origin of the pathological changes, the source of this vascular state was discussed. The embolic theory was shown to be inconsistent with the character and distribution of the morbid appearances, in that in no instance were decolorised plugs found in the arteries, and the symmetrical distribution of the changes was strongly opposed to embolism. To elucidate some of the points in question, the clinical history of the disease was adduced as represented by a tabulation of 22 fatal cases, all examined after death, and 70 cases under observation during life only. The prominent fact brought out by these cases was the frequency of mitral endocarditis in connexion with the disease. This existed in 17 of the 22 fatal cases, while there was stethoscopic evidence of it in 40 of the 70 non-fatal cases. It was thus shown that endocarditis was associated with chorea independently of the frequent origin of the chorea in rheumatism, and when the nervous disturbance could be definitely traced to mental causes. Thus, while in rheumatic cases endocarditis often preceded the chorea, it was equally evident that chorea in other circumstances preceded and caused the endocarditis. This duplex relation between the nervous and the cardiac disorder was discussed, with the conclusion that chorea was not in any way, either embolically or otherwise, a result of endocarditis, though often associated with it as having a common origin in rheumatism; while endocarditis was continually a result of chorea, set up possibly by the muscular irregularity of the heart and the mitral regurgitations thereby occasioned. In conclusion, chorea was regarded as depending upon a widely-spread hyperæmia of the nervous centres, not due to any mechanical mischance, but produced by causes mainly of two kinds, one being the rheumatic condition, the other comprising various forms of irritation—mental and reflex—belonging especially to the nervous system. Given the irritant, mental, reflex, or rheumatic, the course of the disease had been sufficiently traced in hyperæmia and its results. The spots of perivascular change were widely scattered through that large region which lies inferiorly to the cerebral convolutions, between the corpora striata and the lower part of the cord, the district of the motor and sensory as distinguished from the mental functions. The result, chiefly in muscular excitement rather than in paralysis or loss of sensation, was associated with the character of the lesions which were points of irritation rather than planes of sections, and calculated not so much to cut off as unnaturally to excite nervous function. In looking at the nature of the lesions, proceeding, as they do, from vascular distension to perivascular change, it was not possible but to connect them with those of a large group of nervous disorders, prominently with those of diabetes. In diabetes the changes are of similar origin and character, though usually seen at a later stage, and attended with more excavation. They are, however, somewhat differently disposed in the two disorders; in both they are widely distributed, in diabetes the stress falling upon the brain, in chorea upon the cord. Every period of life has its own region of nervous susceptibility: in childhood the motor; in adolescence the emotional; in advancing years the mental, and, coevally or nearly so, that part of the nervous mechanism which instigates glycosuria. Much the same mental impression may make a child choreic, a girl hysterical, or a man diabetic; and thus, both in external origin and in the nature, though probably not in the site, of the organic changes, we see resemblances and alliances between nervous disorders which in their symptoms betray little similarity.

Dr. Broadbent said that, whereas Dr. Dickinson would define the pathology of chorea as a generally distributed hyperæmia of the nervous centres, and especially of the cord, yet he (the speaker) would rather localise it in the corpora striata. No mention had been made in the paper of derangement of sensation, which is often diminished to a considerable degree in hemichorea, and probably much lowered in the general form, since the patients often endured the formation of bedsores without apparent suffering. Then, in bad cases of chorea, there was often violent delirium, and this with a low temperature, and, in some cases, aphasia. All these variations showed a variability in the site of the hyperæmic condition. Hemichorea, which is perfectly parallel to hemiplegia, cannot be supposed to depend upon changes limited to one-half of the cord; moreover, the anæsthesia in these cases was on the *same* side as the chorea, and not on the opposite side, as it would be were the origin of the disease spinal. There was no increased reflex excitability in chorea. Then there were cases of hemichorea followed by hemiplegia. Dr. Dickinson's cases themselves showed that there was frequently a limitation of the most marked changes to particular regions. As regards the embolic theory, Dr. Dickinson seemed to have overlooked the fact that the embolism is capillary, and he (the speaker) remembered one fatal case of rheumatic chorea with delirium in which there was plugging of minute vessels of brain with decolorised clots. Too much stress had been laid upon the irregularity of the heart, which he thought was rather secondary to irregularity of respiratory action, and he could not see how such irregularity could give rise to endocarditis.—Dr. West, after eulogising the labours of Dr. Dickinson, thought that at present we were not in a position to establish, from pathological observation alone, the nature of a disease in which the mortality was so small as 1 per cent. He himself had only seen four autopsies. The conditions described were not peculiar to chorea; much the same changes were found in trismus of new-born infants; and, on the other hand, there were cases of chorea in which such appearances have not been observed. He questioned whether chorea could be fairly considered as rheumatic independent of the cardiac disease, and he would rather connect the chorea with the endocarditis than with rheumatism. Rivière had drawn attention to the fact that whereas in Geneva rheumatism was frequent, chorea was rare. The very frequent association of endocarditis with rheumatism must be borne in mind. Occasionally, too, chorea is followed by rheumatism. Then, even in slight cases of chorea, there was sometimes long-continued mental enfeeblement long after the cessation of the choreic movements.—Dr. Hughlings Jackson said that although doubtless

Dr. Dickinson's able paper would draw away many from the view that embolism was the cause of chorea, he himself still maintained that view. In two cases he had found emboli in the small arteries, but it was right to add that he was aware of two other cases in which no such lesion was found. Dr. Bastian had found plugging of small arteries (which he attributes to thrombosis) in the corpus striatum in three cases. He thought that the pathology of chorea was still an open question, and was glad to find Dr. West expressed the same opinion. But there were many arguments in favour of embolism. Thus it is the very process which could cause that unstable or excitable condition of the nervous system present in the disease. There were constant nervous discharges, showing that the nervous tissue was intact, and even more active than in health. Now embolism, it is known, leads to a hyperæmia, so that more blood was supplied to the nerve-cells. Thus, "red softening" was due to embolism, and the appearances of red softening could be produced by the injection of tobacco seeds into the carotid, as had been done by Prevost and Cotard. This increased vascularity could be well seen in retinal embolism, so that the process of embolism would lead to changes similar to those described by Dr. Dickinson. Passing to the question of *fright*, Dr. Jackson said it must be considered as an exciting cause in a subject already predisposed. Surely the great frequency with which chorea was associated with rheumatism and endocarditis favoured the view of embolism, just as it would in a case of hemiplegia occurring in a young adult without loss of consciousness. Chorea in adults was frequently met with in pregnancy, a condition favourable to thrombosis. The clinical objection raised by Jaccoud and Anstie, that *left* hemichorea was more frequent than *right*, was not a serious one, since other observers had reversed this relative frequency. The prompt recovery from chorea had been advanced as against the embolic view; but did not patients with severe hemiplegia, depending on widespread lesion in the brain, often recover promptly and almost completely? This recovery he had before explained on the "principle of compensation," which had been recently invoked by Carville and Duret to explain the absence of paralysis after removal of certain motor centres in the brain, and Charcot had used the same explanation in a case of recovery from hemiplegia. The resemblance of hemichorea to hemiplegia was very great, both in the order in which the various parts were affected and in which they recovered, and there was defect in talking (aphasia) in right-sided chorea. That the face was affected first negatived the seat of origin being in the cord. He would, however, state a few of the facts that had been advanced in opposition to the views he held. Dogs are liable to chorea, and several independent observers have noticed that if the spinal cord be divided *above* the choreal limb of a dog the movements still persist. But it must be remembered that in the dog it was probable the centres of voluntary movement extended lower down than in man. The changes described by Dr. Dickinson were not inconsistent with the theory of embolism. In chorea the seat of the lesion was probably in the corpus striatum—the chosen spot for embolism.—Dr. Dickinson briefly replied, pointing out that there were certain spots both in the brain and cord which were specially and constantly affected; that the symmetrical distribution of these was a strong argument against the embolic view. He also affirmed that he had examined the vessels in a recent state, and had failed to find any minute emboli; and these, if present, should by reason of their minuteness be widely diffused. Further, chorea will occur independently of heart affection.

CLINICAL SOCIETY OF LONDON.

This Society met on the 8th inst., Sir W. Jenner, K.C.B., President, in the chair. At the commencement of the proceedings the President laid upon the table a copy of the Society's Transactions, vol. viii. The papers read were not productive of much discussion; they included a lucid description of a New Form of Iridectomy by Mr. B. Carter, the Notes of a Case of Idiopathic Tetanus by Dr. Southey, and contributions to Antiseptic Surgery from the hands of Mr. Callender and Mr. Pick.

The first paper read was by Mr. Brudenell Carter upon the "Operation of Iridectomy as performed for Optical Purposes." Mr. Carter said that he had brought several patients for exhibition to the members of the Society, in whom he had performed an operation for admitting light into the eye in cases of leucoma, central opacity of the lens, &c., where the ordinary operation, as performed for the relief of tension, is unsuitable, because of its leaving too large a gap, and thus admitting a superabundance of light to the retina, and also because of its leading to spherical aberration by uncovering the margin of the lens. Even when a very small portion of the iris is excised the artificial pupil is still too large for good vision. The principle, then, of the modified operation is to make an incision outside the corneal margin, and to incise the iris from within outwards, leaving the outer rim of the iris intact. In that way a **V**-shaped pupil is formed. At the International Ophthalmological Congress held in London in 1872, Mr. Bowman advocated a similar operation, which he performs by introducing a small knife, shaped like a spatula, sharpened on one edge, through a puncture made by a broad needle opposite the intended pupil; then, turning the edge forwards, he incises the pupillary edge of the iris, cutting against the cornea. A small incision into the posterior surface of the cornea might be made, but is unimportant; there is, however, great risk of cutting the capsule of the lens. Bowman's operation has been modified by M. Wecker, who calls it "iridotomy," in which he uses a pair of scissors furnished with forceps-handles and blades like Bowman's knife. Introducing the scissors into the anterior chamber as in Bowman's operation, M. Wecker passes the scissors across the pupil, then slightly opening them, so as to enclose the iris between the blades, the pupillary edge and circular fibres are divided, and the scissors withdrawn. But the risk of injury to the lens is greater in this operation than in Bowman's. Mr. Carter has, therefore, adopted a further modification, by which this risk is obviated. Using Wecker's scissors, he makes a small incision in the sclero-corneal junction as far back as possible, and *on the same side* as the intended pupil. The closed scissors are then introduced as far as the pupillary margin, and the iris rising up (as it always does in iridectomy) is caught, by a turn of the instrument, between the scissors-blades, and a very minute portion, of a triangular shape, excised. Mr. Carter stated that he had now performed the operation on thirty eyes (two single and fourteen double operations). To avoid injury to the lens, the ends of the scissors are directed towards the cornea. In one or two of the earlier cases there was slight tendency to prolapse of the iris; and at first he used fine iris-forceps to remove the excised portion, but latterly he has removed this with the scissors. The advantages of this operation consist in (1) a single instrument being used for the excision after the preliminary puncture; (2) the iris being incised *in situ*, and therefore not seized or bruised in any way; (3) there being no difficulty in regulating the breadth of the piece removed, and therefore the size of the new pupil. As an operation for the relief of tension it is valueless. The paper was illustrated by diagrams.—In answer to Mr. Norton, Mr. Carter said that the cases selected were not those necessarily with any retinal affection, but they were all severe cases.—Mr. Spencer Watson thought that there would be less disfigurement if the direction of the pupil passed upwards and inwards, and not downwards as in the diagram.—Sir W. Jenner pointed out that the object of the paper was rather to show the mode of operating than the situation of the pupil; a statement which was confirmed by Mr. Carter, who said that the pupil might be made in other situations if necessary.

Dr. Southey then read notes of a "Case of Idiopathic Tetanus." The patient, a railway ticket-collector, twenty years of age, began to suffer on June 16th with pains in limbs, stiffness in back, and inability to open the mouth. Two days previously he had got wet through. On the 17th he had an attack of opisthotonos, which recurred two or three times a day up to the 28th, when he was admitted into the hospital. He had been taking chloral and stimulants. He was a well-nourished, muscular man, and when admitted had a slight risus sardonicus; could only open the jaws by an eighth of an inch; the neck muscles were stiff, those of abdomen flaccid. He could not move arms nor legs, and had much aching pain in back and calves of legs. General hyperæsthesia. Mere exposure of surface to air provoked opisthotonic spasm. Temperature 100° F.; pulse 120. Was ordered calomel and opium, and a draught containing a drachm of bromide of potassium with ten grains of chloral, to be taken every three hours; no stimulants. There was constipation, a large amount of phosphates in urine, but no albuminuria. On the next day (29th) the temperature was 99·2°, and pulse 94. He had five attacks of opisthotonos between 3 P.M. and 8 P.M., each spasm lasting about five minutes, accompanied by profuse sweating. He was then prescribed two drachms of succus conii with half a drachm of the bromide every three hours, and his bowels were opened by enemata. The attacks remitted till 8 A.M. next day, when they recurred with violence, and were accompanied by much pain. On this day he was swathed in flannels and poppy fomentations, which were ill borne, and were replaced by a tepid bath every night. Improvement dated from July 2nd, and on the 8th he was quite recovered. Dr. Southey remarked that the opisthotonos was as severe as in traumatic tetanus. The decline of the disease was, like the invasion, gradual, the muscles of the neck, which were the first to be affected, being also the first to assume the normal state. The bowels first began to act on the remission of the symptoms, and this Dr. Southey thought was of importance, the return of peristalsis being regarded as one of the earliest evidences of the declension of the disease. When admitted the patient was restless and excited, evidently suffering from the effects of chloral and alcohol. He improved under the bromide and conium, and Dr. Southey referred to the action of the salt upon frogs, producing cutaneous anæsthesia. Wood records sixteen cases of tetanus treated by bromide of potassium, of which nine were traumatic and recovered; while of the seven idiopathic two only were fatal. The conium, too, is known to diminish or destroy the conducting power of the motor nerves, so that both drugs probably combined to restore the normal state.—Sir WM. JENNER pointed out that the date at which the drug was first commenced—viz., the twelfth day of the disease—was late, and near the termination of ordinary cases, which was stated by Dr. Southey to be fourteen days, although some cases were fatal in the third week. Sir William also pointed out that the quantity of succus conii given was small in comparison to the large doses used by Dr. J. Harley with impunity.—Dr. CAYLEY mentioned a case of severe spasmodic torticollis which had been recently under his care, in whom two ounces of the ordinary hospital preparation of the succus produced no effect; and to produce the full effects of the drug, two ounces given in increasing doses up to two ounces and a half of the succus specially prepared were requisite.—Dr. JULIAN EVANS stated that Ambrose Paré records a case of tetanus successfully treated by a warm bath, in which the patient was kept for fourteen days.—Dr. BURNEY YEO thought that the author had done scarcely sufficient justice to the value of purgatives, which might be of value in the same way as counter irritation was useful; and he recalled a case in which hypodermic injection of chloral was employed, with the result that the spasms were cured as the seats of injection suppurated and multiplied. The patient, a boy, had his body covered with scars.—Sir W. JENNER said that here, again, it was of the utmost importance to know the date at which the remedial measures began to take effect, as the apparent benefit following them might be really due to the natural course of the disease; and Dr. YEO said that he hoped to bring the case before the Society.—Dr. SOUTHEY, in reply, said that the temperature was never very high, which showed it to be a mild case. Although he had tried it with bromide of potassium, he would feel sceptical as to the efficacy of any single mode of treatment in every case. He certainly did not think purgation of value, and thought that the great object was to keep the skin from exposure to cold and external irritants; and if the bromide does indeed diminish the irritability of the spinal cord, the *rationale* of its use was manifest.

A short paper, communicated by Mr. CALLENDER, was then read by the Secretary. It was entitled "Experiences with Salicylic Acid." The author had tested the value of this antiseptic in many cases of surgical wounds and injury, and a variety of preparations had been employed, the most frequent of which was an aqueous solution (one in fifty) with phosphate of soda, a solution in olive oil (one in fifty), and an ointment. A preparation of the acid with mastic and spirits of wine was also used. A brief outline of seven cases was given. (1) Free incision for disease about the hip; wound washed out with salicylic acid in spirit, and on the eleventh day dressed with the ointment on Japanese paper. A vesicular eruption followed. (2) Caries of metatarsal bone of great toe; washed out with the acid. Caused considerable local irritation. (3) A wound which, dressed with the acid, took long in healing, and surrounding skin became seat of vesicular eruption. (4) Similar to (1), the effect of the acid being to produce some constitutional disturbance as well as local irritation. It was replaced by carbolised oil. (5) Excision of elbow; wound washed out and dressed with acid. (6) Lacerated wound of forearm; first treated with carbolic acid, and then with salicylic. (7) Operation for relief of neuralgia. These latter cases healed fairly well. Mr. Callender concludes that salicylic acid is of value because it is free from odour, because wounds heal under its influence and usually without local pain; but that it acts as an irritant and gives rise to constitutional disturbance when the solution used is over 2 per cent. in strength. It gives rise to more discharge than carbolic acid does, and repair of wounds is not so rapid under its use. It is then inferior to other antiseptic agents now employed.—Sir W. JENNER related the case of a lady who had an extensive burn, which was dressed with salicylic acid. Soon afterwards a scarlatinoid rash appeared, and faded on the dressing being left off, but returned when this was renewed. At the same time there was much constitutional disturbance. The acid was effectual in destroying the fetor.

Mr. PICK read notes of a "Case of Extensive Wound of the Knee-joint, treated antiseptically." The patient, a sawyer aged eighteen, wounded his left knee with a saw, dividing the patella longitudinally and grooving the end of the femur. The halves of the patella separated widely, exposing the joint. The wound was sponged out with carbolic acid, and, the edges being brought together with catgut suture, the wound was injected with carbolic lotion (1 in 40). Several layers of carbolised lac plaster were applied, and the limb supported in a cradle. There was some febrile reaction, and on the third day the dressings were renewed under the carbolic spray. There was little or hardly any discharge. There was effusion into the knee-joint, which subsided rapidly. Progress was slow, somewhat delayed by burrowing of pus behind the leg. The discharge was very free and copious, but always inodorous. The patient was discharged in July, 1872, about four months after the accident, anchylosis having taken place. He was seen in May of the present year; there was firm bony anchylosis. Mr. Pick remarked upon the usual statement that compound fracture of the patella offered no resource but amputation; but Mr. Poland had given a more encouraging opinion. Certainly in the present case the man was better off with a stiff joint than an artificial leg, and, besides, he had not run the risks of amputation, which were greater than those of conservation. Mr. Pick concluded by pointing out the value of Lister's antiseptic method in such cases, and expressed his full confidence in it.

The hour for adjournment having arrived, the discussion on the papers of Messrs. Callender and Pick was postponed until the next meeting.

THE MEDICAL SOCIETY OF LONDON.—The Fothergillian Gold Medal, value twenty guineas, is offered annually for a dissertation on some subject connected with Medical Science, for which the learned of all countries are invited to become candidates. The subject selected for competition in March, 1876, is on "Cataract and its Treatment"; for March, 1877, on "Pyæmia." Essays, which must be in the English or Latin language, and not in the handwriting of the author, must be delivered to the Registrar, at the Society's house, on or before Nov. 1st preceding. With the dissertation must be delivered a sealed packet, having a motto or device on the outside, and within the author's name and designation. The same motto or device must be inscribed on the dissertation. The successful essay becomes the property of the Society.

Reviews and Notices of Books.

Cyclopædia of the Practice of Medicine. By Dr. H. VON ZIEMSSEN. Vol. X: Diseases of the Female Sexual Organs. London: Sampson Low and Co.

THE physiology of the organs of generation in the female is still an obscure subject. From the time when the law of spontaneous discharge of ova was enunciated and established, and when the formation of the decidua vera from the mucous membrane of the uterus was proved by observation in histology, to within the last three or four years, little or no progress had been made in this branch of science. During the same period, the advances made in the pathology of the organs were few and small; indeed, with the exception of those made in our knowledge of the formation of ovarian cysts, they have been almost entirely limited to morbid histology. On the other hand, observations made at the bedside in the diseases of the sexual organs have multiplied rapidly. Workers have been numerous, and the number of facts gathered together under this head is very great, far in excess of the number of those in the corresponding branches of physiology and pathology. For this reason the views held on various subjects in connexion with the diseases peculiar to women are very different and even opposing, and this diversity of opinion will continue to prevail until further researches into the physiology and pathology of the organs shall have elucidated many points which are now the subject of mere conjecture. For the same reason it is not possible, in the present state of our knowledge, to give a full and systematic account of the disorders of the female organs of generation except from a clinical standpoint.

The work before us opens with a chapter on "Gynæcological Examination," which is one of the best written on the subject. The value of the various means of exploration are well given, especially that of the sound, the bimanual method, and examination through the rectum. The use of the sound has been properly limited, and accurately defined, and the bimanual method has had assigned to it the prominent place it demands.

Malformations of the vagina and of the uterus are treated of in a full and clear manner, and this part of the work leaves nothing to be desired.

Flexions are treated of briefly, though the author assigns to them a very important position in the disorders of the female organs of generation, for he goes the length of treating such displacements even when they present no symptoms. The etiology of anteflexion is summed up as follows:—"Anteflexion occurs in multiparæ as a congenital excess of a physiological state; it also occurs in women who have borne children when, in a normal or relaxed state of its tissues, the uterus is exposed to any great and repeated increase of the abdominal pressure." Reposition of the displaced uterus should be done by the hands alone, but should this be found impossible, the use of an "intra-uterine pessary" is recommended. This is a stem with a knob at one end. The stem introduced into the uterus converts the flexion into a version; the knob is then, in retroflexion, pushed back towards the sacrum so as to carry the fundus upwards. This is similar to Sims's method, with the exception that the hand is used as a handle. It has the further advantage in the hands of Schroeder, who favours the use of stems in the treatment of flexion, that the instrument used for reposition serves as a pessary; for, having reduced the malposition, he leaves the stem in the uterus, and maintains it there by pledgets of lint. He regards the above method as "very efficient," and "not particularly dangerous." At the same time he admits that a relatively small part of flexions can be so treated, but adds that the displacement, as such, in the majority of cases, does not admit of permanent cure.

Our author adopts Waldeyer's view of cancer, regarding it as an epithelial growth of local and not constitutional origin, the varieties of the neoplasm depending on the different proportions of epithelial and connective tissues entering into its composition. He points out the difficulty of recognising cancer in its earlier stages, as well as the fact that the disease is generally in an advanced condition—frequently ulcerated—before medical advice is sought; consequently that the period for attempting a radical cure has passed, as a rule, before the diagnosis is made. When, however, the affection is recognised in its earlier stages, an attempt should be made to remove it entirely. This should be done by the galvanic cautery or the wire écraseur, but never by the chain écraseur, inasmuch as the latter is liable to drag into its grasp too much of the neighbouring tissues, and thus lay open the peritoneum. When the above instruments are inapplicable, the sharp scoop should be used, after the manner of Simon. The knife and scissors should be avoided, as the patients cannot bear the loss of blood which accompanies operations performed by these instruments. After the removal of the growth the actual cautery or some caustic should be freely applied. Of the latter, Shroeder favours an alcoholic solution of bromine, which he believes has a specially destructive action on the "epithelial nests."

The views of Shroeder on hæmatocele are more or less known in England. He says: "True hæmatocele is produced by a free hæmorrhage into the cavity of the abdomen only when the blood is derived from some spot deeply situated, and when the hæmorrhage is slowly continued or repeated at intervals." The pathology of this affection, as well as that of many other uterine diseases, is still doubtful. We do not think there is any advantage in limiting the term in this manner, inasmuch as it expresses symptoms only, and not a disease. Besides, there are other conditions not included in the definition which give rise to similar symptoms, and clinically it is impossible to distinguish them.

The clinical part of the work is not so full as we would wish or expected. The pathological part is much more satisfactory. The author has throughout the work confined himself to stating his own views, not even hinting at the existence of others. In a work of such pretensions as Ziemssen's Dictionary of Medicine we cannot help regarding this as a very great drawback, for any work pretending to treat fully of the diseases peculiar to women must, in the present state of our knowledge, not only state the views held by the author, but discuss others; for, as we remarked above, diversity of opinion must, in the present state of pathology and physiology, prevail on many important matters in connexion with the diseases of the female generative organs, and the views of any particular author alone can represent the subject but very imperfectly. Further, the work lacks in details. We know that the success of a physician greatly depends on minutiæ; especially is this the case in operations and their after-treatment. In this work these helps to success are, in our opinion, passed over much too lightly. The treatise is written from a pathological standpoint, and the clinical part has consequently suffered.

The work of the translators has been, on the whole, well done. The greater part has been rendered into good and readable English. Some parts of it, however, are disfigured by too literal a rendering of the original, and by the introduction of newly and unnecessarily coined words, which, it is hoped, will not become current. We rise from the perusal of the work with a feeling that works recently issued from the English press still hold the highest position as treatises on the Diseases of Women.

The Student's Guide to Osteology. By W. W. Wagstaffe, B.A., F.R.C.S. London: J. and A. Churchill. 1875.

The appearance of this volume is most opportune, and it should be in the hands of every first-year's student. The study of osteology, being the first that is encountered by the medical student, is too often made wearisome and uninteresting by the dry and bare descriptions of the bones in many of our anatomical text-books. Mr. Wagstaffe has most successfully combated this tendency to degenerate into bare enumeration of the named parts of a bone, of their muscles, and so forth. The plan of the work is a model of systematic arrangement. At the head of each description are placed the French and German synonyms of the bone about to be described, and the description that follows deals in order with the situation of the bone, its shape, the enumeration of its various parts, its articulations, its development, mechanism, and structure, terminating with a summary of the chief points of importance to be remembered about the bone. Many practical details are introduced, while at the end of the work a section is devoted to "bony landmarks," a most valuable addition to the book. One of the most striking features consists in the section on the mechanism and structure of the bone under review, which certainly adds greatly to the interest of the description, aided as it is by well-executed diagrams. Selecting at random one of these descriptions, which may be taken as an example of what is to be found in other parts of the work, we find under the Tibia the following account of its mechanism:—

"We observe, with regard to the tibia, that it has to support the weight of the body entirely, and hence is constructed mainly for strength. We notice that each end is pyramidal, the upper pyramid being inverted. Each of these is porous, while the intervening column is composed of a dense hard shell, and is prismatic in shape. The bone is curved for greater elasticity, and is moulded in a spiral form, which also adds to its power of resistance. The curve is seen at the junction of the middle and lower thirds, and it is here that the bone bends in rickets, and when the tie-rod or fibula is deficient, it is here that the tibia gives way. Diseases, also, such as nodes and necrosis, more often attack this than any other part of the bone."—p. 111.

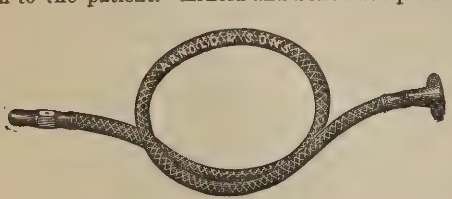
Then follows an account of the internal structure of the tibia, showing the arrangement of the fibres of the cancellous tissue in the ends of the bone. In his directions for "placing" a bone, we notice that although Mr. Wagstaffe generally gives directions as to holding the bone in its position in the body, he always refers to some part of the bone as pointing to or from the side to which it belongs. We are a little sceptical as to whether this is the best way of teaching here, although it is certainly shorter than the other method—namely, a recapitulation of three of the surfaces.

The illustrations are most numerous and exceedingly well done. Every bone is fully figured in the plates, with which the work abounds, and the attachments of muscles are marked by red lines—the origins by continuous, and the insertions by interrupted lines. We cordially recommend the book to all teachers and students, who will alike find it to be a valuable guide.

New Inventions.

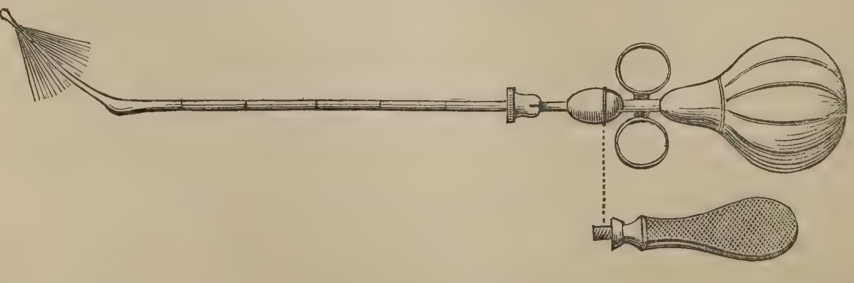
A FLEXIBLE CLINICAL STETHOSCOPE.

Every practitioner has occasion to feel often the need of a longer instrument than the ordinary stethoscope, and one which by its flexibility permits him to vary his position with relation to the patient. Arnold and Sons have produced a flexible stethoscope which meets this want. (See figure.) Its novelty consists not so much in its length and flexibleness as in its ear-piece, which is made of well-polished vulcanite, and is so shaped as to fit the meatus of the ear. Moreover, the ear-piece has a small perforation on one of its sides, which is intended to prevent the air from impinging unpleasantly upon the membrane of the tympanum when the chest-piece is moved or first applied. On commencing to listen the perforation is to be closed with the finger. We are not clear that the instrument conducts sound better than the ordinary stethoscope, but its utility in certain circumstances of frequent occurrence is obvious.



NEW COMBINED SOUND AND SYRINGE FOR UTERINE PURPOSES.

A combination of uterine sound and syringe is a desideratum which has been found in use most convenient. The instrument of which we give an engraving can be used as an ordinary uterine sound; but when, as in many cases, it is desirable to introduce fluids into the cavity of the uterus, the combination will be found extremely convenient, inasmuch as the douche can be effected without the necessity of removing the sound. The sound is hollow, and has a bulbous extremity to facilitate introduction; it is perforated diagonally, so that the fluid flows in the reverse direction and douches the entire extent of the uterine cavity. The instrument is very neatly constructed by Messrs. Salt and Son.



THE LANCET.

LONDON: SATURDAY, OCTOBER 16, 1875.

THERE is, perhaps, no question of practice or of theory that has received more consideration and attention alike from practical surgeons and medical theorists than that of antiseptic surgery; and there is certainly none that has received more varied or more conflicting answers. Almost everyone pretends to have given the subject a more or less full and careful consideration; but there are few who have entered upon the inquiry with a mind so perfectly free from bias that they could see things as they really were. It has been, and unfortunately still is, too common for those who undertake the investigation of the principles or the practice of so-called antiseptic surgery to assume at once, unconsciously it sometimes may be, the character of partisans. This person has faith in the theory on which the antiseptic system of dressing is based, and he ascribes all success to its adoption, and every failure he charges to the neglect of some detail; another may believe the theory, but fails to perceive any practical benefit from its application; others, again, while they are willing to concede that the practical advantages of the particular mode of dressing are great, reject the germ theory as not proven, and attribute the good results that are said to follow this mode of treatment to cleanliness or care, or, in fact, to anything but the special and peculiar nature of the dressings. There is yet another, and perhaps a larger, class of persons who, failing in the practice, have not been careful to discuss the theory. Many of the most successful surgeons of the present day have, after a trial more or less prolonged of Mr. LISTER's plan, gradually given it up, and resorted to the older and well-established modes of practice on which experience has taught them that they may exclusively rely. How is it that the evidence of the special value of antiseptic surgery, which is, apparently, easily obtainable, is so conflicting? The answer is not far to seek. Mr. LISTER and his disciples are themselves to blame for much of the obscurity that overshadows this question, inasmuch as they have never yet openly and fairly met the challenges that have been thrown out to them to produce the statistical results of their practice for, say, five or six years past. From time to time isolated cases, or isolated sets of cases, very successful as far as they went, have been published in our columns and elsewhere; but a few cases here and there prove nothing, and may at any time be matched by similar cases equally successful in which the antiseptic mode of treatment had not been used. It has been very pertinently remarked that if the special merits of Mr. LISTER's plan were really as great as they are alleged to be, they should at the expiration of eight or ten years have declared themselves with overwhelming force and certainty. If the antiseptic system were really all that it is claimed to be, not the shadow of a doubt of its immense superiority over every other system should now exist. But the reverse is the case. Notwithstanding the very able papers on the recent improvement in the details of antiseptic surgery which Mr. LISTER lately published in our columns, followed as they were by the demonstrations at Edinburgh at the meetings of the British Medical Association, there is less antiseptic surgery practised in the metropolitan hospitals than ever there was. There are even rival systems, apparently equally successful, which are founded on principles quite at variance with those on which Mr. LISTER's method is based. Mr. LISTER does not exclude the air, but he attempts to exclude, or rather to destroy, all the organic particles which with his mental eye he sees darkening the air and infecting everything with rottenness and putrefaction. Dr. HUMPHRY, of Cambridge, on the other hand, has been very successful with his system of open treatment of wounds; and Professor SPENCE—Mr. LISTER's colleague at Edinburgh—has had most enviable results in spite of persistently rejecting the antiseptic plan of treatment. Mr. CALLENDER, of St. Bartholomew's Hospital, has obtained brilliant results by means of cleanliness alone. It is, therefore, nothing to the point that Mr. LISTER and his disciples should make sweeping statements respecting the general merits of their plan of treatment. To convince the profession as a body they must descend to particulars, and show by means of statistics what their average results are. Unless this be done, and the benefits of the system demonstrated in a manner altogether beyond dispute, it is useless to expect that medical practitioners, whether attached to hospitals or engaged in private practice, will discard the older and simpler modes of dressing wounds in order to adopt a plan that is extremely complicated, expensive, irksome, and laborious.

On the other hand, in estimating the value of a particular mode of practice, we should not be too exacting and reject all evidence that is not absolutely unequivocal. The general impressions of men who have had large opportunities for observation are worth something, and there are surgeons of eminence who have alleged that by means of Mr. LISTER's method they have obtained much better and more uniform results than they secured before they adopted it. Those who recently witnessed the demonstrations of Mr. LISTER and some of his colleagues could not have failed to be struck by the large number of serious cases that were doing well; but there were cases in the same wards that were doing as badly under the antiseptic treatment as they could be expected to do under any other plan of treatment. On the whole it may be doubted whether the average condition of the cases in the Edinburgh Infirmary at the time to which we refer was better than that of similar cases in many of the metropolitan hospitals. Oddly enough, there is at least one metropolitan hospital where one surgeon follows strictly and exclusively Mr. LISTER's plan and the other surgeons as persistently reject it. Here, one would think, there is some ground on which to stand and view impartially the merits of the two modes of practice. What is the result? After the experience of several years, not to put too fine a point on the matter, it is found that the success of the antiseptic system is certainly not greater than that of the ordinary methods, and it is stated to be actually less.

It is worthy of remark that the results obtained under the antiseptic system have progressively improved with every advance made in the mode of carrying out the details of the practice. The more thoroughly wounds are protected from the actual contact of carbolic acid, the more rapidly do they heal; and when we reflect on the serious imperfections of the early dressings compared with the minute refinements of the later methods, it is difficult to imagine how the results of that time could have been compared with those obtained by the ordinary means. Yet even those early attempts at antiseptic dressings were lauded as triumphs of modern surgery.

There is, however, another important department of practical surgery in which the antiseptic system is said to exercise a considerable influence. Mr. LISTER and his disciples allege that by regularly carrying out the principles of antiseptic surgery, pyæmia, erysipelas, and all the evils of hospitalism may be reduced to a minimum, if not altogether prevented. Testimony in confirmation of this statement has not been wanting either in this country or on the Continent. But even here the opinion of surgeons is not unanimous. THIERSCH, who is an ardent advocate of antiseptic surgery, has stated that, according to his experience, the frequency of erysipelas is not diminished by the employment of carbolic-acid dressings, and the same observer has now almost entirely discarded carbolic acid for the new antiseptic, salicylic acid, recently discovered by Professor KOLBE.

Until Mr. LISTER and his disciples can prove that the results of the antiseptic system are sufficient to compensate for the extra expenditure of money, time, and labour, it is certain that the minute details of antiseptic surgery will only be practised by enthusiasts who have time enough to devote to them. Whereas, if it can be demonstrated that the antiseptic system is immeasurably superior to the other modes of treatment, it will be the bounden duty of every conscientious medical practitioner to give it at least a fair trial. At a future time we shall consider some of the more recent developments of antiseptic surgery.

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THE examination in the University of Cambridge last week, in so much of State Medicine as is comprised in the functions of officers of health, leads us to consider the degree of recognition which has been accorded to the great branch of Medicine which contemplates the prevention and obviation of disease rather than its cure. The University of Cambridge is entitled to much praise for the earnestness and liberality with which it has instituted this examination. Other universities have made arrangements for granting qualifications in State Medicine. But the arrangements are conceived in a less liberal and practical spirit than is displayed by the University of Cambridge. The University of Edinburgh has established a science degree in the Department of Public Health; but the candidates for it must be graduates in Medicine of a British university, or of such foreign or colonial universities as may be recognised by the University Court. Candidates who have not passed an *annus medicus* in the University of Edinburgh must, before presenting themselves for examination, have attended as matriculated students in the University at least two courses of instruction bearing on the subjects of examination. The University of Dublin has instituted a qualification in State Medicine; but candidates must be graduates of one of three favoured Universities—to wit, Dublin, Oxford, or Cambridge. The Universities of Oxford and Cambridge only give their certificates in Sanitary Medicine to their own graduates. In a larger and more liberal spirit than these excluding conditions imply, the Cambridge University has established an examination to which all registered medical men who have attained the age of twenty-four are admissible. It is gratifying to find that such liberal conditions seem to be appreciated, and that no less than twenty-eight candidates responded to the offer of the University; of these, twenty-six actually presented themselves for examination, of whom eighteen held degrees from British universities, and eleven were medical officers of health. The candidates came from various parts of the empire, including Scotland, Jersey, and the principal provincial towns. At least two were connected with the Medical Department of the Army. When we add that this number included several practitioners of acknowledged standing, of whom we may mention Dr. CARPENTER, of Croydon, we have said enough to show that the University is supplying a real want. The questions put to the candidates at this examination are before us, and seem to us to be thoroughly searching and practical. They contemplate fitness strictly for the duties of medical officers of health. They do not include such subjects as forensic medicine and the analysis of food, &c. Perhaps they do not embrace so much of the principles of physics and chemistry as the candidates were led to expect, but they cover the whole field of practical hygiene. Not the least valuable part of the ordeal to which candidates were subjected consisted in their being sent as Health Inspectors to different parts of the town entirely unknown to them, with instructions to make a Sanitary Report on them.

Speaking of the recognition of sanitary medicine, it occurs to us that there is one body which has not done what it might have been expected to do. We mean the Royal College of Physicians of London. Last year it got great and deserved honour for bringing under the notice of the Government, which may be said to have come in on sanitary principles, the lamentable condition of the houses of the poor, combining everything likely to depress and injure the health of the inmates. Nevertheless, in its recognition of sanitary medicine it has been rather backward. It has among its Fellows men of the highest rank in this branch of medical work—such as Dr. PARKES, Dr. GEO. BUCHANAN, and Dr. BALLARD,—to whom it might well entrust the duty of speaking in the name of the College. Year after year passes by, and the duty of delivering the stated courses of lectures in the College is assigned to various Fellows. But hitherto the Fellows who devote themselves to sanitary medicine have been overlooked. Probably this has been quite undesigned on the part of the College authorities. We submit that they could not do better in appointing lecturers than to select one or other of their Fellows who would speak with authority on the subject of State Medicine. Such an appointment would be as beneficial to the public as it would be creditable to the College. There is still a lamentable jealousy of medical men in State departments, notwithstanding the constant demonstration of the evils which accrue to communities from neglect of the simplest truths in sanitary science. The very Acts of Parliament passed in stinted admission of those truths are rendered comparatively useless by the reluctant way in which medical advice is taken as to their application. Meanwhile epidemics stalk unchecked through the land. Last week over a hundred deaths occurred in London from scarlatina. Under such circumstances, the College of Physicians should give its most honoured chair to one of those Fellows who could speak to the profession and the public authoritatively on the preventable causes of disease. Such a course may fairly be expected from a body which claims to represent British medicine, and it cannot be long deferred without suggesting the criticism that the College does not fully realise the drift and scope of modern medicine. The Apothecaries' Society, in this respect, is in advance of the more pretentious institution in Pall Mall. It invited a distinguished sanitarian to discourse on *State Medicine* within its walls. Let us hope that the College of Physicians will lose no time in doing likewise.

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THE Address delivered by Dr. RICHARDSON, as President of the Health Section of the Social Science Congress, on Monday last, is remarkable for the felicity with which he discourses on a trite but vital topic. With a view to epitomise and illustrate the main features of a sanitary ideal, the lecturer conceived and described an imaginary city so constructed and controlled as to secure the conditions most favourable to a low death-rate, an almost complete immunity from disease, and a state of social happiness approaching the highest degree of perfection compatible with the natural laws of human life. The treatment of this time- and word-worn theme was startling and suggestive. A population, numbering 100,000, was distributed in 20,000 houses over 4000 acres. Three wide main streets ran east and west. Beneath each was a subway, with railroad for heavy traffic. The cross and minor streets were wide and the houses low, so as to secure sunlight and general ventilation. Trees and shrubs were judiciously planted at the sides of the public ways. Gardens filled the interspaces between the backs of houses. Public buildings of all descriptions were isolated and surrounded by ornamental grounds. The streets were paved with wood set in asphalte—noiseless, cleanly, durable. No tramways were permitted, the underground railways sufficing for the traffic. The pavements were everywhere ten feet wide, and of white or light-grey stone; slightly inclined to the roadway, which was so inclined as to drain towards the margins of the pavements, but there were no "gutters." The surface was easily cleansed by washing the dirt into the subways, through side openings under the footpaths; and the model city had neither cellars nor kitchens underground. The houses were built of glazed bricks, so that no absorption of water took place, and ventilation was secured by transverse perforations. Fresh air, admitted at pleasure through openings in the outer walls, circulated freely through the tubular brickwork, being heated, when necessary, by passing around the fireplaces. Mouldy and poisonous wall-papers were entirely obviated by the decorative effect of the glazed bricks, coloured and arranged internally according to taste. The ceilings were turned with light arches of thin brickwork; the chimneys collected in central shafts, connected with a gas furnace to destroy the free carbon. The roofs, only very slightly arched, were covered with asphalte or flat tiles, protected with iron palisades and turned into flower gardens. The kitchens and offices were immediately under the roofs. On the second or middle storey of every house was a bath-room, properly provided. The bedrooms were the objects of special care—well lighted, spacious, and thoroughly ventilated, 1200 cubic feet of air being allowed for each sleeper, and all "unnecessary articles of furniture and of dress rigorously excluded; old clothes, old shoes, and other offensive articles of the same order never being permitted to have residence there." The houses were warmed by special air-chambers, behind the open fires—which were retained for the appearance of comfort. The sewers of houses ran along the floors of the subways, and were built of brick. They emptied into cross main sewers, and were trapped for each house. The waterclosets were situated in the middle and basement floors. A continuous water-supply rendered flushing easy and safe—that is, safe as regards the danger of poisoning the drinking-water. There were no public-houses in Dr. RICHARDSON's ideal city, the use of strong drink being unknown. The people had become total abstainers, and they did not smoke. "Pipe and glass," says the lecturer, "cigar and sherry-cobbler, like the Siamese twins, who could only live connected, have both died in our model city. Tobacco, by far the most innocent partner of the firm, lived, as it perhaps deserved to do, a little the longest; but it passed away, and the tobacconist's counter, like the dram counter, has disappeared." The habits generally of the resident population befit the commodious city in which they are so beneficently located. They carry on their industrial pursuits with cleanliness, and without noise or nuisance. The factories are either outside the town or perfectly innocuous. The slaughter-houses are a quarter of a mile from the city, and under minute supervision. The Jewish system of inspection has been adopted, with the improvement that the inspector is a man of science. Nor are the sufferings of the animals slaughtered disregarded; they are, in fact, entirely obviated. The victim is passed through a narcotic chamber, and becomes oblivious of his fate. The slaughter-houses are drained into the sewers, and purity and cleanliness rigorously enforced. Of course the water-supply is absolutely pure and filtered for drinking purposes. The dead are interred in a cemetery designed and conducted on scientific principles, with a view to ensure rapid decomposition.

The sanitary results likely to be achieved, by the application of science to the preservation of health and the removal of every preventable cause of disease, Dr. RICHARDSON conceives to be the extinction of infantile diseases, such as fevers, convulsions, diarrhœa, croup, marasmus, and dysentery. Typhus and typhoid fevers and cholera would be only accidental interlopers, instantly excluded; small-pox would be under control; diseases of low specific type would be unknown; those which commonly arise from cold and damp would be practically interdicted; deaths from privation and the evil consequences of drink would cease; parasitic maladies would be extinct; and, in a word, the larger and nearly all the *produced* maladies to which gregarious human nature is exposed would be eliminated from the catalogue of social sorrows. A mortality of only 8 per 1000 would be the highest in the first generation living under these sanitary conditions and a scientific *régime.* In this picture of the imagination Dr. RICHARDSON has blended together the principal reforms which experience has shown to be desirable, and added some of his own devising. The disuse of stimulants and tobacco, with which the dwellers in Hygeiopolis are credited, is a crotchet it would have been better to leave out of the calculation. It is not yet regarded as an indispensable factor in the sum of health, and its introduction rather weakens than intensifies the force of the lesson it is desired to teach. It is only fair to Dr. RICHARDSON to notice that he does not, as many of our contemporaries suppose, give to "abstinence" the importance of an integral part of his scheme. He simply states the fact, and expressly guards the supposition that it was enforced. We repeat, it would have been judicious to omit it altogether. There are also defects of detail in the sketch, doubtless due to the necessity of touching the main points only, and even those lightly. For example, the lecturer does not explain how the dirt of the streets is to be "washed away every day through side openings into the subways and *conveyed with the sewage* to a destination apart from the city," without incurring the danger of a frequent or continual escape of poisonous gases from the sewers. The "side openings" suggested must surely allow vapours and effluvia to pass out of the sewers if they admit of the dirt being swept or washed in. The sewers are trapped towards the houses, but they cannot be trapped effectually in the streets if the dust of the roadways and pavements is introduced daily. Again, it is disconcerting to find that, while Dr. RICHARDSON is careful to place the slaughter-houses a quarter of a mile outside Hygeiopolis, he allows them to "drain into the sewers of the city." The needless introduction of putrefying animal matters into the sewers of a populated district would scarcely be a measure of hygiene! It was inevitable that many points of lesser moment should be overlooked in a sketch of the nature indicated. Nevertheless, we believe the ideal will serve a useful purpose. The conception may be Utopian, but, as Dr. RICHARDSON observes, Utopia is only another word for time, and it is well to have an object or standard of excellence towards which to work. The outline—so far as it deals with principles of construction; with provisions for the supply of pure water, good and wholesome food, pure gas, and an uncontaminated atmosphere; with measures and appliances for the care and isolation of the sick, for the protection of linen and clothes in public laundries and workshops let out on hire, for the avoidance of nuisances, for the relief of distress without pauperising the poor or removing them from the class of bread-winners, and for the cure of some of the worst evils incident to life in crowded cities,—is a contribution of great value to the cause of sanitary reform. It gathers into focus the scattered rays of light which have from time to time been cast on a subject of vital and daily growing interest; and the eloquent address of which it forms the summary is one which eminently deserves the thoughtful perusal of all classes, and of none more earnestly than the profession whose highest glory consists in showing the world how to prevent—while itself labouring for the cure of—disease.

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OUR weekly contemporaries have something to say on the recent "Introductories." The *Saturday Review,* in a thoughtful article, indited in a spirit of fairness, discusses the general condition of medical education, and the opening addresses, with frankness and moderation. The conclusion reached is, on the whole, favourable to the prestige of the profession and its teachers, and satisfactory as regards the status of pupils, the opportunities of study and usefulness they enjoy, and their social and general prospects. The *Examiner* is neither so cordial nor so complimentary. It takes up the position of a candid friend, and, in the most friendly fashion possible, it contrives to offer some of the least agreeable remarks and criticisms we remember to have fallen from friend or foe. It confesses that "the professional tone of medical men has distinctly risen in our own time, and by dint of more stringent supervision the doors of the profession have been closed upon ignorance and quackery." Even more significant is the admission that "no professional credentials are more trustworthy than those of the young doctor. By the fact of his qualifications we can be more certainly assured of his possessing a minimum of capacity and knowledge than we can be in the case either of a clergyman or a lawyer." After so consolatory an observation, it is at once surprising and disheartening to be told that, whereas "nothing can be more meagre than the professional training of a clergyman or a lawyer, yet, regarded as a liberal profession, Medicine is notoriously inferior to the Church and the Bar." There is a weak point in our contemporary's argument, for he acknowledges that Medicine "has as its basis the whole region of physical science, with its magnificent discoveries and its inspiring methods." The sum of the matter is simply this: the profession is liberal; it has within it "the elements of a liberal education," but, confessedly, the indispensable need of preliminary education has not in times past been adequately recognised or enforced. We scarcely think the education of medical men is inferior to that of members of the clerical or legal professions. But we have no wish to seek excuse for our own shortcomings in the faults and failures of other professions with which the medical may be arbitrarily compared. We believe there has been an unnatural estrangement of Medicine from the older universities. As the *Examiner* puts it, "the old universities have grievously neglected their duty towards an important profession." Thus far we are with our censor; but he goes a length wholly unwarranted when he asserts that "the London medical system" is "a mistake." The system adopted at our medical schools may not be perfect. It would doubtless be better if it were more collegiate, and if the discipline and social training of a resident university could be combined with the special advantages of a technical school. But the concluding sentence of the *Examiner's* article is the bitterest of all: "Probably no profession or trade in the world makes so little use of its best opportunities." We are prepared to accept any reasonable amount of censure in a spirit of meekness and teachability; but this parting shot is a little wild. It is true we may be too much engaged with the practical aspect of our profsesion. The general tone of recent addresses, unfortunately, gives some colour to this remark; but Medicine has been lately engaged in a struggle for social and a political recognition which is not yet secured. When the absorbing questions raised by the creation of a system of State Medicine are settled, if anything more can be done to raise the status of the student seeking admission to the scientific profession of medicine, consistently with a due regard to the exigencies of the technical pursuit—such special requirements as are found to limit the choice of recruits for the scientific corps in all services,—our lay contemporaries may rest assured no pains will be spared to attain that object; for the end to be gained is not less dear to the profession than to its critics, friendly or supercilious.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF SURGEONS.

AT a special meeting of the Council of the Royal College of Surgeons, held on Wednesday last, Mr. Erichsen was elected a member of the Court of Examiners in the vacancy occasioned by the resignation of Mr. Henry Hancock, and Mr. Le Gros Clark and Mr. Savory were re-elected to the Court. This election, as we pointed out last week, is a triumph in several respects. It shows that the College has at last been roused to participate to some extent in the spirit and enterprise of the times. In the general satisfaction that will be felt at Mr. Erichsen's election to the Board of Examiners, it must not be forgotten that this election involves a principle of the first importance to the profession. Mr. Erichsen has accepted an examinership on the distinct understanding that the examiners in surgery and surgical pathology will henceforth be distinct and separate from those in anatomy and physiology. It may therefore be confidently expected that the alteration will at once be made. The arrangement has, we believe, already met with the approval of most of the examiners, some of whom will be heartily glad to be freed from the responsibility of examining in anatomy and surgery. It is for this that we have so long contended.

STRYCHNIA AS A "PICK-ME-UP."

BEFORE the Norwood case drops out of memory, it may be desirable to point the moral of the dismal tragedy. The use of strychnia (the active principle of nux vomica) as a restorative is, it is to be feared, by no means uncommon. It probably forms an ingredient in many of the mischievous compounds known as "pick-me-ups," and is taken and administered by unprofessional persons with a recklessness perfectly astonishing when it is remembered that the drug is one of the most potent and dangerous poisons in use as medicine. Harm has been done by the lay-reading of such passages as the following, which we quote from Pereira's "Materia Medica," a book, like all valuable works of its class, intended for the use of medical readers exclusively, but which, falling into unskilled hands, and being consulted, as many weak-minded persons consult a "Domestic Medicine"—much as they repair to a cookery-book,—may be infinitely harmful and perilous:—"I have seen nux vomica very serviceable in shaking or tremor of the muscles produced by habitual intoxication. A gentleman thus affected, who had for several weeks lost the power of writing, reacquired it under the use of this medicine." Acting upon a statement of this kind, chemists and laymen have dared to play with the drug, and the consequence has been a perpetual risk of misadventure like that which recently occurred at Norwood. There is not the slightest reason to suppose the poor inebriated fool who poisoned a woman the other day cherished a thought of committing murder. He simply played with a weapon he had not the power to use, and being more than commonly foolish on a particular occasion, poisoned the person he meant to cure. The lesson to be learnt from the incident is that the use of drugs by people not acquainted, first with their nature and properties, and then with the nature and functions of the organism it is designed to treat, is *always* perilous. The practice of handing about prescriptions and recommending medicines which have been found serviceable in a particular case to other persons *supposed* to be suffering from the same malady, but to whom the "valuable remedy" may prove so much poison, is fraught with extreme danger, and ought to be deprecated quite as strongly and generally as the not more childish practice of playing with fire. If the moral of the "Norwood mystery" is understood and appreciated, a calamitous episode may serve to illustrate, and perhaps put a stop to, a pernicious and reckless custom, which has often been denounced, but unhappily in vain.

ENCOURAGEMENT TO PUPILS.

THE art of administering encouragement, and offering a suitable incentive, to young gentlemen commencing the study of medicine, is not, it would seem, generally understood. Mr. Richard Davy, of Westminster Hospital, may claim to be the originator of a new system. It will require time to show how far the method is successful, but there can be no question as to its novel character, and unlikeness to the modes employed elsewhere. Mr. Davy cannot be accused of obtruding his discovery on public attention; on the contrary, he produced it under protest. The occasion was the delivery of an "Introductory" on the 1st inst., and Mr. Davy "disapproves *in toto* of introductory addresses." He conformed to the custom at the request of the Medical Committee of the school he adorns, but was quite sure "students and teachers would infinitely prefer one day's pheasant-shooting to hearing or giving an introductory." Looking to the sequel we cannot but commend the preference. "As a surgeon," Mr. Davy was considerate enough to promise he would "cut down this sermon from one hour to fifteen minutes," and he expressed a belief that his successor "might still further reduce the volume of these fruitless harangues." Mr. Davy is too modest. We should not be surprised to hear that his recent address at Westminster had borne fruit of a kind which the astute lecturer would much appreciate, and led to the abandonment of introductories at Westminster "*in toto.*" The general views entertained by Mr. Davy on the subject of medical education are interesting and remarkable. He does not attach much importance to "elaborate teaching." A "self-reliant young man," Mr. Davy thinks, will find "his own efforts suffice to pull him through." "University residence and discipline" are, in Mr. Davy's opinion, to be "strongly insisted on," because the training implied begets "a healthy tone and life-long friendships," and young men are saved from making the acquaintance of "some interestingly repulsive specimens of shark (*squalidæ*), known as London landladies." On these high grounds, Mr. Davy concludes that if he had to "repass" his time he would "commence a course of study by graduating as a Master of Arts at Oxford or Cambridge." He is convinced that "it is by no means waste of time so to do, and much inconvenience of preliminary examinations is got over." Mr. Davy is quite right. If every student of medicine would only commence his studies by becoming a Master of Arts, he would escape preliminary examinations; and if he got himself dubbed "Doctor of Medicine" before he began, he would find professional examinations also "got over," and generally avoid a world of "inconvenience." But why take this trouble to enter a profession which offers only the allurements Mr. Davy is able to hold out? "Hospital physicians and surgeons," says Mr. Davy, "are for the most part unpaid." This is really very extraordinary, considering that nearly all the appointments are purely honorary. Medical officers under the Poor Law and in the services are treated worse than they are paid, "and young practitioners are not paid at all." Probably this last circumstance may be explained upon the same hypothesis that accounts for the predicament in which young and briefless barristers are apt to find themselves. Mr. Davy personally has been fortunate. "For seven years' hard work at the St. Marylebone Dispensary" he "received one guinea." We regret that the lecturer did not explain how he became possessed of the coin in question. Was it for honorary work, or does it represent the balance of his receipts over his expenditure? Mr. Davy also, it seems, knows "a very distinguished London assistant-physician" whose "salary (!) equalled that earned by the man who put the skid on the 'bus wheels at Holborn-hill." Holborn-hill is not now extant, and we do not remember to have heard the salary of the man who put the skid on 'bus wheels there when the hill was still in existence. Nor have we any idea how much a very distinguished London assistant-physician usually receives as *salary*. It is too bad of Mr. Davy to excite curiosity on so many points and leave it unsatisfied. The picture Mr. Davy paints of his profession generally is so lugubrious that perhaps we ought not to be surprised at the terms in which his lecture closes. "In conclusion, let me firmly assure you that your prospects in life are most disheartening. Your toil and ambition may be equally great, but your pay and dignity will be equally small. You have to deal with an ignorant and proud people." The moral Mr. Davy deduces from this deplorable state of things is, that a young gentleman intending to enter the profession ought "to resign at once any and every thought of becoming a medical man unless he possessed three qualifications. First, independence; second, an aptitude for, and love of, the profession; third, the readiness to pay a heavy premium in this world for his prospects of reward in the next." The application of the insurance principle to the encouragement of young medical students is a stroke of genius in which the efforts of Mr. Richard Davy happily culminate. If the students at Westminster were not encouraged by this stirring address, possibly it will be wise not to repeat the effort for their improvement when the opportunity next comes round. We are of opinion that introductories may be made useful, but we doubt whether the course pursued at Westminster is the most promising.

MEDICAL OFFICERS OF HEALTH AND INFECTIOUS DISEASES.

At the close of a somewhat discursive discussion, following the reading of a paper in the Health Section at the recent Social Science Congress, a resolution was passed recommending that the Council of the Association should consider the desirability of securing by legislative enactment that all cases of infectious diseases should be reported to the local medical officer of health. This resolution simply calls attention to what is now felt by medical officers of health to be one of the principal drawbacks to their usefulness. Until they receive early intimation of all cases of infectious diseases, they certainly are in a great measure powerless to control the mortality from epidemics. The question, however, which has to be solved is, who is to be bound by legislative enactment to report these cases to the medical officer of health? The resolution above mentioned in its original form recommended that medical men attending cases of infectious disease should be made responsible for reporting them to the medical officer of health, but this proposition was strongly opposed and was subsequently withdrawn, on the ground that it would be unfair to the medical profession, at the same time that it would not secure the reporting of those numerous cases which are not attended by any medical man. In cases of infectious diseases among cattle, the owners are bound under penalty to report the fact to the police, and it certainly seems anomalous that precautions pronounced by Parliament to be necessary for the safety of our cattle are not enjoined for the protection of human life. It appears to us that the occupiers of a house in which a case of infectious disease occurs, and relatives residing with the patient, might fairly be made responsible for transmitting this important and necessary information to the local medical officer of health.

THE PRINCE OF WALES'S TOUR IN INDIA.

The Prince of Wales has started for his Indian tour, bearing away with him the best wishes of everyone in this country. Apart from sentiments of loyalty, which undoubtedly permeate all classes, and the political and social interests connected with one in his exalted position, the Prince of Wales exhibits many qualities and tastes which make him popular with Englishmen, because they share them. They can sympathise with his keen enjoyment of sport, his appreciation of the pleasures of change and travel, and they recognise a sense of spirit and broadmindedness in his desire to visit the vast and distant territories united together under British rule. It is natural that there should be a certain amount of solicitude as to the Prince's safety, and it is equally natural that a certain number of gloomy people should shake their heads, because gloomy persons are to be found everywhere, and they would have no *raison d'être* if they failed to perceive some cloud or other in every prospect. It is said, however, that life assurance offices do not altogether like the Prince of Wales's expedition to India. For our parts, we fail to perceive any adequate grounds for believing that the Prince will incur, as far as his health is concerned, any greater risks in visiting India than in remaining at home. The climate of India at the time the Prince will visit that country is as healthy as, if not healthier than, England, and we may be quite certain that those of his suite who are possessed of an intimate knowledge of that country and its diseases will neglect no precaution in guarding his health and in so shaping his journey as to avoid exposure to malarious localities and other places where any sources of danger may be apprehended. Dr. Fayrer, for example, in addition to the knowledge which he has derived from a long residence in India and an intimate practical acquaintance with the diseases incidental to a tropical climate, will unquestionably have at his command all the latest and most reliable information as to the sanitary condition of every portion of country included in the Prince's proposed route. We trust that neither matters of policy nor pleasure will tempt the Prince to prolong his visit, however, beyond what is considered the healthy season, but that his departure will be timed so as to avoid the risk and discomfort of the Red Sea in the homeward voyage.

Meanwhile, his Royal Highness was more fortunate in the weather he experienced in crossing the English Channel than those of his suite who preceded him on Saturday, for they had every opportunity of practically testing the effect and relative value of the alleged factors in causing sea-sickness. Whether the lateral rolling or the up-and-down pitching movement, in which the abdominal viscera fail to accommodate their position to the precipitate descent of the rest of the body with the pitching of the ship, or whether the combination of all these movements, be most efficacious in causing sea-sickness, they should now be able to determine, if any of those who happened to suffer in this respect had mental power enough left under the circumstances—which we much doubt—to analyse their sensations.

MEDICINE IN THE "DAILY TELEGRAPH."

PUBLIC OPINION on medical subjects is always largely influenced by the lay press, which often fulfils a useful office in interpreting to the outside world the steps which mark to us the advance of our sciences. But it is important that no over-hasty generalisation, fraught it may be with uncalculated danger, receives the stamp of current circulation by its adoption in columns which are regarded by their readers as an unimpeachable authority, and great care should be taken to encourage as far as possible a wiser tone of thought on many subjects than at present prevails. We regret to have observed some neglect of these precautions in the leading columns of one of our daily contemporaries. The tone of two recent articles on medical subjects in the *Telegraph* has been to encourage some serious errors. A notice not long ago, accepting as unquestionable the alleged success of the hypophosphites in the treatment of phthisis, placed a remedy of most doubtful value before the public in a very misleading manner, and encouraged, by its tone and statements, that demand for specific remedies which at the present day finds little encouragement in scientific facts. A similar encouragement to popular error is to be found in a still more recent article on the subject of anæsthetics, in which the writer, in the *Telegraph's* most florid style, calls for the discovery of a "perfect anodyne which, without peril or after evils, would give us absolute control of this Devil of pain." On the moral significance of the expression we do not comment, but would remark that neither past experience nor present analogy gives us any reason to suppose that any anæsthetic will be discovered the use of which will be devoid of risk. No known facts suggest the probability that we shall ever be able to throw at will the nervous system into such a condition as to be insensible to the strong stimulus to which it is naturally so keenly sensitive, except by exposure to influences which will entail danger of permanent injury. Neither by anodyne nor anæsthetic can suffering be abolished with perfect impunity, and, in proportion to the interference with nervous function is, and always will be, the risk of immediate or ultimate damage. Our contemporary would have done more wisely in pointing out this clear teaching than in encouraging hopes which past experience and present knowledge alike forbid.

THE MODERN PHYSIOLOGICAL SCHOOL.

DURING the late Medical Congress of Brussels, M. Marey gave a conference at a clubhouse, kindly accorded for the occasion, for the purpose of exhibiting the various mechanical contrivances with which he gives mathematical precision to physiological research. The Professor will certainly be instrumental in reviving, with improved machinery, the ancient school of iatro-mathematicians. As regards this revival, M. Marey observed that, until within a recent period, every investigator built up a physiology of his own, arbitrarily assigning certain functions to individual organs. Now, however, modern physiologists chiefly rely upon the aid afforded by exact methods and accurate apparatus borrowed from physics and mechanics.

The audience were much struck and interested by the experiments brought before them illustrating chronography—viz., the measurement of motion through time and space. The apparatus, which we cannot describe here (see *l'Union Méd.*, Oct. 9th, 1875), is self-registering. Then came ingeniously constructed myographs, pneumographs, and cardiographs. An instrument by which the rapidity of the circulation of the blood can be accurately determined was subsequently shown, as well as one intended to register temperatures. If medical men will add to this some method of accurately curing disease, there will hardly be anything left to invent. As to the ear, an important aid has just been proposed by Dr. Weber Liel. This physician showed, at the Congress of Gräz, a very cleverly contrived ear microscope, which, with the ordinary sunlight, not only shows the membrana tympani enlarged fifteen diameters, but the normal and pathological movements of its different sections. These latter phenomena are made manifest by connecting the membrane with an india-rubber tube and a box, in which organ-pipes have been adapted. The sounds of the latter will indicate the force of the movements. Advantage is also taken of the reflected light afforded by starch dropped on the membrane.

FUNERAL REFORM.

THERE is one very remarkable custom in this country which remains unaffected by the changes of time. It is our funerals. Connected with these there is a thriving class who manage to survive all attacks on their order—undertakers. So imperious and tyrannical is fashion that few people have the strength of mind and character to deviate one hair's breadth from the usual course in the matter of a funeral. There is no need to warn undertakers of the danger attaching to a condition "when all men shall speak well of you," for they are a long way from having attained that perilous position. Still, if people abuse, they are all compelled to use them. Poets, satirists, and novelists have depicted "the mockery of woe" of our modern funerals, and laid bare its cruel shams; but, somehow or other, the world is content to go on with practices which are revolting to common sense and opposed to Christian sentiment. There are a good many sensible people in the world who would gladly welcome the cremation, the "earth to earth," or any other system which would rid society of the very ugly, dismal, and expensive mockeries connected with funerals as they are conducted in this country. At the late Church Congress in the Potteries several influential members of the clergy and others discussed this subject of "funeral reform," and it is certainly time that something was practically done by way of abolishing a host of things which are a grievous burden to needy but respectable people, and a source of worry and annoyance to all. The reform must proceed from above downwards—from the upper, aristocratic, and educated classes, before it can reach the lower and less educated. To say nothing of the present system of funerals being opposed to the spirit of Christianity, and utterly unworthy of people professing to be sincere believers in its tenets, much of it is unmeaning. As the Rev. Dr. Collis urged, would any man of common sense explain what "was the use of mutes, except that in funerals, as in grammar, they invariably suggested the accompaniment of liquids. What was the use of pages, except that they suggested pages of the ledger which they would have to pay for? Why should the horses be made such guys of? What did particular plumes mean? Why were certain of these carried by a page on a triangular tray? Would anyone say why these funerals were so dismal?" The present ugly custom extends from the house to the grave, and back again. Scarves, streamers, weepers, hatbands and gloves, mutes and mourning coaches, are the concomitants of a funeral in the present day; and sometimes these are provided from a feeling of ostentation, sometimes out of a sense of respect and affectionate regard for the dead, and in order that the deceased shall have a funeral equivalent to his rank or position in society; and, very generally, because the survivors at such a time have not the strength of mind or moral courage to withstand the dictatorial suggestions of the undertaker. Medical men and clergymen have the opportunity of estimating the effects of all this in many instances in impoverishing the family at the very time, perhaps, when there is most need for economy. Then the practice of supplying refreshments at the house from which the funeral starts is, in the case of the upper classes, an unnecessary and unfeeling infliction on the household, and in the case of the lower it is sometimes even demoralising in its tendency. Who has not seen, too, the returning hearse pulled up before a public-house, whilst the men in sombre garments were refreshing the inner man? It is not unnatural, of course, but it is an unpleasant sight. What is wanted is that all who view these matters as we do should set the example of having funerals conducted with the utmost economy and simplicity consistent with decency.

ADDITIONAL REMUNERATION TO REGISTRARS OF BIRTHS AND DEATHS.

UNDER Section 31 of the Births and Deaths Registration Act, 1874, an additional remuneration was granted to registrars of births and deaths, which it is estimated will cost the country about £10,000 a year, and be equivalent to an annual gratuity of £4 10*s.* to each of the 2194 registrars who make as many as eighty entries of births and deaths during a year. There are, however, a considerable number of registrars in thinly populated parts of the country, whose districts, although of very large area, yield far less than eighty entries in a year. Section 29 of the original and principal Registration Act (6 and 7 William IV.) sanctioned the payment by the guardians out of the rates to the registrars of two shillings and sixpence for each of the entries of births and deaths made in every year; the remaining entries being paid for at the rate of one shilling an entry. By the recent Registration Act every registrar is entitled to half-a-crown for the first twenty entries made in each quarter, instead of for only the first twenty in each year. This, as we have stated, is in the majority of cases equal to a gratuity of £4 10*s.* per annum. In order, however, that this additional remuneration should not form a further charge upon the local rates, it is provided that the amount paid by the guardians to the registrars on this account may be repaid to them annually out of a Parliamentary grant for the purpose. This repayment will only, however, relate to three quarters of the year, as the extra payment for the first twenty entries in the first quarter of each year was by the original Act defrayed out of the rates.

SURFACE DRAINAGE.

THE medical officer of health at Beverley (Dr. Stephenson), in his latest report, draws attention prominently to a matter of widespread interest. Considerable portions of a district under his inspection he found "depending only on surface drainages, and, owing to the town system of drainage being insufficient, they cannot easily have their condition improved." The common results of this defect in a district are apparent when the rainfall becomes excessive: the drains overflow, and the water comes back into the houses, carrying with it the impurities lying on the surface and much of the foul matter which has entered the drain. Before the main-drainage system of the metropolis was commenced—in the old days when the Fleet Ditch, covered in and converted into a temporary sewer, did duty as a general waste conduit, it was calculated that regurgitation from the sewers to the drains, and from the latter to the house-conveniences, always happened after twenty minutes' continuous rain. Unfortunately, surface-drainage still exists, as the only system of sanitation in too many districts. All appliances and schemes aimed to purify districts labouring under this radical defect must prove abortive. In short, it is no use patching up a system so defective. Summary reconstruction under the new powers provided by the Public Health Act is the only remedy.

OUTBREAK OF ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

WE learn that in addition to the twenty cases of fever admitted into the Seamen's Hospital last week, there are seventeen cases in the sick ward on board the *Cornwall.* This makes the number of boys attacked with fever thirty-seven, the total number on board being about two hundred. We understand that an inquiry into the causes which led to the outbreak will be undertaken by the Port Sanitary Authority. The strongest suspicion attaches itself to the drinking-water; and a rigid inquiry will no doubt be instituted as to the means that had been taken to prevent this from becoming polluted with any chance specifically contaminated excretory matters. This outbreak furnishes another illustration how careful ship-captains and ship-owners ought to be with respect to the character of the water shipped on board their vessels. No water ought to be shipped unless it is taken from a source sanctioned by the Port Sanitary Authority, and all supplies taken from the river or from river-side wells ought to be prohibited entirely. We are pleased to be able to state that all the cases in the present outbreak are now progressing favourably towards recovery.

THE HARVEIAN SOCIETY.

THIS Society, following the example of the Medical Society, has just instituted a course of lectures to be delivered annually. The first of the Harveian lecturers is Dr. Sibson, who has chosen for his subject one which, it will be remembered, he took up in the Lumleian Lectures at the College of Physicians two years ago—viz., "On Bright's Disease and its Treatment, considered mainly in relation with arterial tension from blood-contamination." The lectures are appointed for December 2nd and 16th.

NEW PRETEXT FOR DELAY.

WE regret to find Liverpool in the van of obstructives opposing or delaying the application of the Artisans' Dwellings Act. It is with even greater concern we find the local press shifting the blame to the shoulders of the local medical officer. They allege that Dr. Trench has recommended the corporation not to demolish some buildings he has declared fit only to be demolished, *until* they have ascertained "how far capital is likely to be placed at their disposal for building up where they have pulled down!" This is nothing more or less than creating a new pretext for delay. We take it that a medical officer has nothing whatever to do with the financial question. The question whether the Government will be able to lend funds for the schemes it sanctions is not in any sense medical. We cannot believe a medical officer has hesitated to discharge his obvious duty to the cause of public health lest he should inconvenience the local corporation or the Local Government Board, or, perhaps, even the Treasury. The aspect of affairs in Liverpool and the tone of the local press are, however, bewildering, and require explanation. The laborious inactivity of Liverpool contrasts most unfavourably with the energy displayed by the authorities of Birmingham, as detailed by our own correspondent in another column.

THE NEWCASTLE GUARDIANS AND THE VACCINATION LAWS.

IT is gratifying to notice that the Newcastle Board of Guardians, though instigated to talk nonsense about liberty by a communication from the guardians of the Keighley Union, refused to pass the following resolution by a majority of sixteen to nine:—"In cases where persons refuse to have their children vaccinated on conscientious grounds, and when the persons so refusing have already been fined for the same offence, this Board directs that no further action should be taken against such persons." The liberty to have small-pox, and thereby to convey small-pox to others, is a liberty that we are better without. The mortality caused by small-pox among unvaccinated children is 50 per cent. By vaccination it is reduced to less than 7 per cent. The people of Newcastle are, we hope, too sensible to show opposition to a law that has so immensely saved life.

HEALTH OF MILE-END.

IT must be conceded that the metropolitan medical officers of health are carrying out their responsible functions under the Sanitary Acts with great tact and ability. The official reports compiled by these gentlemen, which we receive from time to time, contain ample evidence of assiduity, and of a careful surveillance over the health of their respective districts. The report of the sanitary condition of Mile-end for the year ending March, 1875, has just been issued by Dr. M. Corner. Like many of his colleagues, Dr. Corner has been hampered in his work by the difficulty created last year regarding the supply of district registrars' returns. The deprivation of these returns has hindered him from collating such complete statistical information as he would desire to embody in a health report. We trust this matter, which has for some time been the *bête noire* of vestries and their medical officers, will now be definitely arranged. The Registrar-General evidently cannot recede from the position he has taken up with regard to the subject. We find that the hamlet of Mile-end maintains its reputation for salubrity. A high birth-rate and a low mortality prevailed during the past year. No special manifestation of zymotic disease occurred in the period. There appears to be some amount of overcrowding in the district, which will doubtless soon be remedied by the application of the Artisans' Dwellings Act. The Adulteration Act is working satisfactorily. Of the numerous samples of food &c. examined during the year by Dr. Corner, very few were found to be adulterated.

THE ACADEMY OF MEDICINE.

A GOOD example has been set and material assistance rendered to the progress of scientific medicine in France by the legacies recently left to the Académie de Médecine by MM. Desportes and Demarquay. The former has left 30,000 francs, the interest of which is to supply an annual prize for the best memoir on a therapeutical subject to be chosen by the Académie. M. Demarquay has left to the Académie the sum of 100,000 francs towards the erection of a building for its use worthy of the position the Académie has obtained. In case the cost of erection of such a building is defrayed by the Government, the interest of the legacy is to be devoted to the establishment of an annual prize, the subject of which is to be decided by the Académie. M. Demarquay has also left a legacy to the "Association Générale de Médecine de France."

THE Royal National Lifeboat Institution has already this year been instrumental by its lifeboats and other means in saving 574 lives from shipwreck on the British coasts. There is little flourish of trumpets in the way this noble institution performs its work. Men are rescued every week from untimely ends through its comprehensive machinery, while the public shows very little acknowledgment of its efforts—indeed, takes small interest in its existence. At a meeting held last week, under the presidency of Mr. Chapman, an account of recent proceedings of the Society was given, when it appeared that sums amounting in all to £5220 had been given to the various lifeboat establishments. We are sorry to observe that the receipts look very small in comparison with this sum.

BY the munificence of Miss Clugston, an estate named Broomhill, with its noble mansion, situated at Kirkintilloch, has been purchased for £14,000, and was opened last week as a Hospital for Incurables. A large number of distinguished visitors were present at the inauguration, and amongst them the Earl of Shaftesbury, who uttered some weighty words on the need of such institutions and on some of the points which require to be observed for their successful management. In a subsequent speech the earl referred in highly laudatory terms to the energetic and praiseworthy efforts of the sanitary authorities of Glasgow, which had resulted in so conspicuous an improvement of their town.

DR. WHITMORE, medical officer of health for Marylebone, in a report just issued, expresses an opinion that the time has now arrived when the serious attention of the Government should be given to the consideration of such further amendments in our present Sanitary Acts as will provide for the compulsory isolation of all persons suffering from infectious diseases. A legal enactment for the separation of infected patients would without doubt be instrumental in diminishing disease, but the difficulties in the application of such a law must not be underrated; we fear it would take a long time to accustom the public to its operation.

AT the Social Science Congress, Dr. Fussell, medical officer of health for East Sussex, read a paper in the Health Section on "the best means for rendering English watering-places more efficient for obviating the dangers arising from the occasional introduction of infectious diseases, and for determining the annual rate of mortality in such districts." Dr. Fussell insists that it should be made punishable to remove a patient within six weeks from the commencement of a contagious disorder without a certificate from the practitioner in attendance or from the sanitary officer.

A MEETING of the Pharmaceutical Society was held last week, under the presidency of Mr. Hills, on the occasion of the commencement of a new session in the educational department. Professors Bentley, Redwood, and Attfield testified to the great progress made during the past summer in the subjects of Chemistry, Materia Medica, and Botany—branches of study over which these gentlemen most ably preside. Mr. Ekin, of Bath, in the course of the evening, delivered an excellent address, in which the functions of pharmacists were very clearly defined.

AT the Poor-law Conference, held at Southport, a resolution has been passed to the effect, that inasmuch as provision is made in connexion with all modern workhouses for chronic and harmless lunatics, with the sanction of the Local Government Board and under the supervision of the Commissioners in Lunacy, the Government grant of 4s. a head now paid in respect of pauper lunatics in asylums ought to be extended to such unions.

Dr. Griffith, medical officer of health for Sheffield, has issued his second annual report of the sanitary condition of the borough. The report is compiled with evident care, and contains some interesting information, statistical and otherwise. Scarlatina was fatally prevalent in the town last year, 671 deaths being registered from this cause alone, and there is reason to fear a continued increase of the disease. The number of deaths returned as uncertified seems very large—572. Infantile mortality reached a high figure, 2045 infants having died under one year of age out of a total return of 10,857 births. Dr. Griffith deplores the need of mortuaries and of accommodation for patients with infectious diseases in the town.

In London, last week, 1397 deaths were registered, including 21 from measles, 110 from scarlet fever, 15 from diphtheria, 47 from whooping-cough, 29 from different forms of fever, and 105 from diarrhœa. No death from small-pox was registered. Different forms of violence caused 39 deaths in the period. A death from chloroform while the patient was undergoing operation occurred at the Seamen's Hospital. The Asylum District Fever and Small-pox Hospitals at Homerton and Stockwell contained 314 patients on the 9th inst., of which number one only was a case of small-pox.

At a meeting of the Metropolitan Asylums Board, held last Saturday, under the presidency of Dr. Brewer, the report of the Select Committee of the House of Commons on the Hampstead Hospital question was read. Afterwards it was agreed to appoint a special committee of the Board to consider upon the best means of utilising the suggestion of the report, to the effect that administrative blocks should be erected on the vacant lands in possession of the managers.

The Queen has granted to Dr. William Cormick, who is actually employed beyond Her Majesty's dominions, in the medical service of the Shah of Persia, in which he holds the appointment of chief medical officer attached to the heir apparent to the throne of Persia, her royal licence and authority that he may accept and wear the insignia of the Second Class of the Order of the Lion and Sun, conferred upon him by his Majesty.

We understand from the *Jewish World* that there is great dread of an outbreak of cholera in Jerusalem. Preventive measures are actively pushed forward by the authorities of the city, and the physician attached to the Rothschild Hospital is circulating a pamphlet in which advice and instructions are given to the inhabitants. They are particularly exhorted to practise the virtue of cleanliness.

A child has been poisoned at Barnsley by taking Harrop's Soothing Syrup, which, on analysis by Mr. Palmer, of the firm of Worley & Co., Market-street, Manchester, was found to contain morphia! When will Government compel the publication of the composition of quack medicines, and appoint some responsible person to forbid the sale of such as are dangerous to life?

NEW STUDENTS.

The following is the latest return of the number of fresh students at the metropolitan medical schools this session. The returns give all the new entries at the schools, whether first-year's students or not:—St. Bartholomew's, 120; Guy's, 98; University College, 85; St. Thomas's, 74; St. George's, 46; Middlesex, 41; St. Mary's, 38; London, 33; Charing-cross, 32; Westminster, 11.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

SHREWSBURY.

The school at Shrewsbury was established in the reign of Edward the Sixth as a grammar school for the free education of the sons of the townsmen, the head master being permitted to receive boarders into his house who were to be maintained at their parents' charges. Shrewsbury, in spite of the comparative smallness of its numbers, has always held a prominent position among our chief public schools, and during the last forty years its career has been most brilliant. Shrewsbury men have repeatedly attained the distinction of Senior Classic at the University of Cambridge, and quite recently this honour has been obtained by them three years in succession; whilst since 1848 no less than twenty-one Porson Prizes at the same University have fallen to their share, and since 1868 they have carried off ten University (not College) scholarships. Such success is, we believe, unparalleled, and appears marvellous when we consider that the school rarely exceeds 170 in number, and that there are no entrance scholarships to attract boys of special promise to it.

The school buildings are situate in the town on a rising slope of ground overlooking the river on the west, and occupy about two acres and a half of ground. The school proper consists of a block of stone buildings, three storeys high, which contain the class-rooms, the library, and chapel. The houses belonging to the head and second master lay at right angles to the main buildings, forced back into a somewhat cramped position on the edge of the slope. At the entrance from the town is a small house containing studies. All the buildings are extremely old, and, with the exception of those having class-rooms, decidedly insufficient for the requirements of the school. In consequence of this cramped and crowded condition of the buildings containing the studies and dormitories, the governing body have determined to remove the institution to a more spacious and open site. It may be asked,—What use can any criticism of ours be now, as the school is to be removed? We reply, that the sanitary arrangements at Shrewsbury show what school authorities can do towards rendering their buildings healthy under the most disadvantageous circumstances; and a description of what has been done at Shrewsbury will serve as a useful example to those schools which still lag behind in matters of sanitary reform. It has been remarked that the health of the Shrewsbury students has been "inconsistently" good, considering the close and narrow quarters they have have had to live in; but this inconsistency is explained when an examination of the premises is made, and the care expended on minute sanitary details observed. Great credit is due to Dr. Kenedy (the late) and the Rev. Mr. Moss (the present head master), for their labours in this direction; and we also think that the school has benefited in having the advice and assistance of Sir James Paget, who is a member of the governing body.

The school at present numbers 175 boys, 115 of whom are boarders. The majority of the boarders reside with the head master in two houses, one house for juniors, the other for seniors; about 15 boys reside in the second master's house; all these buildings being on the school premises. Twenty-seven of the junior boys also board with the French master and one of the assistant masters at their private residences in the town. The remaining 33 boys live with their parents or friends in the town, going backwards and forwards to school once or twice a day. Our inquiry only extended to the houses occupied by the head and second masters actually situate on the school premises. The houses in question are, as we have said, extremely old, and look perhaps more dilapidated than they really are in consequence of the walls being nearly all panelled with wood, which successive generations of boys have hacked and hewed about. The staircases are narrow, the rooms small, and pushed as it were all together. Three-fourths of the boys have studies, about four boys to one room; they sleep in small dormitories, which contain from three to four beds as an average number. The rooms perhaps are not large enough in every case for the number of occupants, but every means has been adopted to secure efficient ventilation; and this has been more easily carried out than is usually the case, owing to the huge old-fashioned chimneys which abound throughout the building. In addition to the studies, the senior boys have two large common sitting-rooms, in which they usually prepare their work, though they are not limited to these or to the studies, for Mr. Moss has wisely permitted the boys to prepare their work in any part of the school premises, a privilege that the boys fully avail themselves of, and in this way the most is made of a very confined space. The class-rooms are situate in the main block of buildings, and are airy and light; if the seats were arranged across the room instead of with the backs to the windows it would be better, as by the present arrangement the shadow must be cast before the boy on to his book or paper at some time of the day; by the other arrangement the shadow would be thrown aside of him, either right or left, but clear of the book or paper. The hours at Shrewsbury are as follows:—Chapel at 7.45, breakfast at 9, school from 10 to 12, and on long-class days, Mondays, Wednesdays, and Fridays, from 3 to 5. Practically the long-class days are only two in number, one generally being taken as a holiday. We therefore get seventeen hours a week as the average work in school, to which must be added about twenty hours more as time expended in preparation of lessons. This gives six hours of work a day; the success of the Shrewsbury boys certainly cannot therefore be attributed to undue cramming or severe pressure put upon them. The junior boys go to bed at 9, the seniors at 10 o'clock. The last meal is supper, which is served at 9 o'clock, and consists of bread and cheese. Nothing is served out to the boys in the morning before breakfast, but Mr. Moss says the boys have always plenty of biscuit, which they are at liberty to eat at that time if they require it. The bathing arrangements in the house appear primitive, but they are efficient. Cold bathing is practised by many of the boys throughout the year, and they are particularly attached to the cold douche. During the summer months they bathe in the Severn, some distance above the outlet of the town drainage we are glad to say, and are taught swimming by an attendant; no boy is allowed to enter the water unless he is present. Boating is carried on to some extent by the boys, but none are allowed to row without first having learnt to swim. Three medical men are attached to the school; Dr. Andrews and Mr. A. G. Brookes attend at the head master's house, and Mr. J. R. Humphreys at the second master's. There is no regular medical supervision, and no certificate is required on a boy's entrance or return to school from the holidays. The head master says that as yet the necessity for such precaution has never been forced upon him, as during the eight years that he has had the management of the school there has been no outbreak of fever; he was disposed to think that the suggestion was a valuable one. The numbers being small, and the medical men constantly visiting the school, boys of weak and delicate constitution speedily come under observation, and so, though not in the degree that we should like to see, some sort of supervision is exercised.

Shrewsbury is one of the few schools that has a system of sewerage separate from that of the town. The school sewer is ventilated. Every waste-, sink-, and overflow-pipe, is disconnected from the sewer, is carefully trapped, and empties outside the building over a grating, which is again trapped before entering the sewer. The waterclosets in the house are all ventilated. The consequence is that the interior of the school-buildings, notwithstanding the way in which they are packed together, is perfectly sweet and fresh. The water used in the buildings is from two sources—that for the closet-cisterns is from the town water-supply; the drinking-water is obtained from a conduit near the school, the water of which is brought from springs at Kingsland, so that the drinking water is quite distinct from that used for the closets. The drinking-water is of excellent quality. We ought to say that the second master prefers the water from the Castle-well, and in his house this is used.

The governors, as yet, have not, for want of space, been able to provide a separate sanatorium for infectious cases. Whenever a case of scarlet fever has occurred it has been removed to a cottage in the neighbourhood, and hitherto the accommodation thus obtained has been sufficient. In the event, however, of an outbreak occurring it would be necessary to break up the school. A sick-room, however, is set apart for ordinary cases of illness in the master's house. All boys not in school have to report themselves at once to the doctor, so that in the event of any infectious illness appearing it can at once be isolated. There is no regular playground provided for the boys beyond a slip at the back of the school, on the slope of the hill, on which a fives court is built. Here also are a range of out-door privies and urinals. In one of these urinals we saw an arrangement worthy of general adoption. Instead of the perforated iron pipe, dribbling miserable little jets of water, there was a powerful water-tap turned on, the full stream of which effectually washed away the urine, and kept the place sweet and clean. As there is no regular playground attached to the school, the head master rents a field about half a mile away for the use of the boarders, and hitherto the rent has been defrayed by him, and not by the school.

The great drawback at Shrewsbury, therefore, is want of space, and the evil increases yearly as the school develops. It has been long felt that, as Shrewsbury has gained such a high reputation, some means should be adopted to extend its usefulness and place the school on a basis of permanent prosperity. For twelve years the question of removal to another site has been under discussion, and several attempts have been made to effect it, but have fallen through. Now, however, the governing body have secured from the Corporation a very eligible site at Kingsland, a suburb on the other side of the river Severn. This site embraces every advantage; it is quite separated from the town by the river, yet not too far off to hinder the attendance of the town boys—being, in reality, for many of them, not further than the present buildings. The situation is extremely beautiful, and comprises about twenty-seven acres of ground. It is situate at the top of a hill, at the foot of which winds the Severn, the opposite bank of which is fringed with a noble avenue of trees, which almost hides the town. The soil is dry (of red sandstone), and the natural drainage good. An independent water-supply for the school could be secured from the springs in the neighbourhood. A large brick building at present occupies the brow of the hill, and which for many years has been used as a workhouse. The general feeling of course is in favour of the removal of this edifice and the erection of a building more suitable to school purposes; but we fear the raising of new buildings is a question of money and not sentiment, and the governing body are not wealthy. We think perhaps it would be more prudent to utilise the present buildings till sufficient funds are forthcoming to build a really handsome school. We hope, however, the governing body will not be left unaided in their endeavours to erect a house worthy of the fame of the school. Both Shrewsbury and Shropshire owe much to their school, and liberal donations ought to be forthcoming to aid it on the present occasion.

ARMY MEDICAL SCHOOL.

The thirty-first session of the Army Medical School was opened on the 1st inst. with fifteen candidates for commissions in the medical department of the British Army, ten for H.M. India service, and seven for the Royal Navy. The opening lecture was delivered by Professor Longmore, C.B. The lecturer departed somewhat from the usual course on such occasions; instead of going again into the history of the Army Medical School, and explaining the purpose for which it was founded, Mr. Longmore, after a few words of cordial welcome to the new-comers, referred them for information on all matters relating to the constitution of the school, the instruction given in it, and the duties of candidates for commissions, to addresses delivered on previous like occasions, and to the opening address of Lord Herbert, to be found in the first volume of the Departmental Bluebook. The lecturer then entered on the subject selected for his address—viz., an historical account of amputation from the dawn of surgery to the present time. This important subject was treated in an interesting and exhaustive manner, showing the slow steps by which this commonly supposed simple operation was perfected from the rude and cruel proceedings of the early surgeons up to the bloodless amputations of the present time. As the lecture will be published in a complete form, we need not attempt to give an imperfect summary of it on the present occasion. The lecture was listened to with much interest, and the Professor was loudly applauded at its conclusion.

Correspondence.

"Audi alteram partem."

THE CAUSE OF SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—In a letter to *The Times* on the merits of the *Castalia*, Mr. Marshall suggests that sea-sickness is due to the pitching of the vessel rather than the rolling, and adds that he should like to see the experiment tried of rocking a person from side to side in a chair, and then up and down, and comparing the effects of the two processes. This experiment, in a modified form, was tried upon myself last year in one of the small Scotch steamboats, and completely corroborated the view I already held, which is the same as that of Mr. Marshall. In various other ways also the trial can be made.

Being myself a very bad sailor and having a very susceptible nervous system, I have for many years studied my feelings during the various movements of a steam-vessel, and have no doubt at what time the greatest distress is felt. Rolling has no effect; the upward movement is not unpleasant; but the downward sinking of the vessel produces a sudden horrible feeling of depression at the pit of the stomach, with a corresponding bewilderment of the brain. Some years ago, when on the Mediterranean, I one day thought myself brave enough to sit down to dinner; and I well remember how I fought against all the other movements of the boat until it descended into a trough of the sea, when the swallowing a piece of food became a perfect impossibility. But the proof I wish to mention occurred in the voyage to Skye when passing between two islands where there was a ground swell, and the vessel slightly pitched; at this time I experienced, in a modified degree, the feeling of sea-sickness, but shortly the boat turned and took its course parallel with the waves; a rocking movement ensued, and my disagreeable feeling immediately passed off. No better proof, however, of the immediate cause of the *mal de mer* can be shown than in the similar sensations produced in descending a lofty building by a lift—as, for example, the Albert Hall. I myself have experienced a feeling of faintness after coming down which I have not thrown off for an hour or two, and I have known of others who could sympathise with me. Yet another example of the same kind. I was in the habit at one time of frequently travelling along a line of railway where at one spot it was slightly elevated to cross a turnpike road. The descent on the other side must have been very slight, but I always experienced a nauseating sensation during the moment when the carriage went up and down.

All these facts would tend to show that the sensations which I have described are due to the sudden falling of the abdominal viscera and their want of due support by the muscular parietes during the act of falling. The explanation is for many reasons not wholly satisfactory, but it seems the best which can be offered. It tallies with the well-known fact of the intense depression which is frequently experienced by persons who are the subject of incarcerated hernia.

In sea-sickness it may be remarked how all the symptoms resemble what is seen in gastro-intestinal affections, how on a warm day the sufferer may become deathly pale, cold, and almost pulseless. It is well known that when the movements of the boat are but slight, the horizontal posture will insure immunity from sickness. Chloral appears to be a good remedy, but whether it acts by simply benumbing the nerves of the stomach or by reducing the susceptibility of the whole nervous system, I am uncertain, but I know that a passenger may take a dose of chloral at Dover, fall into a drowsy, half-conscious state, and find himself at Calais free from sickness. Any explanation of sea-sickness must allow for the different susceptibilities of individuals, and nothing can show better than this horrible malady the great range of temperaments amongst us. Many young persons are ill if they ride in a carriage with their backs to the horses. Has this ever been explained?

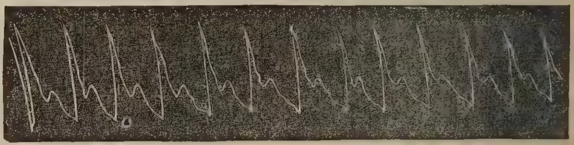
I am, Sir, your obedient servant,

Grosvenor-street, Oct. 1875. SAMUEL WILKS.

A STANDARD SPHYGMOGRAPHIC TRACING (CAPTAIN WEBB'S).

To the Editor of THE LANCET.

SIR,—As it is a matter of considerable interest to physiologists and other students of the sphygmograph to possess a tracing that may be referred to as the type of a healthy, vigorous man, I have taken the opportunity of obtaining that of Captain Webb. It will be seen that it is a magnificent example of perfect elasticity of the arteries and action of the heart. In connexion with Captain Webb's recent feat of strength and endurance, it is especially interesting to put this tracing on record.—Yours, &c.,



Weymouth-street, W. FANCOURT BARNES.

REGISTRATION OF DISEASE.

To the Editor of THE LANCET.

SIR,—I beg leave to call your attention to, and request your correction of, a typographical error of some importance which has crept into your otherwise accurate and favourable notice of my annual report on the health of Customs officers which appeared in THE LANCET of October 2nd, under the title of "Registration of Disease."

Therein it is stated that the mean daily number on the sick-list (30·7) was in the ratio of 6·4 per cent. on strength, and that the death-rate was 2 1 per cent. on strength. These proportions are erroneous, and far higher than have ever occurred in the force. The true ratio of sickness—*id est*, mean daily number incapacitated for duty—in the year 1874 was 3½ per cent., and the mortality-rate (including accidental deaths) was 1·3 per cent. These latter proportions vary but little from the annual average, which, deduced from the records of many years, shows a sick-rate of 3 per cent., and a mortality-rate of 1·2 per cent.; or, to use the more familiar ratio of comparison, 12 per 1000.

I have the honour to be, Sir, your most obedient servant,

Custom House, October 13th, 1875. WALTER DICKSON.

BIRMINGHAM.

(*From our own Correspondent.*)

ACTING on the recommendation of the medical officer of health, Dr. Alfred Hill, the Town Council to-day decided to avail themselves of the advantages offered by the Artisans' and Labourers' Dwellings Improvement Act. The unhealthy area, which Dr. Hill describes "as in such a state of dangerous dilapidation that it is unfit for human habitation," and "affording only receptacles for rubbish and filth, and constituting a danger of the gravest kind to the health and well-being of the whole town," is situate in the centre of the town, and contains the homes of 9000 persons. The scheme unanimously adopted by the Council, after two days' discussion, will involve the purchase of forty-five acres and a half of land, at an estimated cost of over half a million of money. The necessity for sanitary interference in this district is proved by the fact that in the ward which is mainly to be dealt with the mortality is 26·82 per 1000, or twice as great as that of Edgbaston ward (13·11), in which there are no factories, and in which the houses are mostly new and properly built and drained.

Another step which the Corporation have wisely adopted is to keep the public swimming baths open during the winter season. There can be no good reason why this great boon to the working classes should be restricted to the summer months. Then they can avail themselves of the pools and rivers in the neighbourhood of the town, but in the winter there is no chance for them to wash and be clean unless some such bath is open to them.

The deputy coroner has called attention to the alarming fact that from 150 to 200 infants are overlain in this town annually. Negligent mothers who disregard their infants must be dealt with more stringently than they are now, when the jury seem invariably to return a verdict of "found dead," and one or two prosecutions for manslaughter at the assizes would probably tend to diminish this growing crime.

The introductory lecture at Queen's College was given to a crowded audience of old and new students by the Warden, the Rev. W. H. Poulton, M.A., the chair being taken by Dr. Bell Fletcher. The lecturer called attention to the length of time many students wasted at the College and hospital without presenting themselves at any of the examining boards, and suggested as a remedy, that any student who presented himself for examination after the prescribed period of study should be subjected to a more stringent examination. He also inveighed against the tendency of the present day to multiply prizes out of all proportion to the perseverance expended in their acquisition, and against the practice of students holding assistantships during their first and second years at college.

The inaugural clinical address was given by Mr. Alfred Baker, at the General Hospital, on the 8th inst. It was full of sound practical advice to the students, to whom he commended the example of John Hunter, and was received most heartily by a large gathering of the old as well as of the rising members of the profession. The entry of students this year is said so far to be above the average.

Antiseptic dressings have been used recently at the General Hospital, and they have given some extremely successful results. In a case of empyema under Mr. Pemberton, where the chest was opened antiseptically and a drainage-tube run through it, the man has gained weight in a remarkable manner. Another good case is that of an epithelioma of the axilla and of the gluteal fold in a chimney-sweep. The former was in close relation to the axillary artery. There have also been two cases of dislocation of the foot inwards from the astragalus (one, which was compound, dressed antiseptically), and in neither was there any difficulty of reduction under ether, and both made a good recovery.

At the Queen's Hospital Mr. Jordan performed resection of the hip-joint on a young man who had long suffered from hip disease, which had produced partial anchylosis. The case is going on well. Colotomy has recently been performed for cancerous obstruction of the rectum by Mr. West, in a middle-aged man, with success. A melanotic tumour, as large as an orange, was removed on Saturday last from the axilla of a woman, aged forty, which had been growing twelve months.

Birmingham, October 12th, 1875.

MANCHESTER.

(*From an occasional Correspondent.*)

The Medical Department of the Owens College was opened for the session on October 4th, with the usual ebullition of physical approval, by an address from Professor Lund, published in your issue of last week.

During the recess, every opportunity has been taken to let a little more daylight into the fine dissecting-room of the new Medical School, which the experience of last session proved to be unpleasantly shady in the average Manchester daylight. A couple of projecting windows have been let into the roof, and, without impairing the architectural effect, will add much to the comfort of the students.

The new museum is nearly completed, as also the library, where the books of the Manchester Medical Society will shortly find another home. A reading-room will be added in time, and admission will be allowed, under certain restrictions, to the students attending classes.

The chief topic of interest to the profession for some time past is the decision of the Infirmary Board in favour of removal to Oxford-road, in close contiguity to the Owens College. A large piece of land, admirably suited to the purpose, has been secured, and a building containing probably double the present number of beds will be erected. A receiving-house for accidents and urgent cases will be established near the site of the present hospital. There have been many letters in the local papers, by no means entirely in favour of the proposed removal, but there can be little doubt that the plan pursued by the infirmary authorities will prove the best in the end.

One or two of the suburbs of Manchester have had rather severe forms of enteric fever and scarlatina.

The medical officers to the provident dispensaries have just decided to resign, almost *en masse.* Their experience of the present working arrangements, and the treatment received at the hands of the General Council (which does not contain any representatives of their body), have proved eminently unsatisfactory to the small band who have hitherto supported the scheme.

Manchester, October 12th, 1875.

PARIS.

(*From our own Correspondent.*)

THE APPROACHING WINTER SESSION OF THE PARIS SCHOOL OF MEDICINE.

In a few days the School of Medicine will open for its winter session. Before its opening, however, some important changes will have taken place in its teaching *personnel.* Thus, Professor Wurtz, the dean, has sent in his resignation. The school is without a dean, and has been so for some time, as the greatest difficulty is experienced in finding a new one. The *décanat*, or deanship, of the Paris Faculty is no sinecure. The dean must be rather popular with the students, and yet have sufficient authority and firmness to subdue the "manifestations" which they make every now and then. He must also be a good administrator, so as to keep the Faculty in business order, and look after its financial matters. It is said that this was the weak point of the last dean, who, possessed of every possible quality as a professor, a *savant*, and a gentleman, overlooked the business department of the school. Financial matters got muddled through the fault of subordinate officers, and the dean, disgusted with the results, sent in his resignation. He of course retains his chair of Chemistry, and the students will not be deprived of his brilliant lectures this winter.

Meanwhile, no one cares to take his succession as dean. There was a talk of Professor Gosselin accepting, but he has decidedly refused. Professor Depaul was also spoken of, but he has gone over to Brazil to accouche the Emperor's daughter-in-law. At present Professor Vulpian is most earnestly solicited to take the post, and will very likely end in accepting it, notwithstanding some reluctance.

Another important change in the Faculty will be the formal disappearance of the venerable and renowned Bouillaud from the teaching of the school. It is true that for the last few years he generally had some of the vice-professors of the school to lecture in his place at the Hôpital la Charité. Still his name figured in the programme and amongst the professors, with the lustre which it sheds. Now he definitely retires from the arduous scene of clinical work and teaching, though he is yet full of life and vigour, and his abilities are as bright and active as ever. But he has well won his laurels, and is at liberty to take his *otium cum dignitate* when he pleases.

His retirement from the clinical chair of La Charité will necessarily entail the appointment of a successor. As you know, it is the professors of the school who elect a new colleague whenever a vacancy occurs. They generally select their colleagues out of the body of vice-professors, or *agrégés*. They choose two names, which are presented to the Minister of Public Instruction for selection, and he invariably nominates the first on the list. On this occasion it is very likely that one of the professors of the school, Dr. Hardy, Professor of Internal Pathology, will be allowed to change his chair for the vacant one of Clinical Medicine; and one of the *agrégés*, very likely Dr. Jaccoud, will be elected to Dr. Hardy's chair. Dr. Hardy is the well-known teacher and writer on skin diseases, whose clinical lectures on dermatology at St. Louis have been as successful as his theoretical teaching on medicine at the Faculty.

WINTER PROGRAMME OF THE PARIS SCHOOL.

Whilst on this subject, no doubt a statement of the winter programme of the Faculty will be read with interest. The professor of anatomy, M. Sappey, will lecture on the principal systems and the principal regions of the body, whilst Professor Robin will lecture on histology and make a special study of each of the organic tissues and systems. The theoretical teaching of surgery is divided between MM. Dolbeau and Le Fort, the former of whom will lecture on general surgical pathology, and the latter on "the therapeutics of affections of the circulatory system," and "the operations performed in diseases of the eyes, the mouth, and the chest." In Medicine M. Duguet (Medical Pathology) will lecture "on diseases of the urino-genital organs in man and woman"; and Prof. Chauffard (General Pathology and Therapeutics) on "acute and chronic disease, their symptomatology and etiology." The Professor of the History of Medicine, M. Lorain, will lecture this year on "the historical aspects of some contagious diseases—small-pox, syphilis, &c." The sister sciences will include Prof. Gavarret's lectures on the physical phenomena of speaking and hearing, and Prof. Wurtz on the study of the blood and the chemical phenomena of respiration and nutrition. The practical teaching of the school is carried on in the hospitals, and includes Professors Béhier and Richet at the Hôtel Dieu; Gosselin and Sée at La Charité; Verneuil and Lasègue at La Pitié; Broca at the Hôpital des Cliniques; and Depaul in the lying-in wards of the same hospitals. Dr. Blachez will also deliver a series of supplementary lectures on pædiatrics at the Hôpital des Enfants.

DEATH OF MARBEAU, THE FOUNDER OF CRÉCHES.

A man of worth and usefulness, François Marbeau, the founder of *créches*, died yesterday. He was an assistant-mayor at one of the mairies of Paris, when, being appointed to visit some asylums, he had occasion to notice that a great many workwomen were obliged to give their babies in keeping, to pay sevenpence a day for the purpose, and to go twice a day to suckle their children in the asylums. The idea occurred to him of establishing homes under the direction of sisters of mercy, provided with medical attendance, cradles, and every possible comfort and *surveillance*, and where workwomen's children might be kept safely and fed during their labour hours. The first *créche* was founded in 1844, at Chaillot, and proved most successful. The number of *créches* in Paris is now thirty-four, and in the departments eighty.

François Marbeau from that time continued to devote his life to the success of the institution he had founded, and to other charities. His life was one of general usefulness, and he is universally regretted.

ILLEGAL PRACTICE OF MEDICINE IN FRANCE.

There is at present a general outcry in France against the amount of illegal practice of medicine, which is doing the greatest harm to the regular practitioners, and is gradually cutting down the number of medical men who will consent to practise in the country. Everybody seems to meddle more or less with medicine; but those who *sell* medical advice or drugs, to the prejudice of qualified medical men, and without being authorised in any way, are most culpable, and their number is legion here. The provincial special and general papers are very earnest on the subject. One of them, the *Decentralization*, a political paper of Lyons, cries out that it is high time to put a stop to the practice in the interest of the public. It quotes the fact of chemists opening abscesses and prescribing, religious congregations selling eye-salves, midwives applying plasters to strangulated umbilical hernia, a renowned individual purging consumptive sufferers to death with a quack medicine, and winds up with an authentic history of a somnambulist who charged three francs for the following advice to a rheumatic individual:—Take two live tenches and apply them to the calves of the legs; take some little onions and apply one of them between each two toes; and take some bitter drink to finish up the cure.

THE PARIS HOSPITALS AND CLINIQUES.

In addition to the official teaching mentioned above, I may state that the various private lecturers in the hospitals are also busy preparing for the forthcoming *rentrée*. Dr. Michel Peter will continue his series of brilliant and instructive lectures at the St. Antoine; Dr. Bucquoy is to lecture at Cochin; Fournier at Lourcine or the Lock Hospital, on the venereal diseases of women; Panas, on eyes, at Lariboisière; and Gallard, on women, at La Pitié. Dr. Isambert will also continue his lectures on the larynx and his practical demonstrations of the uses of the laryngoscope, which he inaugurated so successfully last winter.

Paris, October 12th, 1875.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 7th:—

Boswell, Alexander, Disraeli-road, Putney.
Johnstone, William, Seaforth, Liverpool.
Low, Frank Harrison, Aberdeen House, Blackheath.

The following gentlemen passed the Primary Professional Examination on the same day:—

Reeve, Henry, London Hospital.
Roberts, Henry William, Guy's Hospital.

THE subscriptions to the proposed memorial to Sir John Gray, M.P., have already reached £500.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—A meeting of the Council will be held on Friday (this day) for the purpose of considering what shall be the future policy of the Association, the action to be taken in support of the Maunsell Testimonial, and for general business.

ST. BARTHOLOMEW'S HOSPITAL.—The Abernethian Society, composed of the teachers and students of the hospital, holds its meetings in the reading-room, every Thursday evening during the winter session, for the reading and discussion of papers on subjects of medical science or practice, and for the exhibition of pathological specimens.

DUBLIN HOSPITAL SUNDAY.—At a late meeting of the Executive Council of the Dublin Hospital Sunday Fund communications were received from the secretaries of the Meath Hospital and the Convalescent Home, enclosing resolutions to the effect that the committees of those institutions desired that they should participate in the movement. The Meath Hospital was one of those institutions which heretofore refused to have any share in the funds collected, and we are glad to find that its governors have seen their mistake. The Adelaide Hospital, however, another of the objectors, still declines to have anything to do with the movement.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—At the annual meeting, held in July last, the following officers were elected for the ensuing year:—President: Dr. G. Buchanan. Vice-Presidents: Dr. Thos. Stevenson, Dr. G. Ross, Dr. F. T. Bond. Treasurer: J. Liddle, Esq. Secretaries: Dr. J. Northcote Vinen, Dr. W. H. Corfield. Council: Dr. J. Adams, Dr. C. O. Baylis, Dr. M. Corner, Dr. T. O. Dudfield, Dr. C. B. Fox, E. L. Jacob, Esq., Dr. P. Jones, Dr. H. G. Sutton, H. Leach, Esq., Dr. C. M. Tidy, Dr. J. T. Tripe, Dr. W. T. G. Woodforde.—The first meeting of the session will be held at the Scottish Corporation Hall, Crane-Court, Fleet-street, on Saturday, October 16th, at 7.30 P.M., when the president will deliver an inaugural address "On some Directions of Scientific Work by Medical Officers of Health."

West Kent Medico-Chirurgical Society.—The opening meeting of the twentieth session was held on Friday, Oct. 8th, at the Royal Kent Dispensary, Greenwich-road, Dr. John Anderson in the chair. The following members were elected officers for the session 1875-76:—President: Dr. J. N. Miller. Vice-Presidents: Dr. Thomas Creed and Mr. J. P. Purvis. Council: Drs. John Anderson, William Carr, Ralph Gooding, and Messrs. Hughes Cable, William Churton, Frederick Moon, and William Lockhart. Treasurer: Dr. Prior Purvis. Secretary: Mr. H. Knight Hitchcock. Librarian: Mr. J. B. Saundry. The next meeting will be held on Friday, Nov. 5th, at 8 P.M. precisely, when Dr. Braxton Hicks will read a paper.

Medical Appointments.

Baber, E. C., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the Atkinson-Morley Convalescent Hospital, Wimbledon, vice Owen, whose appointment has expired.

Barlow, C., M.R.C.S.E., has been appointed Medical Officer for the Sutton Coldfield District of the Aston Union, vice Smith, deceased.

Bernard, A., M.B., L.R.C.S.Ed., has been appointed an Honorary Medical Officer to the Liverpool North Dispensary, vice Walby, resigned.

Brown, Mr. F. W. (London Hospital), has been appointed Resident Clinical Assistant at the Hospital for Consumption and Diseases of the Chest, Brompton, vice Blakiston, whose appointment has expired.

Chambers, Eber, M.B., C.M., M.R.C.S.E., has been appointed House-Surgeon to the Chester General Infirmary.

Cooper, J. C., M.R.C.S.E., has been appointed House-Surgeon to the Midland Counties Hospital for Chronic and Incurable Diseases, Leamington.

Dale, G., M.B., C.M., has been appointed Medical Officer for the Patterdale District of the West Ward Union, Westmoreland.

Davidson, G., M.B., C.M., has been appointed Medical Officer to the West Pelton Lodge of the Durham Miners' Association.

Dyke, T. J., F.R.C.S.E., has been reappointed Medical Officer of Health for the Merthyr Tydfil Urban Sanitary District for six months.

Foulds, S., L.R.C.P.L., M.R.C.S.E., has been appointed an Hon. Medical Officer to the Chesterfield and North Derbyshire Hospital and Dispensary, vice Booth, resigned.

Glasier, C., M.B., C.M., has been appointed House-Surgeon and Secretary to the West Norfolk and Lynn Hospital, vice Reid, resigned.

Hall, F. de H., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to the Westminster Hospital, vice Sturges.

Hicks, C. C., M.D., M.R.C.S.E., has been appointed Medical Officer for the Upper District of the Leighton Buzzard Union, vice Bothwell, resigned.

Hunter, T., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer to the Teesdale Medical Union.

Imlach, F., M.D., M.R.C.S.E., has been appointed an Honorary Medical Officer to the Liverpool North Dispensary, vice Lewtas, resigned.

Jones, E. O., M.B., C.M., has been appointed Medical Officer and Public Vaccinator (temporarily till Christmas) for the No. 3 District of the Oswestry Incorporation of the Poor, vice Davies, deceased.

Keys, R. A., L.R.C.P.Ed., L.M., F.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Castlefin Dispensary District of the Strabane Union, Co. Tyrone, vice Smith, resigned.

King, T., M.D., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Rochford.

Le Quesne, E. J., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Metropolitan Free Hospital, Devonshire-square, vice Harvey, whose appointment has expired.

Long, H. P., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Eythorne District of the Eastry Union, Kent, vice Williams, resigned.

Mac Ewan, A. C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Visiting Surgeon to the Chester General Infirmary, vice Chambers, appointed House-Surgeon.

Parkinson, C. H. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the Wimborne and Cranborne Union, vice C. B. Parkinson, M.R.C.S.E., deceased.

Peele, E., L.K.Q.C.P.I., L.R.C.S.I., L.M., has been appointed Medical Officer for the No. 2 Division of the South City Dispensary, Dublin, vice Maunsell, deceased.

Powell, H. M., M.R.C.S.E., has been appointed Visiting Medical Officer to the Dispensary for Sick Children, Gartside-street, Manchester, vice Renshaw, resigned.

Roberts, A., M.R.C.S.E., has been appointed Medical Officer for the North Keighley District of the Keighley Union, vice Cockcroft, resigned.

Sturges, O., M.D., F.R.C.P.L., has been appointed a Physician to the Westminster Hospital, vice Sir G. D. Gibb, Bart., M.D., resigned.

Taylor, F. E., M.R.C.S.E., has been reappointed Medical Officer of Health for the Wells, Norfolk, Urban and Port Sanitary Districts.

Taylor, Mr. H. E., has been appointed a Resident Medical Officer to the General Infirmary, Leeds, vice Ellerton, whose appointment has expired.

Thomson, A., F.R.C.S.I., L.M. K.Q.C.P.I., has been appointed Assistant Medical Officer to the Barnwood House Hospital for the Insane, Gloucester, vice Pilcher, whose appointment has expired.

Wearing, R., M.B., C.M., has been appointed Assistant Resident House-Surgeon to the North Dispensary, Liverpool, vice Blake, resigned.

Wilkins, Mr. R. B. (Univ. Coll. Hosp.), has been appointed a Resident Clinical Assistant at the Hospital for Consumption and Diseases of the Chest, Brompton, vice Orr, whose appointment has expired.

Wilson, J. M., M.B., C.M., has been appointed Medical Officer of Health for the Rochdale Urban Sanitary District: £300 per annum, with all office requirements.

Wyke-Smith, W., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for No. 2 District of the Wimborne and Cranborne Union, and Medical Officer to the Workhouse, vice Chas. H. W. Parkinson, M.R.C.S.E., resigned.

Births, Marriages, and Deaths.

BIRTHS.

Bassett.—On the 7th inst., at Hockley-hill, Birmingham, the wife of John Bassett, M.D., of a son.

Bland.—On the 10th inst., at Park-green, Macclesfield, the wife of Geo. Bland, L.R.C.P.L., of a daughter.

Messer.—On the 7th inst., at Helensburgh, the wife of T. J. Fordyce Messer, M.D., of a daughter.

Moore.—On the 6th inst., at the Pembroke Royal Dockyard, the wife of Geo. Moore, M.D., Fleet-Surgeon R.N., of a daughter.

Skues.—On the 2nd inst., at Lonsdale-square, the wife of Dr. Skues, Staff Surgeon-Major, Malta, of a son.

MARRIAGES.

Curran—Fyson.—On the 7th inst., at Christ Church, London, Dr. Curran, of Lew Down, Devon (eldest surviving son of Thomas Curran, Esq., of Ennistimon, Co. Clare, Ireland), to Sarah, third daughter of the late Wm. Fyson, Esq., of Exning, Camb.

Thomson—Cose.—On the 6th inst., at Beechwood, Lochee, Wm. Thomson, M.D., of Peterborough, to Jessie Methven, only daughter of George Addison Cose, Esq., of Invertrossachs, Perthshire.

Woodman—Allen.—On the 9th inst., at St. Mark's, Torquay, John Woodman, F.R.C.S.E., of Exeter, to Catherine Louisa, daughter of the late Rev. John Allen.

DEATHS.

Bennett.—On the 4th inst., at Worksop, Edwin Bennett, M.R.C.S.E., aged 47.

Dunlop.—On the 6th inst., at Greenock, Dewar Dunlop, L.F.P. & S. Glas., aged 55.

Forsyth.—On the 6th inst., at Templeard, Culmore, Geo. Crompton Forsyth, M.B., aged 22.

Furnivall.—On the 2nd inst., at Egham, Edward T. Furnivall, M.R.C.S.E., aged 41.

Kay.—On the 1st inst., at Alverstoke, John Kay, Deputy Inspector-General of Hospitals and Fleets, aged 82.

Leeds.—On the 6th inst., at Castle-hill, Brenchley, Kent, Hannah, the wife of Edward Leeds, M.B., M.A., M.R.C.S.E., aged 34.

Manford.—On the 5th inst., at Ness Bank, Inverness, Robt. A. Manford, M.D., aged 66.

Matthews.—On the 7th inst., at Maida-vale, Robt. Hughes Matthews, M.R.C.S.E., aged 70.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Reports of Medical Officers.

Medical Officers of Health will greatly assist some inquiries we are prosecuting into the sanitary condition of the country, if they will forward to us copies of reports made or issued since the passing of the recent Acts of Parliament.

A New Medical Journal for Paris.

We have received the first number of the *Paris Médical*, a weekly journal to be devoted to practical medicine and surgery. It is edited by Prof. J. A. Fort, who, in explaining the aims and objects of his enterprise, says that it finds its *raison d'être* in the present neglect of therapeutical instruction from which the students of Paris are suffering—a neglect which has found its result in the recent official report addressed to the Minister of Public Instruction by the President of the late "Concours d'Agrégation en Chirurgie." In that report M. Ridet points out that, although the results of the recent examinations were such as to show very extensive pathological and clinical knowledge on the part of the candidates, as regards treatment and the indications for treatment, their knowledge was lamentably deficient. Dr. Fort proposes, then, to fill up this hiatus in medical education; and in his journal, which is to have none of its articles signed, in order that perfect freedom may be left to the writer and reader, he will draw attention to practical medicine and surgery. The first number is, however, too much occupied by the editor himself for us to judge of its merits, since not only does he contribute the aforesaid address, but he also devotes some pages to a description of the last edition of his General and Descriptive Anatomy, a course for which, however, he duly apologises. In spite of this, the aims of the journal are good, and we wish it success.

Surgeon-General Dr. Maclean is thanked for his courtesy.

Foot-and-Mouth Disease.

To the Editor of The Lancet.

Sir,—As this disease is very prevalent in Warwickshire, and as many cases of aphthous sore mouth and throat are now to be found (amongst the working classes especially), I should be very glad to have replies to two queries:—1st. Is foot-and-mouth disease seriously believed to be communicable to the human subject? 2nd. What are the safest tests of suspected milk during the continuance of the epizootic? Yours truly,

Coventry, Oct. 13th, 1875. A Subscriber.

"MADE GROUND."

A CONTEMPORARY recently called attention to the peril of placing new residential property upon a foundation consisting of "old cabbages, fish-bones, old shoes, &c.," to the depth of five feet. We fear the practice of "making ground" by levelling up with "rubbish" of every description is not only widespread, but almost universal. The custom, when a piece of land intended as the site for an "improvement" requires raising, is to let it to some contractor, who immediately sublets it to a nondescript tradesman, who emblazons the site with a placard, "Brown's Shoot," "Robinson's Tilt," or "Rubbish may be shot here." If possible a hoarding is put up round the land; in any case a barrier of some kind is erected, and the speculator either himself takes a toll from the carts which congregate to the spot, or places an old man or woman to perform that pecuniary service on his behalf. This method of procedure is so commonly adopted that it is even pursued in the case of pleasure-gardens. More than one square in a populous district of London has been recently "levelled-up" with decomposing matters collected by the open "shoot." A year or two hence, when the land has settled, and the surface soil has been washed down, a putrefying surface will be exposed, and perhaps an outbreak of fever in the row of houses overlooking this elegant garden—so healthful for the children to play in—will perplex the local practitioners. It is absurd to go to the expense of closing intra-urban graveyards and removing nuisances, by costly expenditure, if we create new beds of pest-breeding rubbish, and call them "made-ground." The remedy officially proposed is to cover up the evil with a layer of concrete. This may be the only practicable plan where the mischief is done; but the practice should be summarily interdicted.

"ABUSE OF MEDICAL CHARITY."

To the Editor of THE LANCET.

SIR,—I shall feel obliged by your inserting the following correspondence, in reference to my letter in THE LANCET of the 25th ult., in your next number.
I am, Sir, yours truly,
Cirencester, Oct. 11th, 1875. EDWARD CRIPPS.

Greenhill, Weymouth, Oct. 8th, 1875.

DEAR SIR,—In last week's LANCET I observe a letter from you, stating a patient of yours had come to the Sanatorium at Weymouth for advice gratis, and had since got her medicines at the druggist's from the prescription there given her, and that you were thereby deprived of your patient, &c. &c. I think it better to write to you rather than to THE LANCET, to disabuse your mind of any desire on the part of the medical officers of the Sanatorium to provide for anyone but those for whom the institution was established. Indeed, if a grievance be at all felt, I am sure you will agree with me that I have rather the right to complain of one in the position of your patient coming for advice gratis, depriving, if not robbing, me of one guinea; but even had she come to my house for advice, and paid my fee, she might still have taken the prescription to a chemist's, though I might, as is my custom, advise her to take it to her own medical man.

However, my chief object in writing you is to make you acquainted with the Sanatorium, which I have founded, and have had endowed, more especially as its portals are open to receive in-patients from all parts of the United Kingdom, and you may perchance have in your district some poor sufferer, for whom you would like to secure good nursing and sea air at a rate compatible with her circumstances—one, in fact, who could not afford to pay for lodgings, much less for medical attendance, and for such a one is the Sanatorium more especially founded; and if you know of any such to send, I need not say how much pleasure it will give me to treat them in the Sanatorium; or if you send a note with an out-patient unable to pay for advice, I shall be equally pleased to advise their course while here by their coming to the Institution twice a week, and will ask them to take the prescription to you on their return. You will better understand the nature of the Weymouth Sanatorium by seeing and reading the annual reports, and I have much pleasure in sending you those of last and previous years.

Believe me very faithfully yours,
Ed. Cripps, Esq. WM. J. SMITH.

Cirencester, Oct. 11th, 1875.

DEAR SIR,—I have received your letter, also the prospectuses, reports, &c., of the Weymouth Sanatorium. You will excuse me for saying, however, that all this is beside the question at issue. In my letter to THE LANCET I upheld the practice of your institution as typical of the abuse of medical charity. You reply, first, that my patient has deprived *you* of a fee by coming to your institution instead of consulting you privately, and that the practical result to me would be the same in either case; and secondly, that "I may perchance have in my district some poor sufferer for whom I should like to secure good nursing and sea air at a rate compatible with her circumstances, and who could not afford to pay for medical attendance."

To the first, I reply that whether you deprive yourself or me of a fee it matters not; you do an equal injustice to the profession in either case. And secondly, I admit that I have such poor sufferers in my district who cannot afford to pay for medical attendance, but that the patient in question is not such a one. The fact is, the case is so simple that there is not much to be said about it. A patient, perfectly well to do, and as well able to pay her way as you or I, is able, by the indiscriminate way in which your "portals" are thrown open, to obtain gratuitous advice and medicines, without any "recommendation," and without any questions being asked as to her circumstances. This, I say, is an abuse of the word charity, and does an injustice to the profession. Surely a little care and discrimination would easily enable you to become aware of the class of many of your out-patients. To show that I am not singular in my ideas on the subject, I could quote from a letter which I have received from one of the most respectable medical men in the county of Wilts, in which he speaks most strongly of the injury done by your instititution to the local medical men.

I am yours truly,
Dr. Smith. EDWARD CRIPPS.

P.S.—Although you say you prefer sending me a private note to answering my letter publicly, I feel that, as my first letter was published in THE LANCET, I ought to publish your letter and this reply.

POISONING BY GOAT'S MILK.

WE have received a pamphlet by Prof. Toscani, giving a minute description of this occurrence. It would appear that in a locality of Rome, called Borgo Nuovo, near the Piazza Pia, twenty persons belonging to seven distinct families were seized soon after partaking of goat's milk and bread early in the morning, either mixed with coffee or plain, with symptoms of prostration, irritation of bowels, cramps, convulsions, &c. The milk was obtained from only one goat-keeper. The latter, as is usual in the month of June, came every morning into Rome with a herd of twelve goats, taking his stand in the Piazza Pia to supply his customers. It should be noticed that such members of the seven families who did not partake of the milk remained in good health. Prof. Toscani, in his pamphlet, which is a reprint from the *Archivio di Medicina*, Nos. 7 and 8, 1875, gives full details of the symptoms presented by the patients, none of whom died from the accident, and states that the principal remedial means employed were oil of sweet almonds, large draughts of water containing magnesia and albumen, tamarinds, and ether in a few cases. By order of the authorities, careful investigations were made as to the health of the goats, the vessels into which the milk was drawn, the state of the cups used by the patients, and especially the plants which the goats had used for food, either in the residence of the herd or travelling along from the country into Rome. No positive clue was obtained; but it became probable that elaterium or colchicum was the principal factor in the accidents. Very minute quantities, however, must have reached the stomach of the sufferers, as the goats remained perfectly healthy.

INTRODUCTORIES AND GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—I think if previous lecturers at the "introductories" in October had drawn a picture so startling as that Mr. Davy drew in his recent lecture at the Westminster Hospital, many aspirants would be deterred from entering our overstocked profession, and reserve their brains and energy for a field where they would be more appreciated, at all events better *paid*. There is no doubt of the usefulness—nay, almost *necessity*—in these days, of being "independent" of the profession, if one would succeed in it; for the hard up-hill work, ever-raging competition, and miserably low fees of the general practitioner (and these latter often never forthcoming!) make it really a serious question whether our lecturers do right in painting the profession in such brilliant colours as they generally do at the "introductories," when it is, in reality, one where the prizes are few and blanks many.

Now, Sir, were it the custom for the general practitioner to receive his fee as promptly as the consulting physician or surgeon does, instead of waiting a year or longer, as he generally has to do, the state of things so many young *dependent* men (amongst whom I am thankful it is not my misfortune to be) complain of might be remedied, and they be better enabled to meet the demands made upon them. In some towns the general practitioner insists on cash payments from his poorer patients, and an old fellow-student of mine, thus fortunately located, tells me it is as popular with the patients as their doctors! Bad debts (alas! so numerous) are thus unknown, and the *dependent* practitioner knows what he may fairly rely upon. As it is now, to get a patient is one thing; but to obtain the fee quite another, very often. This credit necessity from the practitioner is what so often leads to his downfall, and it was only a few days ago that I heard of a surgeon leaving his house suddenly, many of his tradesmen being heavy losers thereby, while with the proposed *cash* payments he would likely have found no necessity to have done so.

Could not some change be effected before those now young become old? It must be unanimous, though.
Your obedient servant,
October 6th, 1875. M.R.C.P.

THE FREE UNIVERSITIES IN FRANCE.

SOME of these, by the incessant labour of the higher ecclesiastics, will enter upon their duties this autumn. Hitherto no faculty of medicine connected with these Universities has been attempted, as clinical instruction cannot be given as long as the Board of Hospitals in Paris keeps aloof. This Board is independent of the faculties, and to some extent of the Government. We hear, however, that at Lille the Board has consented, for a sum of £5600, to grant clinical instruction. The Faculty of Paris is, however, sounding the alarm; for the professors have induced the Minister of Public Instruction to appoint a Committee to report upon the improvements which might be introduced into the modes of clinical teaching and on other desirable changes. In the meanwhile a new branch of study has been annexed to the Paris Faculty of Medicine—viz., anthropology,—with a very efficient staff of professors. This is the work of M. Broca, the eminent anthropologist.

Mr. W. H. Williams.—The rule varies. A distinct understanding should be come to before completing the engagement. The privilege could not, we imagine, be claimed as a matter of right.

THE BODY OF THE LATE JEREMY BENTHAM.

To the Editor of THE LANCET.

SIR,—In THE LANCET of October 2nd a correspondent inquires as to where the body of the late Jeremy Bentham now lies, which is answered by "J. T." quite correctly in the last number of the same journal.

Allow me to supplement "J. T.'s" information by adding that a public demonstration of the muscles of the body was given by Mr. R. D. Grainger on the day following Dr. Southwood Smith's lecture, the dissection for the demonstration being made by myself and two or three of the other senior students of the Webb-street School of Anatomy. The head was desiccated under the receiver of an air-pump by the aid of strong sulphuric acid by Mr. Cooper, the Lecturer on Chemistry; and the skeleton put together by Mr. Appleton, Prosector of the School.

I am, Sir, yours truly,
St. Leonard's-on-Sea, Oct. 13th, 1875. THOMAS LLOYD, M.D.

HOSPITALS AND CHARITABLE ESTABLISHMENTS IN COLOMBIA.

A RECENTLY issued Consular report says that the Spaniards left in many parts of their South American colonies numerous establishments of this kind. They were all connected with the Church, and, in the majority of cases, possessed considerable revenues. Although a great number of these have disappeared, owing to repeated confiscations and the exigencies of frequent revolutions, some still exist. They are now supported by State aid increased by voluntary contributions. In Bogotá there is a fair provision of benevolent institutions, and many private individuals give up their time and labour to them gratuitously. Within the last four years a number of French Sisters of Charity have been introduced, who have done much good.

A. B. C.—Our Students' Number will supply the information required.

MAUNSELL MEMORIAL FUND.

THE following additional subscriptions have been received on behalf of the above:—

Amount already acknowledged £216 0 0

A. B., per Dr. Rogers ...	£1	1	0	Dr. James Little...	£1	1	0
Dr. Anderson, Newtown-Hamilton	0	5	0	Rev. T. Long, A.M.	1	0	0
Dr. F. Hastings Baxter, R.H.M.S., Phœnix Park .	2	0	0	Dr. F. B. M'Dowell, York-street	2	2	0
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Dr. J. G. Burne	1	1	0	Dr. M'Gusty, Slane	1	0	0
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Dr. Chaplin, Kildare... ...	1	1	0	Dr. MacMorran	0	10	0
Dr. Churchill, jun.	1	0	0	Dr. Murdoch, Sandymount	5	0	0
Dr. Corley	1	0	0	Dr. Nevill	0	10	0
Dr. Cronyn	1	1	0	Dr. Newland, Kingstown...	1	0	0
Wm. Coulter, Esq., London	1	1	0	Dr. O'Neill	0	10	0
Dr. Cryan	1	1	0	Dr. O'Rourke, Enniscorthy	1	1	0
Dr. Cullinan, Ennis	1	1	0	Dr. Petit, D. L. Asylum, Letterkenny	1	0	0
Dr. Dillon, Ennis	0	10	0	Dr. Peebles	1	1	0
Dr. Dorman...	0	10	0	Prof. Seaton Reid, Belfast .	1	1	0
Dr. Duffey	1	1	0	Dr. Jas. Ridley, Tullamore	1	0	0
W. H. Elliott, M.B., Coolock	1	1	0	The President, College of Physicians	2	2	0
Dr. C. Fitzgerald	1	1	0	The President, College of Surgeons	1	0	0
Dr. A. W. Foot	2	2	0	Dr. Rowan, Kilkee	0	10	0
Dr. Gordon	1	1	0	Dr. Shaw, Lurgan	1	1	0
Dr. Greene, Ennis	1	1	0	Dr. Smith, Sheffield	0	10	6
Dr. Hadden	0	10	6	Dr. W. G. Smith...	1	0	0
Mitchell Henry, Esq., M.P.	5	0	0	E. Smyth, Esq., Wesbridge House, Enniskillen ...	1	0	0
G. Hepburn, Esq., Clerk, S. D. Union	1	0	0	Dr. B. H. Spedding, Belfast	1	0	0
Rev. B. H. Johnson	2	2	0	Dr. Twiss, Killarney, per Dr. Rogers	1	1	0
Dr. G. Johnstone, Rotundo Hospital	1	0	0	Dr. Eben. Watson	1	0	0
Michael Kerrigan, Esq. ...	0	10	0	Michael Webb, Esq.... ...	0	10	0
Dr. F. Kirkpatrick	1	1	0	Dr. Whistler, Bray	1	0	0
J. R. Kirkpatrick, M.B. ...	1	1	0	Dr. Wolseley, Dunfanaghy .	1	1	0
Dr. Ledwich...	1	1	0				

Subscriptions will be received by Dr. Joseph Rogers, 33, Dean-street Soho, London.

CONVALESCENT HOMES.

To the Editor of THE LANCET.

SIR,—I have never had a desire to rush into print; but as a constant subscriber to your journal of nine years' standing, I feel that I have a right to defend a valuable institution, with which I am connected, from a wholly unmerited attack.

The young man to whom allusion is made by your correspondent is a poor clerk, who is delicate, and was at the time knocked up by work. Many hospital and private nurses, school teachers, scripture readers, City missionaries, and others, who have succumbed to their arduous duties, and would be ill if it were not for rest, are admitted in the course of the year, and surely no objection can be made to the reception of such cases. I believe, and I have had considerable opportunities of observing here and elsewhere, that the Home is less abused in this way than most other charitable institutions. It does not profess to be a hospital, and it is quite true that the male and female inmates do dine together under proper supervision. I think he must be a veritable "Simon Pure" who objects to this. Of course, publicity is the only means of correcting many abuses; but I fancy a little more experience would have led your correspondent to make further inquiries before attacking a useful charitable institution, especially when he learns that the deficiency in income has hitherto been made good out of the private purse of Mrs. Rusher, the founder and manager, and that many of the "rambles" consist of drives in the private carriage of the Rev. W. Hinde, Mrs. Rusher's brother-in-law, who gives his services as Secretary and resident Chaplain altogether gratuitously.

I have neither time nor inclination for further correspondence on the matter, and I remain, Yours obediently,

Quay House, Dover, Oct. 11th, 1875. THOS. W. COLBECK.

To the Editor of THE LANCET.

SIR,—If your correspondent, Mr. Morton, will look to last year's October number of *Good Words*, he will see that there is another side to Mrs. Rusher's Home than the one he describes in his letter.

Mrs. Rusher's Home is designed not only for convalescents, but for overworked, delicate *poor* people, to whom a "holiday at the seaside" is of great service. I venture to think that most medical men, on the principle that prevention is better than cure, will say what a capital institution this must be. Many of my poor parishioners and the young man in question have much to thank Mrs. Rusher for. No doubt, many London incumbents can say the same. Your obedient servant,

GEORGE H. W. BROMFIELD.

St. Mary's Vicarage, Lambeth, Oct. 8th, 1875.

THE SUBSULPHATE OF MERCURY.

THIS "turbith mineral," as it is called in France, is seldom prescribed in this country; but is highly lauded by Dr. Cadet in the *Corresp. Scient. di Roma*, No. 27, 1875, as a remedy against rabies. In the article on the subject, Dr. Cadet alludes to Dr. Edes, of South Carolina, who states that many "distinguished physicians considered the subsulphate of mercury a specific in cases of membranous croup." Italian physicians also use the same salt with much success in pertussis. In fact, the subsulphate is held by some of our brethren in Italy as being highly useful in cholera and the plague.

PURPURA HÆMORRHAGICA.

To the Editor of THE LANCET.

SIR,—The following case is, I think, of sufficient interest for insertion in THE LANCET.

Sarah P——, aged forty-seven, was brought down to death's door by free hæmorrhage at the same time from the tongue, gums, bladder, and bowels. From March 26th to April 6th, 1875, the hæmorrhage was very free from the gums

History.—March 26th, 1874.—Under my care for five weeks for left pneumonia, and had been well a week. The night before last I noticed a swelling, about the size of a pea, on the right edge of the tip of the tongue. She lost blood through the night and next day very freely. On my seeing her it was not bleeding, but had the appearance of a blue extravasation of blood in the substance of the tongue. Her mouth was full of decayed teeth and stumps, and on the left side the gums were bleeding very freely, and she was constantly expectorating florid blood. By her bedside was a basin, containing seven ounces of dark blood mixed with saliva, which she had expectorated during the night and morning. The blood keeps round the gums. She is pale and emaciated; very weak; pulse 100; appetite bad; bowels constipated and irregular; tongue large, moist, and fissured; purpuric spots all over the body, of every shape, most of them of a dark claret colour, some scarlet, and distinctly felt under the skin—they appeared after the swelling in the tongue. Five grains of gallic acid and fifteen minims of dilute sulphuric acid to be taken every four hours.

March 27th.—2.30 P.M.: The patient has taken four doses of the mixture. Gums have bled freely, and blood was still oozing at my visit; a great deal of blood in the urine; pain after micturition. Has taken mutton broth and port wine. Gums to be well rinsed with a lotion of liq. ferri (three drachms to three ounces of water); half-drachm doses of tincture of iron to be taken every two hours, and a draught of half-drachm dose of oil of turpentine. Motions dark-coloured.

28th.—Dr. M. saw her with me. No sleep. Every ten minutes during the night she spat out saliva and blood. Urine of a pale Condy's fluid colour; no sediment. Pulse 130; tongue and mouth coated black from the iron and gallic acid. Had taken two half-drachm doses of turpentine and three or four doses of the tincture of iron, and had rinsed the gums with the iron lotion. She had also taken a dose of ten grains of gallic acid and half a drachm of sulphuric acid every hour. Bowels open; motions dark in colour. To leave off the iron, and rinse the mouth with cold water.—7.30 P.M.: Messenger arrived to say that the hæmorrhage from the gums was still continuing, and that her urine was more high-coloured. To take a pill consisting of three grains of acetate of lead and one grain of opium every two hours, and two drachms of oil of turpentine every six hours.

29th.—2.30 P.M.: Urine the colour of dark claret; expectorated only a little blood from the gums. To take gallic acid, iron, and bark every two hours; to suck ice.

30th.—Bowels opened last night; motions black; passed about a pint of urine, of the colour of damson-juice; also passed a pint last night, very dark; tongue and teeth coated black, and here and there arterial oozing from the gums. Ordered bladder of ice to the hypogastric region. She has taken well of brandy, beef-tea, &c. A mixture of sulphate of iron and liquor ammoniæ.—Evening: Dr. M. saw her. Hæmorrhage from gums still going on; thick sediment of blood in the urine.

31st.—4 P.M.: Still expectorates saliva tinged with blood; passed only three ounces of urine to-day, of a bright scarlet colour, with a clot in it; bowels opened; motions very black. She took a pill of acetate of lead last night. On the left side of the tongue there is a swelling similar to that on the right side, but as large as a field bean, and full of black-looking blood. Pulse 130. Ordered two grains of quinine and five grains of alum every three hours.

April 1st.—Gums bleeding slightly; passed urine twice, still dark.

2nd.—11 A.M.: Passed about four ounces of urine, of a muddy lithatic colour, with a little red blood; frequent and difficult micturition; bowels opened twice; no blood; no uterine hæmorrhage; tongue cleared of its black coating; gums at a couple of spots oozing blood; spots still numerous, but fading.

3rd.—Expectoration from gums scanty; urine lithatic.

4th.—Very pallid; when in sitting posture very faint; slight oozing of blood from gums. To take bark and acid mixture.

5th.—8 P.M.: Very sick; expectorating a quantity of saliva slightly tinged with blood; passed about two hours ago two ounces of lithatic urine, no blood, but had also passed about four ounces of very dark-coloured urine; tongue clean; pulse 130.

7th.—No blood from gums or in urine; spots fading.

11th.—Going on favourably; spots dull on arms, brighter on chest. From this date the patient got quite well. Yours &c.,

Tenbury, October, 1875. F. H. THOMPSON, Surgeon.

ANTI-VACCINATION POSTAL CARDS.

To the Editor of THE LANCET.

SIR,—The announcement of the birth of one's child in *The Times* would seem to be attended by an infliction through the post of rather a formidable character, if my experience is similar to that of others. First came printed lists, with illustrations of various articles of baby linen; then arrived trade lists, with dozens of testimonials from medical men, of bottled stout, "particularly recommended by the faculty for nursing purposes"; thirdly, photographs from various parts of the country of the birth column of the "leading journal," containing the interesting notification itself, with a request for twelve stamps; fourthly, postal cards from the Anti-Vaccination League, full of what may be politely called errors, &c. &c. The last named I beg to enclose for your inspection, in order that you may know the means that are employed by the few misguided men composing that body for the dissemination of their pernicious crotchets amongst the ignorant.

Yours truly,

October, 1875. A MUCH-ENDURING PARENT.

Resolute Inaction.

The "Local Board" of Nantwich has formally and deliberately resolved not to move in the matter of sewage reform, because the cost of any change would be considerable, and the local nuisance is not great. Only a hundred houses discharge their sewage directly into the river Weaver, and the landowners (!) are not known to suffer any serious injury therefrom. The spectacle of a "Board" thus defying law and prudence would be amusing if the consequences were not likely to be mischievous. We shall hope to hear that some form of compulsion, more formidable than the injunction with which the Local Board of Nantwich has been playing for the last twelve months, has been discovered and applied with an earnestness equal to the obstruction.

"Public Conveniences."

To the Editor of The Lancet.

Sir,—I observe you have recently with just cause commented upon the general filthiness of public conveniences. Whilst the attention of the public is yet directed to this subject, I venture to suggest to you what would, in my opinion, be a further step in the right direction. It is generally felt as a great want the impossibility of discovering the whereabouts of a post-office or a urinal. In Edinburgh this want has been recognised by the authorities, and these places are now distinguished by *coloured lamps.* I trust that in the interest of the public you will, through the medium of your columns, urge upon the proper authorities the adoption of some such plan.

I am, Sir, your obedient servant,
Philpot-lane, City, Oct. 5th, 1875. William Beattie.

Insurance against Sickness.

To the Editor of The Lancet.

Sir,—It is strange that amongst all the Insurance Societies there is not one, so far as I can find, that issue "sickness policies." There are many Benefit Societies, but these are confined to the artisan and labouring class. The advantages of a Society of this nature to the members of the medical profession cannot be estimated, as, for instance, to younger medical men, who, like myself and many others, depend solely on their own exertions for their independence. The letter of Dr. Jas. O. M'Creery in your impression of last week leads me to hope that the subject will not be lost sight of.

I am, Sir, yours faithfully,
Clapham, Oct. 13th, 1875. J. De Burgh Griffith.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Prof. Humphry, Cambridge; Dr. Wilks, London; Mr. Holmes, London; Dr. Curnow, London; Surgeon-General Maclean; Mr. Wright, Liverpool; Dr. Gill, Clapham; Mr. Hudson, South Cave; Mr. Moore, London; Mr. Madden, London; Mr. Roberts, Keighley; Mr. Thompson, Tenbury; Mr. Smith, Dublin; Dr. Fort, Paris; Dr. Dougall, Glasgow; Mr. Ireland, Linton; Dr. Stainthorpe, Hexham; Mr. Lund, Manchester; Dr. Parsons, Dover; Mr. Williams, London; Dr. Peters, New York; Mr. Harrison, Liverpool; Dr. Bodine, Trenton, U.S.A.; Mr. Mulvany, R.N.; Dr. Dudfield, Kensington; Mr. Sewill, London; Mr. Brown, Dorchester; Mr. MacGregor, London; Mr. Collins, Dover; Dr. Lawrence, Bayswater; Dr. Adamson, Hetton-le-Hole; Mr. Rendle, London; Mr. Colbeck, Dover; Dr. Dickson, London; Mr. Bromfield, London; Mr. Loudon, London; Dr. Speedy, Dublin; Dr. Roper, London; Mr. Ingpen, London; Dr. Clark, Walsall; Mr. Moreton, Leamington; Mr. Skinner, Worksop; Dr. Griffiths, Rhyl; Dr. Lister, Ashton; Mr. Robinson, Folkestone; Mr. Hooper, London; Mr. Force, Exeter; Mr. Gray, Edinburgh; Dr. Fox, Brighton; Dr. Evans, Cardiff; Dr. Cole, Bath; Dr. Cripps, Cirencester; Mr. Irving, Huddersfield; Dr. Edis, London; Mr. Meadows, Bradford; Mr. Searle, Brixham; Mr. De Burgh Griffith, Clapham; The Secretary of the Medical Society of London; Culpho; S.; Rufus; Abyla; Registrar-General, Edinburgh; The Secretary of the Harveian Society; Surgeon, Thaxted; The Secretary of the Improved Industrial Dwellings Company; A. B., Dorrington; M. B., Glasgow; A. B., Leicester; The Secretary of the Pathological Society; A Subscriber; Mataro; Enbuirer; M.R.C.S.; Constant Reader; A Student; Beta; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Dr. Wollaston, Lyme Regis Mr. Pursey, Liverpool; Mr. Flint, London; Mr. Royds, Rochdale; Mr. Leeds, Brenchley; Mr. Brown, Stockton-on-Tees; Messrs. Hartill and Co., Willenhall; Mr. White, London; Mr. Hilliard, Birmingham; Mr. Jones, Pendelton; Dr. Nihill, Tulla; Mr. Whitbourne, Topsham; Mr. Buller, South Brent; Dr. Sloane, Leicester; Mr. Thorpe, Walsall; Mr. Allen, Ivy Bridge; Mr. Walters, Edinburgh; Mr. Tilsley, Burslem; Mr. Girdlestone, Andover; Mr. Drury, Harleston; Dr. Ramsay, London; Dr. Ginders, Normanton; Dr. Hodgson, Preston; Mr. Lloyd, Lambeth; Mr. Neill, Bangor; Messrs. Maclachlan and Co., Edinburgh; Mr. Buck, Leicester; A. Z., Amersham; Theta, Walsall; L. C. B., York; Medicus, Bath; L. M. N.; A. H. S., Eltham; Omega, Peterborough; M. D., London; Sentry, London; Medicus, Halifax; Alpha, Birmingham; Medicus, Ripley; B. B. J., Durham; W. T., Frome; A. B., Manchester; Principal, York; A. F.

Newcastle Chronicle, Cork Constitution, Western Morning News, Record, Local Government Chronicle, East London Observer, Metropolitan, Surrey Advertiser, Hackney and Kingsland Gazette, Huddersfield Chronicle, Sussex Daily News, Manchester Guardian, Birmingham Morning News, Leeds Mercury, Wrexham Guardian, Hull News, Liverpool Mercury, Dover Telegraph, Welshman, Colchester Mercury, and *Daily Bristol Times* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Oct. 14th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Oct. 8	30·21	S.W.	54	57	...	61	50	...	Cloudy
" 9	29·70	WNW	51	54	...	61	53	...	Hazy
" 10	29·96	S.W.	50	58	...	61	42	...	Overcast
" 11	29·30	W.	49	52	...	56	49	0·30	Overcast
" 12	29·37	W.	37	38	...	54	37	0·07	Foggy
" 13	29·20	S.E.	42	43	...	53	37	...	Foggy
" 14	29·29	N.	44	47	...	...	42	...	Overcast

Medical Diary for the ensuing Week.

Monday, Oct. 18.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Medical Society of London.—8 p.m. Opening Meeting of the Session.—Dr. Routh, "On Hyperpyrexia viewed especially in its Surgical Aspect." Dr. Thorowgood, "On a Case of Acute Pneumonia."

Tuesday, Oct. 19.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Pathological Society of London.—8½ p.m. The following Specimens will be exhibited:—Hydatid Cyst of the Liver which burst into the Lung; Fractured Bones of Gorilla; Rickets in Young Pheasants; Supra-renal Capsular Disease; Ulcer of Stomach; Calculi of Cystic Oxide; Epithelioma of Tongue and Jaw; Subarachnoid Hæmorrhage of Cord; Thrombosis of Internal Carotids; Uncommon form of Carcinoma of Breast; Tumour of Anterior Cerebral Artery, &c.; Carcinoma Lipomatosum of Kidney; Tubercle of Pancreas; &c. &c.

Wednesday, Oct. 20.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1¼ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Thursday, Oct. 21.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, Oct. 22.

St. George's Hospital.—Ophthalmic Operations, 1¼ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Clinical Society of London.—8½ p.m. — Adjourned Discussion on Mr. Callender's Case of "Treatment of Wounds with Salicylic Acid," and Mr. Pick's Case of "Treatment of Wound of Knee-joint with Carbolic Acid."—Mr. T. Holmes, "On a Case of Ligature of Femoral Artery with Carbolised Catgut." — Mr. Haward, "On a Case of Lymphadenoma."—Dr. Murchison, "On a Case of Acute Cancer of the Liver, with Pyrexia, in a Man aged twenty-four"; "On a Case of Abdominal (Hepatic?) Abscess without Elevation of Temperature"

Quekett Microscopical Club.—8 p.m.

Saturday, Oct. 23.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

TERMS FOR ADVERTISING IN THE LANCET.

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A Clinical Lecture
ON
THE PULSE: ITS DIAGNOSTIC, PROGNOSTIC, AND THERAPEUTIC INDICATIONS.

Being Lecture V. delivered at St. Mary's Hospital in the Summer Session of 1875,

BY W. H. BROADBENT, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

(*Concluded from p.* 550.)

FROM what I have previously said you will understand the signs by which we recognise a pulse of high tension. I will, however, once more briefly recapitulate them. But first let me describe the normal pulse. It is of course of average frequency, regular as to time and equable as to strength, and it will be compressible by moderate force, not shooting suddenly under the fingers nor lingering long on the touch. The artery ought not to be easily distinguishable in the intervals of pulsation; it should present no irregularities when the skin is rubbed along its course; and especially it should not roll under the fingers like a solid cord, or be traceable far up the forearm. The pulsations ought not to be visible, or at any rate not conspicuous. When there is high tension, the artery, usually rather small, but sometimes large, is hard and cord-like; it can be rolled under the finger, and is easily traced in its course up the forearm, where it feels like another tendon lying amidst those in front of the wrist. It reminds one, as I have often said when pointing out these features in the wards, of the vas deferens.

When the fingers are first lightly placed upon the vessel, the pulsation detected is inconsiderable, and such a pulse on superficial examination is often set down as weak, but let pressure be applied with a view to its extinction, and it is found to be compressible only on the employment of great force. The apparently weak and really slight pulsatile movement is due to the fact that the artery remains full during the diastole of the heart, and is not flattened by the degree of pressure ordinarily applied; not being flattened, the change of shape produced by the increased pressure of the systole is necessarily inconsiderable. The remaining feature of high arterial tension is that, in consequence of the resistance which has to be overcome by the heart, its contraction is prolonged. The expansion of the artery, therefore, is prolonged, and does not quickly leave the finger, making the pulse long. Briefly, then, the pulse is *small, long,* and *hard.* And this is the general character of the high-tension pulse met with, but there are important exceptions and qualifications which must be mentioned, though they cannot be fully considered here. For instance, the artery is sometimes large, very large; the pulse must then be called large, hard, and long, but the pulsation is not large and free for the reason given. Again, when the action of the heart is weak the pulse may appear to be short.

The condition of tension is often associated with tough and thickened arteries, especially in kidney disease, and is often mistaken for mere arterial degeneration; but it frequently occurs as a temporary condition in perfectly normal vessels. The conditions giving rise to high tension may be classified and enumerated as follows:—

1. Degeneration of vessels. Of this there are two kinds. In one the artery is usually large, but sometimes small when associated with a weak heart, and as the finger is run along it, it is found to be bulging at different points, and feels thickened. In the other form the vessel is calcareous, and feels like a string of beads; in this form the artery is not necessarily large. I do not think one is simply an advanced stage of the other.

2. Kidney disease; pregnancy.

3. Gout; suppressed gout, or retained nitrogenised waste; lead-poisoning.

4. Affections of the nervous system.

Besides these, there are various unclassified cases, in which I cannot assign a definite reason for the existence of high tension.

1. *Degeneration of the vessels.* — This frequently results from renal and gouty disease, and it is difficult to draw the line between the tension of these conditions and degeneration.

Arterial tension is produced by obstruction in the capillaries and arterioles to the passage of blood laden with excretory matters, nitrogenised waste, or imperfectly oxidised material present in kidney disease or gout. If this condition of tension be long continued, it matters not from what cause, it will damage the arterial system; it will produce hypertrophy of the heart; the constant strain will affect the aorta and produce endarteritis; it will show its effect on the arterioles by their thickening and the hypertrophy of the muscular coat, and ultimately by degeneration.

But arteriole degeneration may be otherwise induced; it cannot, at least, always be traced to tension, of which it becomes a cause. Whether as cause or consequence, we usually have to deal with degeneration in association with tension, and the recognition of degeneration must be effected partly by the state of the vessel, but also by other general considerations. When the artery feels like a string of beads under the skin, the case is clear; but in the form first mentioned, in which there is no calcareous change, with the indications of tension, and the large size of the vessel, the inequalities detected as the finger is carried along its length, a sensation of resistance, stiffness, or toughness are the signs presented by the vessel. Together with these we consider the age, appearance, history, general condition of the patient, the state of the temporal arteries, cornea, conjunctiva, skin, &c.

When a diagnosis of advanced arterial degeneration is formed the prognosis is of course very serious, and all we can do by treatment is to obviate the evil consequences more or less imminent, and postpone as long as possible the inevitable result. The evils threatened vary in different cases. One of these is apoplexy. When the heart retains its vigour and continues to act powerfully while the flow of blood through the capillaries is obstructed, the liability of degenerate vessels to burst under the high pressure at which the circulation is maintained is obvious. On the other hand, if the heart shares in the structural changes and is weak, the languid movement of the blood in diseased vessels is likely to give rise to thrombosis and cerebral softening. When there is kidney disease, uræmia is of course a contingency to be feared. But the prognosis of an attack of acute disease of any kind is made more serious by the existence of arterial degeneration.

I propose to illustrate these statements by cases which have been under my care, and more especially by cases in which the arterial condition has actually furnished a basis for prognosis subsequently verified by the result. Every day we see cases in which we reason backwards and explain the occurrence of apoplexy, &c., which we are called upon to treat, by the state of the vessels; but I am anxious to show you that we can reason forwards and predict, and if we can predict we can sometimes prevent.

The first case is that of a Scotchman, aged fifty-two, who came under observation in May, 1873, with the following history of himself. Five months previously, while apparently in good health, although he had felt conscious for some months that he was unequal to business at times, and his hands often became blue and cold, he was taken with a sudden giddiness; he did not fall, but was unconscious from fifteen to twenty seconds. On recovery he felt weak in his arms and legs. He had never been well since, and had always been under treatment. For some time he was at an hydropathic establishment, where he tried the water cure. His was almost the worst case possible for such treatment, and he became worse. He was treated also, at one time, with a "bitter syrup," which made him insensible; this was probably syrup of chloral hydrate; he was none the better for it. He did not look his age, was well fleshed and had good colour in his face, but was a little sallow and puffy under the eyes. His expression was dull, and he had a look of want of energy. There was somewhat of a renal appearance about him, but there was no albumen in his urine; its specific gravity was 1018, and it was of good colour; at one time there was a faint turbidity by heat, which was not quite removed by acid. At times he felt giddy. His arms were weak and his hands cold and purple. His walk was weak, but he was able to stand with his eyes shut, and on either leg, alone. His speech was slow but distinct, his voice weak and monotonous, and he could not write well. He frequently had hesitation in swallowing liquids, feeling unable to do so; but there was no return by the nose, and no choking. He soon became confused when talking or thinking, and made many mistakes. He always fell asleep after dinner, and slept heavily at night; he had also become apathetic, whereas formerly he was energetic.

Here was a case of damage to the medulla oblongata. The pulse gave the key to its character; it was long and hard, and the artery presented inequalities to the touch; the temporals also, especially the left, were tortuous and hard. The heart sounds were of a tic-tac character—that is, equidistant and similar—and were loud. The aortic second sound especially was loud and booming and was heard over a large area. The aorta itself was dilated; it could be felt above the sternum; and there was dulness across the upper sternum.

His vision was not good. The pupils were small, and there was slight arcus senilis at the upper part of the cornea. The ophthalmoscopic examination was not satisfactory, only an imperfect view of the fundus being obtainable in the left eye; bright white spots were seen near the yellow spot, and the right disc was red and ill-defined.

My diagnosis was, disease about the medulla, probably a limited hæmorrhage. The prognosis I gave from the state of his vessels was bad; some improvement might be obtained, but sudden death from apoplexy was to be anticipated. I was unable to find a cause for the bad state of his arteries, and this perhaps made the case of a more serious nature. The treatment I adopted was an aperient mercurial pill, to reduce the arterial tension, iodide and citrate of potash, phosphorus, and cod-liver oil. Unmistakable, indeed remarkable, improvement took place at first, but after one or two warnings, two months after I first saw him he had his attack of apoplexy, which, from the symptoms, was apparently hæmorrhage into the pons and medulla, and died. Unfortunately, I was away from town at the time and no post-mortem was obtained.

Another case of extreme interest is that of a gentleman, aged sixty-two, whom I was called to see in June, 1873. He was suffering from a well-pronounced but mild attack of gout; but his family were uneasy about him, for lately he had been getting paler, feebler, apathetic, easily fatigued, disinclined for exertion, and, indeed, incapable of it, for he soon became out of breath. The gout, in this case, was comparatively unimportant; it was its results that were dangerous. He was a country gentleman; but his habits were not active, as is usual with his class, though his living was of the usual generous description, and he took beer of his own brewing, which was very good, sherry, and port daily. It was not, therefore, to be wondered at that he had had gout for seven years, and with it the frequent accompaniment of eczema and other gouty troubles.

He had a terrible family history, as I learnt later. As I sat on Sunday in the family pew of the village church I was struck with the history recorded on the long series of his ancestral monuments. They were a long-lived race, averaging from eighty to ninety years for many generations; but his father died at seventy-three or seventy-four, and already one younger brother had died of Bright's disease and apoplexy, and he had another the subject of renal disease and paralysed.

His face was rather sallow and pale, with faded red on his cheeks. He had a well-marked arcus senilis all round the cornea. His pulse, which was rather frequent, was long and hard. He had slight reduplication of the first heart-sound at the apex, and a loud second sound at the base. His urine was of sp. gr. 1013, pale, not quite clear, and it had a trace of albumen, which came and went. Here was a typical case of so-called arterio-capillary fibrosis, with contracted and granular kidneys, due to true gout. He had high tension, damaging his arteries; and this or the same state of blood which had given rise to the tension had affected his kidneys. His condition fluctuated with the variations in the arterial tension. This, therefore, indicated the treatment, which was directed to reducing it by every means at our disposal. I ordered him mercurial aperients, though I was aware of his kidney disease, saline purgatives, iodide of potassium, citrate of ammonia, and then tincture of iron. His diet was also strictly regulated; it was made to consist largely of milk, eggs, and fish. He was directed to stop his wine and beer, and to take whisky and Apollinaris water. This was followed by wonderful improvement, and he went for change to the seaside. While there he had an escape for his life from constipation, which he neglected. He came back, however, much improved. All went well with him till the spring of 1874, when the election business, with its attendant exertion, exposure, and excitement proved too much for him, and he knocked up under it. He now began to have severe nocturnal dyspnœa, the attacks coming on at 2 or 3 A.M. There was a wheezing sound, but air entered the lungs quite freely, and the dyspnœa was, in fact, cardiac. There was general arterial spasm, the pulse being even smaller, longer, and harder than usual, and the reduplication of the first heart-sound more marked; the left ventricle was, apparently, unable to force on through the arteries an adequate amount of blood, and, accordingly, too little reached the right ventricle and lungs. Possibly the attacks were in part uræmic. Mercurial and saline aperients were again given, and were followed by great relief. A fortnight later he had sudden loss of sight, which came on while stooping. Before I saw him this had improved, and he saw better; but there remained a peculiar limitation of the field of vision—all appeared dark except what was immediately before him. The ophthalmoscopic examination showed the retinal arteries to be so small as to be scarcely visible, and there was œdema around the disc. The high tension was now again remarkable. The sight gradually improved; but improvement in the general health was very slow. He went to the seaside in August. Here he again neglected his bowels, which became constipated. This brought on a profuse attack of hæmorrhage from the bowel, by which he was completely prostrated; but he once more improved in every respect. In February of this year he had again severe dyspnœa, with pulmonary congestion, and finally came the attack of apoplexy which I had so long feared.

Arterial degeneration, chronic renal disease, and arterial tension are often so combined in the same case that I have difficulty in deciding under which head to describe some of those I wish to relate to you. It was so in the last case, but I considered the arterial condition the one which most threatened danger, and so I take it to have been in the following, in which good results, at one time unhoped for, attended the intelligent and persevering application of principles of treatment indicated by the pulse, by my friend Dr. Kilner Clarke, of Huddersfield.

The patient, a gentleman aged fifty-six, engaged in commerce, had fair health till twelve months before I saw him, which was in March, 1874. He was at this time suddenly seized with great giddiness one morning, and for the remainder of the day was continually vomiting. This was set down to biliousness, but he had never been free from giddiness since; was nervous, and started readily; was soon tired; and his memory was impaired. A slight difference was observable in the muscular markings of the two sides of the face, these being smoothed out a little on the left. The temporal arteries stood out; the pulse was rather small, very hard and long; the arterial tension was extreme, and a short systolic puff was heard over the aorta. Urine of sherry colour; sp. gr. 1009; no albumen. Ophthalmoscopic signs negative.

Dr. Clarke had recognised these facts, and ordered appropriate treatment; but a physician consulted in London advised it to be left off. Soon afterwards I saw the patient, and the line of treatment was resumed: one grain of mercury pill, one-third of a grain of extract of colchicum, and two and a half grains of compound colocynth pill, being given twice a week; and three grains of iodide of potassium, ten grains of bicarbonate of potash, five minims of colchicum wine, with spirit of ammonia and tincture of oranges, three times a day. There was improvement, but the patient had work and anxieties in his business for which he was unfit. In December he had unilateral convulsive attacks, and albumen appeared in the urine. When I saw him in January his walk was feeble, his speech indistinct, and his aspect that of cerebral mischief. Still his general condition was much better, his arteries were softer, his tissues more healthy, and his colour fresher and less sallow; so that, with cessation of business worries, now absolutely necessary, I was not without hope of improvement. The patient remained entirely under Dr. Clarke's management; and when

I last heard of him, in June, he had shaken off the cerebral symptoms, and was so much better in every way that he was returning to business, from which he had definitively retired.

I have now under observation a lady, the wife of a medical man, in whom I predicted cerebral hæmorrhage, and in whom also it has occurred. She suffered from violent palpitation, faintness, and feeling of lowness, for relief from which she had resorted to stimulants. She had also become weak and liable to attacks of vertigo. From this and from timidity she had almost entirely given up out-door walking. I never met with a case of such extreme high tension. The pulse-rate was habitually nearly 120, the arteries everywhere prominent and tense. She had a rather bloated, red face, which was still more disfigured by acne; and her aspect was that of extreme plethora. I obtained by much urging a modification of her diet, but I could not prevent recourse to stimulants, which were not, however, taken to excess. I only saw her twice, early in the year, but felt certain of the condition which threatened her, and gave a prognosis of apoplexy. In May she had her first distinct warning, which came in the shape of hæmorrhage into the left retina, with loss of sight. In June she had more severe and alarming symptoms, a meningeal hæmorrhage having apparently occurred. On the night of the 6th she became restless and irrational in her talk, and then a severe attack of convulsions came on; she had altogether four attacks of convulsions within twelve hours, which were followed by prolonged loss of consciousness, and when recovering from this she was in a state of extreme excitement, with delirium and delusions and complete loss of memory; she became also extremely obstinate and violent.*

But, besides furnishing a basis for prognosis, arterial degeneration often explains to us a long train of miserable nervous symptoms coming on late in life—loss of energy, depression of spirits, a feeling of confusion in the head, sleeplessness, transitory loss of consciousness. I have in mind the case of a lady for some time under my care, formerly energetic, active, full of spirits, now prostrated or confused by the slightest exertion, bodily or mental, scarcely able to walk, or to write a letter, or to command her attention, sleepless, and persecuted by a constant pain in the back of the head. She is relieved by the very means which her weak state would seem to contra-indicate.

You have seen also in two cases, one still in the hospital, the other only just discharged, how convalescence from slight illness has been protracted almost indefinitely for no assignable reason except that the arteries were degenerated. In one, however, the heart was weak, and till restored by prolonged rest in bed its systole gave neither impulse nor first sound. Both the patients were women, who, nearly up to the time of admission, had been able to attend to their duties, and both came in for subacute rheumatism. The first, a monthly nurse, aged fifty-seven, had a slight attack of pneumonia a few days after her admission, but this did not at all account for her extreme weakness and slowness in recovery. It was more than three months before she could stand, and when she left the hospital, at the end of four months, she could only just walk the length of a small ward. The arteries were small, irregular, resistant, certainly degenerated, perhaps on the way to calcareous change; and this, I think, explained the difficulty attending the re-establishment of the nutrition and restoration of strength. The case of the other patient was very similar, and I need not give the particulars.

When advanced calcareous degeneration of the small arteries exists it can scarcely escape attention, even on the most superficial examination. The radial feels, as I have said more than once, like a string of small beads when the fingers are carried with the skin along its length. All I need do is to remind you that with the vessels in this condition a very slight ailment may prove fatal. I have had no marked instance in the wards lately, and to read you notes of cases I have had under observation formerly would simply be to give you accounts of the complications by which the patients were carried off. In one the chain of events was bronchitis, œdema of feet gradually progressing to general dropsy, failure of right heart with enlarged liver, and albuminuria. In another, attacks of giddiness, loss of energy and memory, indistinct and slow articulation, later a gradual impairment of the faculties, occasional escape of urine and fæces in bed or into clothes, and ultimately the entire train of symptoms attending cerebral softening.

I propose to take up this subject again on another occasion, for I find I have not time to complete it to-day. It is not merely in forming prognosis that a careful study of the indications furnished by the pulse is useful, but also in treatment, and of this I hope to give illustrations.

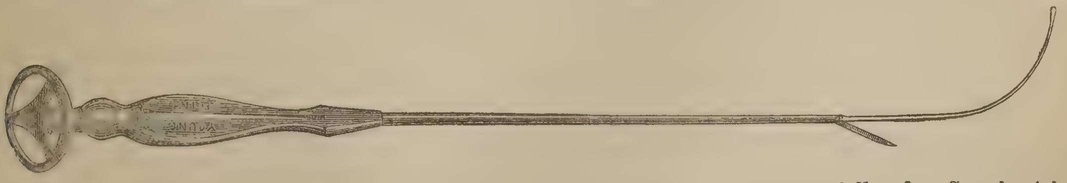
ON A

NEW URETHROTOME FOR INTERNAL URETHROTOMY.

By PATRICK HERON WATSON, M.D., F.R.S.E., &c.,
SENIOR SURGEON TO THE ROYAL INFIRMARY, EDINBURGH.

I have no wish to enter into any consideration at present of the advantage of one method of treating stricture of the urethra as compared with another. I believe that dilatation, divulsion, external and internal urethrotomy, have each their separate sphere, and form an efficient armoury, from which a skilled surgeon will, according to circumstances, select his appropriate weapon. I wish at present merely to direct attention to a new instrument which two years ago I had constructed for the internal division of strictures of the urethra. It has seemed to me much more satisfactory than any other form of instrument, intended to effect internal urethrotomy, with which I am acquainted.

The original instrument I had constructed for me in Paris under the direction of my former resident surgeon, Mr. C. W. Macgillivray, by Luer of Paris, but as its size was too large for the treatment of very tight strictures, I had a modified instrument, upon the same principle, constructed by Mr. Young of this city. From the accompanying woodcut it will be seen to consist essentially of a Syme's stricture staff, from which a tenotomy blade is made to protrude at an angle on turning from left to right a wheel fixed at the proximal extremity of the instrument. This instrument is probe-pointed at the distal extremity, and the size of a No. 10 or 12 at the haft. The instrument gradually increases for four inches from the fine probe-pointed extremity, up to the size of a No. 2 bougie. Here it abruptly enlarges to the size of a No. 12. At this point, where the thick and thin portions of the instrument are continuous, a tenotomy knife-blade, concealed in a groove in the slender part of the shaft, is so pivoted that it can be projected at an angle with the commencement of the thick portion of the staff. The degree



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* The treatment consisted chiefly in free purgation. Venesection was to have been practised had convulsions again come on. Bromide of ammonium was given for a short time. A farinaceous, milk, and fish diet was prescribed, and stimulants forbidden. When this lecture was delivered, the mental powers appeared to be so much shaken that anything like complete recovery was scarcely hoped for, especially as improvement of intellect did not at all keep pace with the improvement in the patient's general condition. To my astonishment, the arterial tension was gradually reduced, the pulse became perfectly soft and natural, without being weak, and the rate came down to 72. The arterial degeneration I had diagnosed did not, in fact, exist; and I think the tension, which was quite the most remarkable I ever met with, was due to the frequent and powerful action of the heart, which forced blood into the arterial system faster than it could escape by the capillaries, except under great pressure. For some weeks the behaviour was peculiar and memory all but lost. Now, however (July 12th), except that the memory is still weak, the patient is well.

of angular projection of the knife is determined by the number of turns given to the screw attached to the handle of the instrument, and this degree of protrusion is marked by an indicator on the shaft. For the purpose of cleansing the instrument after use, the blade can be screwed out to a right angle to the shaft; but in use, when dividing a stricture, no protrusion beyond an angle of 45° is required. The instrument in all its parts, except the blade, is nickelised to prevent rusting.

When employed the instrument is introduced with the blade enclosed in its groove. When the pointed extremity has been insinuated through the strictured part of the canal, it glides smoothly onwards towards the bladder, till the anterior extremity of the stricture arrests the progress of the thick portion of the staff. The anterior extremity of the stricture is thus determined with absolute precision, and as few strictures exceed an inch and a half in length, the blade is sufficiently long to secure the division of the stricture with one movement of withdrawal of the whole instrument. When once the instrument has been lodged in close contact with the stricture, the screw in the handle is turned so as to secure a protrusion of the blade to an angle of 30°, the whole instrument is then drawn forward as if to withdraw it from the canal. When this is at first attempted it is felt to be firmly held, then the tissues yield. When the instrument has been withdrawn about two inches from the urethra, the screw is inverted, causing the blade to retreat completely into its groove, and the passage of the whole instrument onward towards the bladder is once more attempted. In most instances this is found unopposed. And if it be so, the urethrotome is withdrawn, and a full-sized catheter passed to empty the bladder. Should the passage onwards of the thick portion of the instrument be opposed, either another stricture or some portion of the same stricture is shown to be undivided. A reprotrusion of the blade, and repetition of the movement of withdrawal, will secure the division of this obstruction, and similarly of any other constriction which may still oppose the passage of the full-sized portion of the stem of the instrument.

I have never encountered any troublesome hæmorrhage in the use of this instrument, while by means of it the extent of tissue divided has always been completely under control.

The woodcut shows very well the appearance of the instrument with the blade protruded at an angle of about 20 deg.

The advantages which this instrument has seemed to me to present are:—1. It determines accurately the anterior aspect of the stricture, while the shaft has been insinuated through the contraction. 2. It divides the stricture from behind forwards. 3. It enables the operator, by the abrupt shoulder on the shaft, to determine whether, by the use of the cutting apparatus, the stricture has been completely or only partially divided, and admits of his completing the division if need be, without any change of instrument, by merely repeating the same steps of operative procedure, as in the first instance. 4. It limits the section of the urethra to the part or parts which are actually contracted, and does not "promenade" the whole canal. 5. Its use is attended by remarkably little pain or bleeding.

As the arrangement of the wheel and screw admits of no yielding of the blade, even in fibrous, cartilaginous, or resilient structures, in which cases I have chiefly employed it, the section of tissue is effected with absolute certainty, the gradual angle or wedge-forming position of the knife to the stem of the instrument securing that the cutting edge will act against all tissues with which it is brought in contact as the instrument is withdrawn. Neither have I found any difficulty in retiring the blade within its groove when the section is complete, the fitting of the parts securing them against the possible interposition of any portion of the surfaces of the divided soft tissues.

For strictures situated in the anterior portion of the urethra, an instrument constructed precisely in the same manner, but shorter and quite straight, is made. I find myself, however, that the ordinary curved instrument is quite sufficient for every purpose.

The cutting-blade has its edge turned towards the floor of the urethra, but it may be constructed to act upwards if so desired, or to work with a double-edged knife, both upwards and downwards. I prefer myself that the incision should be made only in one direction, and that downwards or towards the floor of the canal.

Edinburgh

CASE OF MEDIASTINAL TUMOUR.

By THOMAS COLE, M.D., M.R.C.P.,
PHYSICIAN TO THE ROYAL UNITED HOSPITAL, BATH.

I am indebted to my friend and house-physician, Mr. Field, for most of the notes of the following case.

William I——, aged fourteen, a traveller, was admitted into the Royal United Hospital, Bath, on Aug. 9th, 1875.

History.—With the exception of being in a London hospital some time since, for some weeks, he gives no account of illness till three weeks ago. He then had an eruption on the right lip, with a barking cough. A week afterwards he ran, in the early morning, after a stray horse, and fell down all bathed in perspiration. A week ago he was wrestling with a playmate, when he suddenly became breathless, but felt no pain. Since that time the breathing has been so difficult that he could not lie down in bed; last night he could not go to bed at all. He has been very thirsty for three weeks, with a bad appetite and confined bowels.

Present condition.—Respiration most painfully laboured, not much quickened; slight cough; tongue furred; no marked blueness of face; heart apparently healthy. Dulness at right lung-apex anteriorly, and at posterior left base; at the latter spot tubular breathing; on both sides anteriorly, except at the extreme left apex, the breathing is very indistinct, very little air seeming to enter the chest. Expiration prolonged everywhere; no crepitation nor rhonchus. Liver two inches below the costal margin; spleen not enlarged. Temperature at 9 P.M. 99° Fahr.; respiration 32; pulse 134. Ordered, three grains of carbonate of ammonia, half a drachm of compound camphor tincture, and ten minims of tincture of squill, to an ounce of water, every four hours.

Aug. 10th.—Temperature 98·6°; respiration 33; pulse 122, small and weak. Passed a dreadful night, wanting to get in and out of bed; orthopnœa; face bedewed with perspiration; lips somewhat blue; external jugulars swollen, the left more than the right; superficial veins on the right side of the chest prominent and enlarged; tenderness over this part; much heaving of the chest on inspiration; a few small cervical glands enlarged; total dulness in the right anterior chest, including the sternal region; but little movement; nearly the same on the left side; fremitus diminished, except at the lower right half; vocal vibration diminished. Right chest posteriorly: a tympanitic note everywhere except at a point behind the infra-axillary region, where there is dulness; loud blowing breathing all over. Left chest posteriorly: hyper-resonant superiorly; dull, with a tympanitic modification, below; vocal fremitus much diminished below, somewhat increased above. Tubular breathing heard generally, with a little small crepitation. The diagnosis now arrived at was, that the patient was suffering from a tumour in the anterior mediastinum, malignant in its nature, and probably of a lymphadenomatous character. Evening temperature 99·6°; respiration 36; pulse 136; urine acid, sp. gr. 1027, loaded with pink and white lithates, no albumen.

11th.—Morning temperature 98·4°; respiration 30; pulse 124; very bad night; constant orthopnœa; temperature, according to the nurse, was 103° at 8 A.M.; tongue much coated; sweating profusely; takes scarcely any food; no excess of white blood-cells.—Evening: Temperature 100·4°, respiration 40, pulse 142. Ordered ten grains of chloral.

12th.—Temperature 98·6°, respiration 36, pulse 140; slept about two hours after a second dose of chloral; no improvement; there was evidence of a larger accumulation of fluid in the pleural cavities.—Evening: Temperature 99·4°, respiration 40, pulse 146. Death somewhat suddenly ended the poor lad's sufferings the same night.

Post-mortem examination.—On opening the chest a large quantity of serous fluid escaped from both pleural cavities; on the right side it was confined to the anterior two-thirds of the chest by old firm adhesions, and the lung was bound down in a carnified state at the back; on the left side the carnified lung floated freely in the fluid. The lungs were free from growth, except a few white grains on the pleural surface. Beneath the costal pleura, and situated over the ribs, were masses of new growth; these were at the posterior part of the chest, and quite removed from the main mass which filled the anterior mediastinum. Microscopically, they consisted of lymphoid tissue. A very large and somewhat irregular mass filled the anterior mediastinum; it was adherent to the sternum, ribs, and diaphragm, and encroached a little more into the left chest than the right. The trachea and œsophagus ran down behind it, without being constricted. The tumour was firmly and intimately united with the outer layer of the pericardium. This contained a quantity of dark bloody-looking fluid. There was no growth from its serous surface. The heart, which was pushed somewhat backwards, had a few small pieces of hard white substance on its surface, which consisted of fat and lymphoid tissue. The liver and spleen were healthy, but the kidneys contained several large round masses of white growth. No other glands beyond the mediastinal were implicated. The mediastinal tumour presented all the microscopical characters of a lympho-sarcoma.

Bath.

NOTES OF SIXTEEN CASES OF ABORTION.

By JOHN DOUGALL, M.D. Glasgow.

The abridged particulars of the following cases are submitted, not to illustrate any novelty in treatment, but from their variety and clinical interest.

Case 1.—Mrs. D——, aged thirty-six, in fifth month, second abortion, fifth pregnancy, got a kick on the abdomen from her boy in bed. Two days after had slight oozing of blood from vagina, with pelvic and lumbar pains. On third day both increased. Os uteri was somewhat open, and the fœtal limbs could be felt. Cold was applied to the vulva, and ergot with digitalis prescribed. About four hours after the fœtus was expelled. Ergot was again given to assist the expulsion of the placenta, but after two hours, during which the hæmorrhage was trifling, the os was found nearly closed and the cord running into it. Matters remained thus for three days; ergot had no effect. The hæmorrhage, though slight, was constant. I insisted on giving chloroform and exploring the uterus, but she objected. Latterly she was anæsthetised with difficulty. The hand was passed into the vagina, as recommended by Dr. Barnes,[*] and the finger swept round the uterine cavity, when the placenta was found free from attachment, and removed with ease. Made a rapid recovery.

Case 2.—Mrs. W——, aged twenty-five, in fourth month, first abortion, second pregnancy, began to lose blood without apparent cause. Opium and horizontal rest were prescribed with temporary success. On the third day after, hæmorrhage returned greatly increased, with severe bearing-down pains. I was told "all was away," and found the fœtus lying among a mass of coagula. I searched in vain for the placenta. The os admitted the point of the finger, but the uterus was too high to be explored satisfactorily. I took the usual precaution to abate hæmorrhage, and administered ergot repeatedly. In twenty-four hours expulsive action was evoked, accompanied several times in the intervals with a gush of blood. Feeling the placenta dilating the os, and having tried in vain to liberate it with the fingers and ovum forceps, I introduced my left hand into the vagina with comparative ease, and steadying the uterus above the pubes with the right, insinuated two fingers between the placenta and uterine wall, and instantly brought away the mass entire. She made a good recovery.

Case 3.—Mrs. McD——, aged twenty-six, in tenth week, first abortion, first pregnancy, six months married, had been doing some extra cleaning, and was attacked with slight hæmorrhage and bearing-down pains. She continued to work till compelled to desist from increase of hæmorrhage and pain. Os closed, cervix remarkably elongated, from which the probability of averting the impending danger was inferred. I prescribed Battley's solution, with digitalis and sulphuric acid, light diet, horizontal posture, abstinence from fermented liquors, and cold to the vulva. On the following morning the ovum was shown me entire, having been expelled during the night. This was rather unexpected, from the condition of the os and cervix the previous evening. Recovery was rapid.

Case 4.—Mrs. McA——, aged twenty-five, in tenth week, first abortion, first pregnancy, four months married, when assisting in hanging pictures, was suddenly seized with severe pain and hæmorrhage. Four hours after I found the ovum unruptured lying in the vessel. Patient was extremely sorry at her mishap, having a strong desire for offspring. She was kept in bed ten days and carefully nursed. She convalesced rapidly. After twelve months she consulted me in regard to her not being again pregnant. Is healthy, menstruating easily and regularly, but complains of dull pain over right ovarian region. The os is healthy, but pointing abnormally backwards and to the right. After repeated attempts I managed to introduce the sound. The uterus was flexed diagonally, its fundus lying in the left sacro-iliac synchondrosis. On the least rotation of the sound unbearable pain was produced. Subsequently I made several similar trials with the same result. It is three years since she aborted, and, though healthy, has not again conceived.

Case 5.—Mrs. A——, aged twenty-eight, in fourth month, first abortion, third pregnancy, without apparent reason had an oozing of blood for five days, when it greatly increased, accompanied with violent bearing-down pains. I found her very weak. She said it was a miscarriage, and handed me a fœtus about one inch long wrapt in a bit of newspaper. I examined the clots, soiled cloths, &c., for the secundines without finding them. The os was almost closed, and nothing protruding from it. I prescribed ergot, digitalis, and sulphuric acid, rest, low diet, &c., and left her comfortable. Next day she felt perfectly well; a vaginal examination showed only a slight sanguineous discharge and tumidity of the labia uteri. On the second day she was in the same condition; no pain, resting quietly. In the afternoon I was hurriedly summoned, as she had suddenly flooded. Os still closed. Having stanched the hæmorrhage by stuffing the vagina with sponge wet with vinegar, as recommended by Dr. Dewees, and taken other precautions to prevent bleeding, I left. Two hours after she had lost no more blood, but was extremely weak, with a dicrotic pulse, and a presentiment that she was about to die, "as she once had a sister who died from the same symptoms." Suddenly she felt as if the bowels would move, but could not. I withdrew the sponge, gave a large simple enema, and retired to the adjoining room. In about five minutes I was called, and found the placenta expelled entire with the enema, but no fæcal matter. Recovery was rapid.

Case 6.—Mrs. P——, aged twenty-four, in third month, first abortion, first pregnancy, six months married, had been losing blood for two days, accompanied with severe pain. I was shown "something that had come away"—part of the fœtal involucra. I prescribed rest, ergot, sulphuric acid, and digitalis. The hæmorrhage was trifling. Next day she had a slight attack of metritis, the lochia becoming fetid, which was allayed by opium, poultices over the abdomen, with vaginal injections of an aqueous solution of hydrochloric acid. On the whole, recovery was tedious. Three months after she began to menstruate, having missed the previous term. Had no pain, but felt sick; os closed; bleeding trifling. She was kept in the horizontal posture, and laudanum, digitalis, and sulphuric acid given. The hæmorrhage ceased in two days, and she was going about in a week. Two months after she lost about six ounces of blood per vaginam. It began while using a light wooden rake in a garden plot. There was no pain nor sickness. The last mixture was again prescribed, and the utmost quietness enjoined. In four days the hæmorrhage ceased; in two weeks she was going about. Latterly has had a living mature male child; breech presentation.

Case 7.—Mrs. D——, aged thirty-two, in fifth month, second abortion, fifth pregnancy; attributed her mishap to prolonged grief. I found her nearly pulseless from loss of blood, while a male fœtus about twelve inches long, with the cord and placenta attached, lay among the hæmorrhage. Still bleeding profusely, cold was applied to the vulva and abdomen, the vagina stuffed with sponge soaked in a weak solution of perchloride of iron, and brandy with ergot given. As the bleeding resisted the usual means of arrestment, she was put under chloroform on the third day, and the uterus explored. The os was open and patulous, but except one or two small clots, nothing was found in its cavity. Next day, the napkins being still largely stained with florid blood, I introduced an elastic catheter, with the opening at its point, into the uterus, and injected about half an ounce of aqueous solution of iron alum (strength two scruples to the ounce), which had the desired effect. In two days the injection had to be repeated, after which the bleeding gradually stopped. I had ceased attending for a week when she took a sudden flooding after washing her feet in hot water. The same means were employed as hitherto, and were attended with the same difficulty. After a course of iron and quinine she eventually recovered.

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[*] Obstet. Oper., p. 391, second edition.

Case 8.—Mrs. A——, aged twenty-eight, very anæmic. Eleven weeks previous to my visit had a mole abortion at third month. Had a living child the first year of her married life; had three consecutive abortions since, of which the mole was the last. This was preceded by much hæmorrhage, and at the time of visit (eleven weeks after) it had not ceased. The uterus was found somewhat retroflexed, and measuring three inches and a half, the os open, and its labia tumid. The uterine malposition was comparatively easily adjusted, though causing some pain. The organ apparently contained no shreds of membrane nor clots, nor was the discharge fetid. She was advised to keep her bed, use cold astringent injections, take chiefly albuminous diet, also milk, wine, steel, and quinine. In about three days the bleeding completely ceased, and in a fortnight she was fairly convalescent.

Twelve months after she again became pregnant, of which I was duly apprised, and reiterated my advice to avoid physical and mental excitement. She obtained my consent to reside a short time at the coast. A few weeks after she had to hurry to reach the boat. On arriving home she had slight hæmorrhage, shivering, felt sickly, also bearing-down pains, with backache. I found the os closed, but feared, from her abortive diathesis, another miscarriage. Stimulants were prohibited, a light diet ordered, with rest and quietness in the horizontal posture, and solution of opium with digitalis prescribed. This treatment seemed successful, and in a week I ceased visiting. In two days I was called, when the ovum entire was shown me. It contained a three months' embryo. Recovery was rapid, after which she resided some weeks at the seaside, having salt water baths daily, and taking compound syrup of phosphate of iron, with a regular allowance of light dry sherry.

In five months she was again pregnant. Being extremely anxious for offspring, and remembering previous experience, she put herself entirely under my care, and ultimately had a daughter at full term. Previous to her confinement there was much œdema of the lower limbs, slight swelling of the features, and considerable albuminuria. These gradually disappeared under appropriate treatment after parturition. She made a good recovery, and is now in better health than for some years. The child, aged twelve months, is well. She is again five months pregnant.

Case 9.—Mrs. J——, aged twenty-two, in third month, first abortion, first pregnancy, married four months. Two days before had been polishing a friend's table, the obvious cause of her illness. I found her much depressed and vomiting. There was little bleeding, but severe and frequent bearing-down pains. The ovum was projecting through the os. A dose of ergot was given. After an hour, no change taking place in her condition, I left. On my return in six hours I was shown the ovum entire, newly cast off. The hæmorrhage was trifling. Three days subsequently she had a slight attack of metritis, which yielded to subchloride of mercury and compound ipecacuanha powder, with hot applications to the abdomen, and washing out the vagina with water acidulated with HCl; otherwise she made a good recovery.

Case 10.—Mrs. M'C——, aged twenty-eight, in the fifth month, first abortion, fourth pregnancy. When in her fourth month she had an oozing of blood from the vagina, with bearing-down pains—the apparent result of a long walk. She was kept in bed a week, and sedatives administered successfully. Soon after she had severe acute bronchitis, causing prolonged paroxysms of coughing, for which she was kept in bed two weeks. When scarcely recovered, an only child had inflammatory diarrhœa, causing her much anxiety and extra trouble. After he got well she set to a day's cleaning, in direct opposition to my emphatic instructions and also those of her husband. The same night uterine contractions began. I found little hæmorrhage; the funis prolapsed and pulseless. The presentation was footling; the lower half of the fœtal body lay in the vagina; the upper was grasped by the uterus. Traction on the limbs with two fingers failed to disengage it. Ergot with borax had no effect. During the next twelve hours I saw her several times. Latterly the fœtus was expelled. A large dose of ergot was given to assist in the expulsion of the placenta; the effect was again *nil*. On tracking the cord in the vagina, it was found entering the os, which only admitted the point of the finger. Causing an attendant to grasp the uterus over the pubes, I made slight traction on the cord with the right hand, and endeavoured with my left to dilate the os and otherwise assist in extracting the placenta; but the cord parted within the uterus. I tried to pass the hand into the vagina, but failed. There being still little bleeding, I resolved to wait and see what nature would do. Nature took matters easy. For two days she fed well, slept soundly, and was painless; but I was getting anxious. Chloroform was given, and with the left hand in the vagina and the right steadying the uterus over the pubes, I dilated the os to the size of a crown-piece, and found the placenta adhering to the left uterine wall and part of the fundus. The most extreme difficulty was experienced in getting it separated, the two fingers not being able to work at the fundus, nor the hand to enter the uterus; consequently, about two-thirds of it was extracted in small shreds. Latterly the adhesion was separated, and a good hold obtained of the remaining large part, which was liberated coincident with a uterine spasm. Five hours after the patient was flushed, and complained of headache; pulse 108. Next day the pulse was 72; headache gone. She recovered rapidly without a bad symptom.

Case 11.—Mrs. C——, aged twenty, in third month, first abortion, second pregnancy, after walking about seven miles, had bearing-down pains with profuse flooding. I found her supported by two persons and unable to move. She was put to bed, and as the pain was unusually severe, thirty minims of sedative solution of opium were given. The os admitted the finger, and the fœtal ovoid was found jammed in the cervix. A towel soaked in cold water was applied to the vulva, the pelvis raised, and the shoulders lowered. This lessened the hæmorrhage, while the opium soothed the pain. About three hours after her bowels inclined to move, she insisted on getting up, and fainted. On my arrival she was recovering, but blanched and nearly pulseless. Brandy had just been given, by which, with the horizontal posture, she revived. The membranes were now protruding, the hæmorrhage had ceased, and the pain was nearly gone. After waiting about an hour, and her condition remaining the same, ergot with borax was given, and, assisted by the two fingers grasping the membrane, resulted in the expulsion of the ovum entire. Patient made a fair recovery, and was pregnant four months after.

(To be concluded.)

OPHTHALMIC MEMORANDA.

By EDGAR A. BROWNE,

SURGEON TO THE EYE AND EAR INFIRMARY AND THE DISPENSARY FOR SKIN DISEASES, LIVERPOOL.

1. A case of partial staphyloma corneæ afforded an opportunity for trying a method of treatment which I do not remember to have seen previously employed.

C. S——, workman, St. Helens, having neglected a gonorrhœal ophthalmia of the right eye, was first seen when a large sloughing ulcer of the outer and lower third of the cornea was threatening perforation. Although the eye was rescued, a large staphyloma resulted. The protuberance was exceedingly unsightly, and gave rise to inconvenience by preventing closure of the lids. As useful vision upwards and inwards remained, the only ordinary method available seemed to be repeated paracentesis with pressure. But, considering how often this plan fails to do good even in small staphylomata, I resolved to imitate a process now in vogue for conical cornea, and operated (May 7th) by transfixing the most prominent portion of the tumour with a Graefe's knife. The incision was an eighth of an inch long, parallel to the long axis of the swelling, and obliquely inclined to its surface. The flap was seized with the iris forceps, and a tiny wedge-shaped piece was snipped off by the scissors. Firm pressure was then applied. I felt very doubtful of the capacity of the degenerated tissue for healing, and was delighted to find that the posterior edges of the wound had, in twenty-four hours, healed as readily as healthy cornea. The wound having completely cicatrised, though but little flattening had resulted, I again (May 28th) excised a wedge-shaped piece of tissue, about an eighth of an inch long and a line across at its widest part. This healed readily, and produced a marked improvement. On June 18th I excised a third piece with like favourable result. When cicatrisation was complete the staphyloma was considerably flattened (though not quite level with the normal surface of the globe), and the lids closed easily and comfortably.

The main points conducive to success seem to be, that the posterior edges of the wound should be in apposition, and that a large piece of tissue be not removed at one sitting. As the operation is nearly painless, it might be repeated a dozen times if necessary.

2. Wound of an ocular muscle without injury to the globe is necessarily a rare and curious accident. The following is the only case I have ever seen.

J. K——, iron-roller, St. Helens, was hit by a flying fragment of metal between the lower lid and the globe, neither of which, strange to say, was injured. He applied at the infirmary some weeks after the accident on account of vertical diplopia. On inspection, an upward squint was manifest, and the power of downward movement was considerably impaired. At the bottom of the retro-tarsal fold was an irregular cicatrix, and the lower part of the ocular conjunctiva was red and much thickened. On June 11th I operated by snipping a free horizontal opening in the conjunctiva, about an eighth of an inch from the corneal margin. The tissues were matted together, but by careful employment of scissors and hook the attachments to the globe were freed; the tendon remaining joined to the conjunctiva. The superior rectus was now divided, and the lower tendon brought forward by three silk sutures, which were drawn sufficiently tight to give the eyeball a slight downward inclination. The wound healed readily; but when the superior rectus regained its power the improvement was found to be only partial, and I therefore (August 6th) brought the inferior rectus still further forward by a second operation, but did not again divide the superior tendon. The pupil was at first half its diameter lower than its fellow, but after the withdrawal of the sutures it gradually rose till it was level. The patient was discharged cured.

Liverpool.

ON THE TREATMENT OF ALVEOLAR ABSCESS.

By ISIDOR I. LYONS, M.R.C.S., L.D.S.

Alveolar abscess is the result of an acute inflammation of the periodental membrane. This may arise from various causes. It is commonly the sequel of acute inflammation of the pulp of a tooth, but it may commence in the membrane. An alveolar abscess generally points opposite to the buccal or labial surface of the affected tooth, or the pus may exude at its neck or travel along the hard palate and open at any point internal to the dental arch.

Among the different local remedies prescribed for this affection, the most common are external fomentations and poultices. This treatment is to be deplored for the following reason. When, for example, an abscess takes place at the root of an upper bicuspid tooth, and the swelling is at its buccal surface, on a poultice being applied externally, pus would travel above the fold of mucous membrane connecting the superior maxilla with the cheek, and appear among the buccal muscles, ultimately passing through the skin, thereby producing those ugly scars often seen on the face of patients who have undergone this treatment. The following cases are typical of these results.

Isabella B——, aged twenty-eight, admitted into St. Bartholomew's Hospital April 1st, 1875, under the care of Mr. Callender. This patient had suffered great pain for a long time from a carious lower molar, at the roots of which there had been an abscess. This had been treated by external fomentations and lancing of the gum. When admitted into the hospital, there was a soft red spot with two or three openings over the middle of the lower jaw, on the right side, extending behind towards the angle and ramus, and slightly down to the neck. There was also inability to open the mouth except to a very slight degree. The first lower molar was reduced to a stump. Since admission, the swelling behind and below has increased, and apparently suppuration taken place. On April 9th the right lower molar (which was necrosed) and the fangs of the two other teeth were extracted. On the 16th the abscess appeared to be discharging through openings in front of it. As regards the rest of the history of this patient, an attack of erysipelas supervened, involving both sides of the face, and which was remarkable for its severity and high temperature. On June 16th she was discharged, her general condition much improved.

Emily C——, aged twenty-four, admitted as an out-patient of the hospital April 8th, 1875, under the care of Mr. Coleman. This patient had acute periodontitis of the first left upper molar in the previous March, and was ordered to apply poultices externally. Within a week the abscess burst. In April she came to the hospital to have the tooth extracted. At that time the scar extended from that part of the cheek opposite the zygomatic arch to midway between it and the angle of the mouth.

G. S——, aged twenty-one, admitted as an out-patient on March 21st, 1875, under the care of Mr. Coleman. This patient had suffered from acute periodontitis of a left lower molar for one month; and, an abscess supervening, it was treated by external fomentations and poultices. At present there is a fistulous opening in the cheek.

The appropriate treatment in the above cases would, no doubt, be the immediate extraction of the offending teeth; but if desirous of saving them, by internal fomentations (the patient to be desired to bathe his mouth frequently with water at as warm a temperature as possible), also by lancing the gums and the application of leeches, and, when an abscess has formed, by free incisions.

The cases given are types of a very large number of out-patients seen at the dental department of the hospital.

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. THOMAS'S HOSPITAL.

CASE OF HYDROPHOBIA.

(Under the care of Mr. Sydney Jones.)

A point of interest in the following case, for the notes of which we are indebted to Mr. H. P. Potter, house-surgeon, was the benefit derived from the inhalation of chloroform. Although the case unfortunately proved fatal, the chloroform gave considerable relief.

Henry W——, aged twelve, a very healthy boy, rather hot-tempered but not nervous, applied at the hospital on September 24th, at 1 P.M., suffering from symptoms of hydrophobia. He had had no previous illness. The boy stated that six weeks ago, whilst stroking a dog which was chained, the animal snapped, and caught hold of his right little finger, and he had to pull it forcibly out of its mouth. No one else was bitten. The dog was killed two days after, and was said to be suffering from rabies. The finger was simply bound up in rag for two days, when he came to the hospital, and poultices were ordered. The wound healed in about a fortnight. During the interval the boy was pretty well, but sometimes he was rather strange in his manner; never spoke of fear of hydrophobia. On the evening of the 19th September he was taken with rigors, and complained of pain shooting up the right arm from the bitten finger; nothing amiss was noticed about the wound. The boy went to bed at once, and passed a restless night. The next morning he was better; ate and drank well. On the 21st he began to refrain from food; said he would take it "by-and-by." On the 22nd spasms were first noticed, when he drank fluids. Since the night of the 20th he had not slept; had been very hateful; had had illusions, and frequent and copious micturition. The spasms and restlessness increased up to the day of admission, on the morning of which he foamed at the mouth. He had no aversion to animals, and he caressed the cat just before leaving for the hospital.

On admission at the Casualty department the patient had a most anxious and woful expression, gasping for breath like a child after a fit of crying; at each inspiration the angles of the mouth were drawn downwards and the eyes opened. The face was pale and cold. There was an old cicatrix at end of right little finger; nail not quite renewed; no redness nor tenderness about it. Pain shooting up right arm and down the right side. Bowels were said to have acted freely after some jalap powder on the 20th.

The patient was admitted into Edward small ward. At 3 P.M. was seen by Mr. Jones. Appeared in a state of great nervous excitement, but at intervals could answer questions rationally. On the least excitement, as of drawing bed-clothes up or down, or when spoken to quickly, the muscles of the face and neck were spasmodically affected, the chin thrown up, and angles of mouth drawn down. On trying to swallow fluid (to which he had strong aversion) the spasms were most intense; he gargled, and at last swallowed part of the liquid, while part was expelled by the mouth. Pulse 88, quiet; temperature 101·2°; skin warm; feet comfortably warm. No pustules nor enlarged glands seen beneath the tongue. Five grains of calomel in glycerine, and the sixth of a grain of the extract of belladonna every four hours. Hot bottles to feet. — 4 P.M.: About the same. Said he saw a big dog on the ceiling. Answered rationally but refused fluids and ice. On bringing an ice-bag in contact with the head intense spasms were excited. Pulse risen to 140. — At 10 P.M. Mr. S. Jones saw the patient, as he was much worse. He raved and was greatly excited if looked at fixedly; spasm more or less at each inspiration; answered questions, but angrily; pugnacious, tried to bite and scratch bystanders. Bowels acted freely after turpentine enema. Pupils fairly dilated; perspiring. Temperature risen to 102°; pulse 130 to 140; respiration 24. Chloroform inhaled with most marked effect; instant relief. As soon as insensibility was produced, he breathed tranquilly, the inspiratory spasm being entirely lost; slight tracheal rhonchus, as of mucus. Mr. S. Jones then determined to keep patient under the influence of chloroform, and gave an enema of fifteen grains of bromide of potassium, with ten of chloral hydrate, every four hours. 11 P.M.: Respirations at long intervals, and gasping. He neither moved nor spoke. Previous laboured breathing became quiet. Pulse accelerated, and slightly stronger. Appearance tranquil. Temperature 101°; pulse 130.— 11.45 P.M.: Chloroform given with Clover's apparatus for two hours, but left off on account of accident with bag. Warm bricks retained in bed, and patient packed with blankets. Ice applied to nape of neck brought on spasms and general disquietude. — Midnight: Nutrient enema, with half an ounce of brandy, fifteen grains of bromide of potassium and ten of chloral hydrate, given and retained. Chloroform kept up. Abdominal muscles rather tense. Thoracic breathing, with great uplifting of trachea. Feet and hands comfortably warm.

Sept. 25th.—1 A.M.: Patient allowed to recover sensibility for a short time. He sighed very much, tossed his head from side to side, and threw his left arm about. Temperature 101°.—1.30 A.M.: Chloroform still used. Patient appeared more exhausted. Breathing slower and less deep; extremities warm; pupils moderately contracted.—4.30 A.M: Fully under chloroform. Tracheal rhonchus; skin hot and dry. Temperature 102·8°; pulse 160; respiration 42. Had not passed urine since admission. Bladder not distended; eyes congested.—4.45 A.M.: Enema of fifteen grains of bromide of potassium, ten of chloral, and half an ounce of brandy; eggs and beef-tea. — 5 A.M.: Subcutaneous injection of one-sixth of a grain of morphia. Chloroform administered for about half an hour after the morphia injection, when the pupils were contracted to the size of a pin's head. He then seemed fully under the influence of morphia, and no chloroform was required till 6.30, when he came to, and the spasms at each inspiration recommenced. Chloroform repeated. — 6.30 P.M.: Temperature 102·6°; pulse 120, very soft and feeble; respiration 26. Rhonchus all over the front of the chest. Face congested; eyes half opened and turned upwards; skin dry and warm. Had not passed water nor motions. Bladder not distended; abdomen tympanitic; hands blue.—7.20 A.M.: Died. Before death the tracheal rhonchus became more and more marked; lividity of hands and feet correspondingly increased. During the last fifteen minutes of life the inspirations became irregular; the inspiration prolonged, accompanied by much rattling in the larynx. Artificial respiration kept up for ten minutes. Pupils widely dilated. Thermometer introduced into the right axilla ten minutes before death, 101·7°. Respiration ceased at 7.20, though the heart's action continued for some short time after.

Autopsy, fifty hours after death.—Body much decomposed. Results mostly negative. Brain congested. On section, the grey matter, both external and internal, was unusually distinct and congested. Numerous vessels in the white substance. Internal organs congested; tongue congested.

ST. BARTHOLOMEW'S HOSPITAL.

STRANGULATED UMBILICAL HERNIA IN A WOMAN; GANGRENOUS INTESTINE; FÆCAL FISTULA MADE; DEATH SIX DAYS AFTER OPERATION.

(Under the care of Mr. WILLETT.)

FOR the notes of the following case we are indebted to Mr. James Shuter, M.A., LL.B., house-surgeon.

E. E——, aged forty-four years. Had had an umbilical hernia for ten or fifteen years, often strangulated, but always reducible by taxis.

Oct. 24th, 1874.—At 11.30 A.M. the hernia became strangulated. At 5 P.M. Mr. Willett reduced a portion of the hernia by taxis, leaving what seemed to be thickened omentum. Symptoms were at once relieved.

25th.—12 noon: Hernia redescended during the night; she complained of pain at the hernia, and of sickness. Tumour was larger than on the previous day. A dark-coloured patch was noticed at umbilicus.

26th.—5 P.M.: Admitted to Casualty ward.—At 8 P.M. gangrene of covering of hernia had gradually extended. When under chloroform, Mr. Willett made a free opening into the sac, and found the contents of omentum and small intestine strangulated by the fibres of the linea alba, and part of it gangrenous and constricted, the result probably of the first strangulation. The stricture being relieved, the intestine was laid freely open, and the edges stitched to the sides of the wound. Pulse 120; temperature 101°. Subcutaneous injection of a quarter of a grain of acetate of morphia at night.

27th.—10 A.M.: Continuous retching; complexion dusky, areolæ under eyes; pupils rather contracted. Patient had slept well; had taken four ounces of brandy in water, one teacup of milk, and half an ounce of essence of beef. Ice and brandy kept down. Pulse 114; temperature 99°. Injection of a quarter of a grain of morphia. Tongue fairly clean and moist.—2.30 P.M.: Comfortable, and under the influence of morphia; tongue rather more furred; retched, but did not vomit. Pulse 108.—8.30 P.M.: Intestine was opened in a fresh place for escape of gas; essence of beef retained. Injection of a quarter of a grain of opium. Pulse 108; temperature 100°.

28th.—11.30 A.M.: Hands cool; patient very excited and asks for brandy; is in no pain; passes her water; fæces and gas escape from false anus; tongue moist, white fur. Had a pint and a half of milk with two ounces of brandy during the night; all vomited. In the morning had half a pint of milk with five ounces of brandy, but all was vomited. Pulse 100; temperature 98·4°. Subcutaneous injection of a quarter of a grain of acetate of morphia.—8.45 P.M.: Not sick since 11.30 A M. Had half a pint of beef essence, one ounce of brandy, and a pint of milk for dinner. Had four ounces of beef essence for tea. Pulse 108; temperature 98·2°.—11.45 P.M.: Tongue clean; no vomiting. Pulse 114; temperature 98·3°.

29th.—Morning: Slept fairly well; retched slightly, but did not vomit. Had half a pint of milk and one ounce of brandy. Pulse 100; temperature 98·4°.—3.30 P.M.: Pulse 100; temperature 98·4°.—Evening: Slight pain in right iliac fossa, which went away when she was moved; liquid fæces and gas escaped from false anus; vomited forcibly. Had a pint and a half of beef essence, two pints of milk, and three ounces and a half of brandy. Pulse 110; temperature 99·6°. A quarter of a grain of acetate of morphia subcutaneously.

30th.—Morning: No vomiting since last night; tongue clean and moist. Pulse 114; temperature 101·1°.—11.30 A.M.: Had half a pint of essence of beef, half a pint of milk, and one ounce of brandy during the night; half a pint of milk since 8 A.M. Pulse 118; temperature 101°. Had a quarter of a grain of acetate of morphia subcutaneously.—3 P.M.: Began to vomit. Charcoal poultice put to wound.—3.30 P.M.: A quarter of a grain of acetate of morphia subcutaneously. Midnight: Vomited some essence since 7 P.M.; pulse intermittent about four times per minute. Pulse 121; temperature 101·2°.

31st.—Morning: Did not sleep all night; vomited everything.—9 30 A.M.: Pulse 128; temperature 101°. Had a third of a grain of acetate of morphia.—1.30 P.M.: Slept about three hours; has taken nothing; vomited little; fæces pass from aperture. Pulse 144; temperature 100·5°.—11.45 A.M.: Tongue covered with brown fur and rather dry, especially at tip; has been spitting sharply with tight lips about three times per minute; feels very weak, but has no pain. Had half a pint of milk with ice, and four ounces of brandy, but vomited all, also three cups of tea. Pulse not to be counted for rapidity; temperature 100·7°. Acetate of morphia five-twelfths of a grain.

Nov. 1st.—Died at 1 A.M.

Autopsy.—Abdominal parietes from above umbilicus to the pubes, and for some distance laterally, were greatly swollen, infiltrated, and congested; omentum and large knuckles of small intestine projecting from the wound were gangrenous; there were offensive gases and much opaque fetid fluid in the peritoneal cavity. The brain was not examined. The other organs were healthy.

ROYAL INFIRMARY, EDINBURGH.

TWO CASES OF AMPUTATION THROUGH THE HIP-JOINT; RECOVERY.

(Under the care of Prof. SPENCE.)

FOR the following notes we are indebted to Mr. J. Allan Gray, M.A.

CASE 1. *Morbus coxæ; excision; amputation; recovery.*—Thomas H——, aged twenty, a clerk, was admitted into Ward 13 on Sept. 24th, 1874. The history records a series of abscesses near the hip-joint on two different occasions: once at the age of ten, when he had injured his hip by a fall; and again five years ago, when convalescing from relapsing fever. Last May he had an attack of hæmoptysis.

On admission he was seen to be a delicate, anæmic-looking young man, emaciated to the last degree, and suffering evidently from advanced morbus coxarius — a diagnosis which examination confirmed. He was ordered wine and a ferruginous tonic; the sinuses at the hip to be dressed with lotion of chlorinated soda, and extension apparatus to be applied. At first he seemed to improve rapidly, due no doubt to the altered regimen and rest; and after residence for five weeks in hospital he was so much better as to be deemed fit for operation. The joint was accordingly excised on Oct. 29th. For a time he did well, but the discharge was always free, and often fetid; his health, however, remained wonderfully good, notwithstanding the great strain. On Nov. 17th he had a slight attack of pleurisy, and on Dec. 20th examination with the probe showed a piece of dead bone yet to separate. About this time he began to complain of pain in the region of the liver, which was seen to be greatly enlarged, and was most probably affected with amyloid degeneration. For this, counter-irritation with tincture of iodine was applied every second day, and seemed to do some good. On Jan. 28th a small piece of bone which was pressing on the cicatrix of the excision wound was snipped off. But during all this time the discharge was very free, and the patient seemed to lose ground. This state of matters continued, and on April 3rd half an inch of the upper end of the femur and some loose necrosed portions of bone were removed. After this the patient appeared to be sinking fast, and, as a last resource, amputation at the hip-joint was had recourse to.

April 13th.—Pulse 84; temperature 99°; urine still with a trace of albumen. To-day Prof. Spence amputated the limb at the hip-joint. The patient having been placed under chloroform, Esmarch's (flat) elastic bandage was applied tightly to the limb from the foot upwards, so as to extrude all blood from the part. An india-rubber band was next brought round the thigh, immediately below the pelvis, drawn tight, and secured by being again passed round the limb and tied. The flat roller was then removed. Mr. Annandale now compressed the femoral at the pelvic brim, while Prof. Spence transfixed the limb and cut the anterior flap by the usual method. This he gave in charge to Dr. Duncan. The posterior flap was next cut, so as to have for one of its margins the incision made on the 29th October last for the removal of the head of the femur. The femoral artery was immediately tied and the other arteries secured. A small projecting necrosed portion of the acetabulum was then removed with bone-pliers, and the surface of the flaps, especially where the remains of sinuses were observable, washed with a solution of chloride of zinc (twenty grains to an ounce of water). The flaps were then brought together along the margins by silver-wire sutures, the extremities being left free for drainage. A pad of lint was laid along each edge of the wound, a fold of boracic lint over its surface, and the whole secured with a broad flannel bandage around the pelvis.

Though the patient lost little blood, yet towards the end of the operation his pulse became very weak. On this indication ether was substituted for chloroform as an anæsthetic, and an enema of brandy-and-water given, which had the effect of strengthening the pulse. The enema was repeated on the patient being put in bed, and champagne and brandy-and-water ordered in frequent small doses.

14th.—Morning: pulse 110; temperature 100°. Evening: pulse 112; temperature 100°. Slept a little through the night, and does not complain of much pain. Takes beef-tea and milk.

15th.—Morning: pulse 118; temperature 101·6. Evening: pulse 112; temperature 99°. Urine of sp. gr. 1012, with a trace of albumen.

19th.—Pulse has never been above 120, nor temperature above 99·6°, since the 15th inst. The stump looks well; a part towards the inner aspect has healed by first intention, and the discharge is decreasing. Patient is looking and feeling better than before the operation; sleeps well now, and takes his food. The urine still contains a trace of albumen.

30th.—Patient improving in every way. Temperature has been normal since the 19th instant, and continues so. Appetite good. The wound has healed with the exception of a small point in the centre of the incision, through which some discharge comes, and that part of the posterior flap which was formed of a previous incision. The latter, however, is healing well by granulation. Urine yet contains a trace of albumen, and liver dulness remains much as before.

May 27th.—Stump looking better, and patient much stronger. Urine slightly albuminous. Sent to Convalescent House.

Oct. 8th.—Patient's health since his discharge has continued good. Wound is now healed.

CASE 2.—*Chronic necrosis of femur; amputation through hip-joint; recovery.*—Lilian S——, aged nine, was admitted to Ward 15, on 10th July, 1874, suffering from necrosis of femur and fibula. On admission, the leg was found flexed on the thigh from the contraction of the hamstring tendons, and the signs of extensive necrosis of the femur were abundantly observable. Patient remained in the ward until 20th January, 1875, when she was dismissed to the Convalescent House. During this time several pieces of dead bone were removed—one a sequestrum three inches long—and the wounds were dressed with chlorinated soda or dilute carbolic lotion, the patient meanwhile taking internally small doses of steel drops and dilute phosphoric acid. On 17th February she returned from the Convalescent House, and had the hamstring muscles divided, so as to straighten the limb. Dismissed again on 4th March, and admitted once more on July 26th with the thigh in a state much as formerly. Examination with the gunshot probe showed a large amount of dead bone still to separate. The necrosis, besides being extensive along the shaft of the femur, implicated the great trochanter. Amputation at the hip-joint was accordingly determined on as a last resource; for the general health, although never very good, had lately been failing.

Aug. 3rd.—The limb was amputated at the hip-joint by anterior and posterior flaps. The femoral and profunda arteries were secured with silk ligatures.

Since the operation patient has never had a bad symptom. The ligatures came away on the 17th August without any hæmorrhage.

Oct. 1st.—Patient is now able to walk about on crutches, and is in health much better than before the operation.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

CASE OF OVARIAN TUMOUR SIMULATING EXTRA-UTERINE PREGNANCY, WITH COMPLETE EXTRUSION OF UTERUS AND BLADDER; SUCCESSFUL OVARIOTOMY AND CURE OF THE EXTRUSION.

(Under the care of Mr. LAWSON TAIT.)

H. L——, a handsome brunette, aged eighteen, had menstruated regularly from the age of thirteen until twelve months ago, when the catamenia suddenly ceased, and the abdomen began to enlarge. In February last she was seen by several practitioners, who all pronounced her to be pregnant, and in a letter from one of them it is stated that she had morning sickness, irritability of the bladder, darkened areolæ, and that the writer was positive he had felt movements and heard the fœtal heart. At the end of June she had what seemed to be the expulsive pains of labour; but, as the uterus was found to be virginal, and to be completely extruded from the vulva, it was supposed that the pregnancy was extra-uterine. In the beginning of July she consulted Mr. Tait, who diagnosed an ovarian tumour, multicystic, and advised its removal. Between his first and second visits one of her attendants communicated the facts of the history given above, and they were enough to make Mr. Tait hesitate in his opinion, until he had examined her under ether. The more complete examination confirmed his previous opinion, and on August 18th he removed the tumour. The cysts were so numerous that the mass was practically solid. The pedicle was very long, broad, and triangular in shape, extending from the cæcum upwards and inwards to the tumour, and downwards and inwards to the extruded uterus. In order to cure the displacement of the pelvic organs at the same time that the tumour was removed, Mr. Tait pulled the inner part of the pedicle as far up as he could, and clamped it close to the right ureter.

The patient recovered without a single bad symptom, began to menstruate on the 5th of September, ceased on the 9th, and went home on the 10th with the uterus and bladder in their normal positions.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THIS Society met for the first time this session on Tuesday, the 19th inst.; the chair being filled by the President, Mr. George Pollock. At the commencement of the proceedings the President laid upon the table a copy of the new volume (No. 26) of the Society's Transactions, remarking upon the difference in bulk between that volume and the first issued by the Society. The specimens brought forward were, many of them, of striking interest and rarity.

Dr. CAYLEY exhibited a specimen of Hydatid Cyst of the Liver, which burst into the lung. It was procured from the body of a man, aged thirty-two, who was sent to the London Fever Hospital as a case of typhoid. His illness was of seven weeks' duration. There was some dyspnœa, slight cough, pain in the right side, and dulness at the lower part of right back. Dr. Cayley, thinking the case to be one of circumscribed empyema, was on the point of performing paracentesis, when the patient coughed up numerous hydatid vesicles. Puncture was then made in the posterior axillary line, and two pints of turbid yellow fluid, containing cysts, were drawn off. The hydatid expectoration, however, continued; and in spite of further attempts at complete evacuation, including the introduction of a drainage-tube and injection of water, the patient died suddenly, suffocated by hydatids. There was found a large hydatid cyst in the upper part of the liver, communicating with a cavity in the base of the lung; the bronchi and trachea were plugged with hydatid vesicles, a number of which were still contained in the mother cyst in the liver. The intestines were normal. Two years before his death the patient had been treated for enlargement of the liver; and on the present occasion the extension of hepatic dulness was ascribed to depression of the organ from the supposed empyema.—Mr. MAUNDER inquired whether the admission of air into the cyst had led to decomposition, or to any injurious effects to which death might be ascribed. — Dr. CAYLEY replied in the negative; and stated that death was due to the blocking of the air-passages by the vesicles.

Dr. PEACOCK showed specimens of the Skin and Supra-renal Capsules from a case of Addison's disease. The patient, a female, presented in a marked degree the constitutional symptoms of the affection. She suffered from dyspepsia and vomiting, and died somewhat suddenly from asthenia. The skin was markedly bronzed, the pigmentation being most marked in the axillæ, areolæ of nipples, &c. She had always had a dark complexion, and two years before had suffered from general eczema. There was marked pigmentation of the buccal mucous membrane. On post-mortem examination, beyond two cretified nodules at the apex of one lung, with fibroid thickening of the pleura, and adhesion of the liver to diaphragm, there was no disease found save in the supra-renal capsules, both of which presented the characteristic changes in a fairly advanced condition.—Dr. GREENFIELD, who had made the examination, supplemented Dr. Peacock's account by some valuable remarks. The microscopical appearances of the diseased capsules confirmed those of previous observers. He remarked further upon the extensive adhesions, of a firm fibrous character, involving the whole of the abdominal viscera; and in this case, as in another which he had seen, he met with fine glistening pearly nodules in the peritoneal adhesions. This fibrous thickening and adhesion in the vicinity of the capsules had been insisted on by Dr. Greenhow as a very constant morbid appearance. The right capsule was firmly adherent to the liver. The spleen was large and tough. The pigmentation of the tongue was peculiar, in occurring in patches on the surface of the organ, leaving the papillæ free, the exact converse of what had been found in the other case he had seen.

Dr. PEACOCK also showed a specimen of Ulceration of the Stomach from a man, forty-two years of age, of intemperate habits, who, five weeks before admission, had swallowed a tablespoonful of sulphuric acid. He suffered from severe attacks of vomiting of dark, grumous matter, and a curious feature in the case was the appearance of a firm tumour in the epigastrium, which receded at every attack of vomiting. The tumour was probably due to spasmodic constriction of the stomach. The man lived for three weeks, and died of exhaustion. Widespread ulceration of stomach and constricted pylorus were found.

Dr. PEACOCK further exhibited a specimen of Congenital Disease of the Aortic Valves, taken from a girl twelve years of age, who, during life, had presented the symptoms of aortic regurgitation and obstruction, and of slight mitral constriction. She suffered much from vomiting, had a very low temperature (not often above 95°), and was twice tapped for ascites. She died dropsical. There were only two aortic valves, about equal in size, one of them being retroverted and showing the remains of the raphé on its aortic surface. There could be no doubt that this condition was congenital. There was no history of rheumatic fever. In answer to the President Dr. Peacock stated that the symptoms came on gradually.—Dr. GREENFIELD said, in confirmation of Dr. Peacock's view of the case, that the patient had been under his observation for several years, and throughout the disease had run a chronic but slowly progressive course.—Dr. PEACOCK added that at first he thought the condition might be ascribed to intra-uterine endocarditis, but from the frequency with which it occurred together with the absence of any rheumatic history in many cases, he had come to the conclusion that it was due to arrest of development.

Dr. DOWSE showed a specimen of recent Hæmorrhage into the Pons Varolii and Fourth Ventricle, from an old woman who had suffered from left hemiplegia for two years. When seen she was seized with an attack of right-sided convulsions, became profoundly comatose, with contracted pupils, facial palsy (right), &c. There was found subarachnoid hæmorrhage over cerebellum; and a large clot involving both halves of the pons, which had ruptured on the left side. Traces of old hæmorrhage were found in the grey matter of the right cerebral hemisphere.

Dr. DOWSE also brought forward a specimen of Subarachnoid Hæmorrhage of the Spinal Cord, which occurred in a man aged fifty, who, after a convulsive seizure, had recovered to a slight extent, when he was attacked with general convulsions, and fell into a semi-comatose state, marked by muttering delirium and subsultus tendinum. There was marked paraplegia, while the upper limbs were paralysed and rigid. The lower limbs were hyperæsthetic, reflex excitability being increased. He died comatose within thirty-six hours. There was great vascularity of the cerebral pia mater, with subarachnoid effusion over the posterior lobes, the anterior lobes being free from extravasation. There was subarachnoid hæmorrhage down the whole length of the cord. The source of the hæmorrhage was probably miliary aneurisms.

Dr. DOWSE showed a specimen of Thrombosis of the Internal Carotids, taken from a woman aged sixty-six, in whom the symptoms, when first seen, were semi-coma, aphasia, perfect paralysis of right arm, imperfect of right leg, hyperalgia and hyperæsthesia of both limbs; no marked facial palsy. Ten days after this attack, while the right arm was still paralysed, the patient was seized with left hemiplegia, and died comatose. The brain was remarkably anæmic, with the exception of the anterior half of the right hemisphere, which was of a pink colour, and on section points of softening were found in the second and third frontal convolutions (left), while the right half of the brain was congested. Both internal carotid arteries were plugged. He could not explain the reason of the anæmia of the left and congestion of the right half of the brain.

Mr. BUTLIN showed a specimen (illustrated by some beautiful drawings and microscopical sections) of Colloid Carcinoma of the Breast, removed by Mr. Savory from a female forty-three years of age. The tumour, which was of the size of a small egg, had been growing for one year. On removal it was of firmer consistence than usual with colloid tumours. The microscopical characters were those of typical colloid cancer.

Dr. GREENFIELD brought forward a remarkable case of Aneurism of the Anterior Communicating Artery of the Brain. The patient, a bricklayer, aged forty-five, fell fifteen feet from a scaffold, was picked up insensible, and brought to hospital on May 31st suffering from cerebral concussion. There was inability to stand, but no loss of motion or sensation in lower extremities; fracture of left innominate bone was discovered. Was going on well, when on June 8th he died suddenly in a fit. At the autopsy, beyond a scalp wound there was no injury to the head. A small quantity of blood was found beneath the arachnoid at base of brain, which was completely covered by blood and clot, surrounding medulla and upper part of cord, and filling the fourth ventricle. There was slight atheroma of the internal carotids, middle and posterior cerebrals and their branches. The anterior cerebrals were rigid; lying between them, just in front of the anterior communicating artery, was a small aneurismal sac the size of a sweet pea. It sprang from the inferior and anterior aspect of the vessel and contained firm clot. It was partly adherent to the two anterior cerebral arteries, and in its upper aspect its wall, which was very thin, was perforated by an aperture one-twelfth of an inch in diameter. Dr. Greenfield remarked that probably the hæmorrhage occurred at three or four different periods, and that it was one of these attacks that caused the man to fall from the scaffold. The quantity of firm clot at base of brain favoured this view. Aneurism in this region was extremely rare. He had only found one case on record—viz., by Dr. M'Dowall, in THE LANCET for August 7th, 1875, in which, however, the aneurism produced no symptoms. It was also of interest in a medico-legal aspect, since it was a question whether the patient's death was due to the fall from the scaffold. Probably he fell because of a fit due to the first rupture of the sac.—Dr. SEMPLE alluded to a case of aneurism of the basilar artery, which he had recorded in the Society's Transactions for 1870.

Dr. GREENFIELD also brought forward a case of Tumour of the Left Anterior Cerebral Artery, leading to thrombosis in that vessel. The patient, a sailor, thirty-seven years of age, was admitted with left hemiplegia, and paresis of right limbs. He died after a fortnight's stay in hospital, during which time he had some convulsive seizures, and some palsy of left third nerve. There was found softening of the anterior part of the left corpus striatum, with thrombosis of the anterior cerebral artery, and of a branch from that vessel supplying (in place of the middle cerebral) the softened part. On the anterior cerebral artery, close to the origin of the anterior communicating, was a small rounded nodule, the size of a pea, closely adherent to the wall of the artery, which it appeared to surround, but projecting upwards and forwards, and slightly compressing the left optic nerve, close to the chiasma. No sign of softening in ganglia or in other parts of right hemisphere.

Dr. HILTON FAGGE showed a recent specimen of Ulceration of the Larynx in Typhoid Fever. The patient was a sailor, twenty-three years of age, who was taken ill on board ship with enteric fever. There was a copious eruption of rose spots, diarrhœa, high temperature, and much bronchitis. His voice was hoarse and throat sore, and latterly he had had dysphagia. In the intestines there were only two small points of ecchymosis, as if from recent ulceration, in the ileum, and Peyer's patches were indistinct. The mesenteric glands, however, were all red and swollen. The spleen was not enlarged and was firm. The lungs were emphysematous, but not engorged. There was extensive laryngeal mischief, the right arytenoid cartilage being exposed by a deep ulcer containing unhealthy pus; there was also linear ulceration on each vocal cord and along the margin of the epiglottis. The gall-bladder contained no bile, only a thin mucous fluid, while the cystic duct was free from bile-staining. Dr. Fagge remarked upon the extensive amount of ulceration in the larynx and the slight degree of intestinal disease, the latter in strong contrast with the considerable extent of the change in the mesenteric glands. The absence of bile in the gall-bladder in cases of fever might, he thought, be explained by the patient's being fed at small intervals, so that, there being a constant need for bile, the function of the gall-bladder was superseded.

Dr. COUPLAND brought forward recent specimens of Organs from a case of Infantile Syphilis. They comprised the liver, heart, and lung from an infant three months of age, who was brought to hospital moribund, having been in good health to within three hours of death. At the autopsy there was found general interstitial myocarditis, the heart being square-shaped, its walls thick, firm, and very pale. A large gummatous tumour occupied nearly the whole of the left lobe of the liver, and extended for three inches into the right lobe; other nodules also existed on the liver. The mass was of a yellow colour, firm, and semi-translucent; no capsular thickening. In the right lung was a similar firm yellow nodule, the size of a large pea. Dr. Coupland remarked upon the interest of the case. 1st. From the mode of death and the widespread visceral disease, without interference with the health of the child, which was plump and well nourished. 2nd. The existence of syphilitic infiltration of the heart, rare enough in adults, but much rarer in infantile syphilis. 3rd. The large size of the gumma in the liver, a diffuse cirrhotic change being the usual form of hepatic disease in congenital syphilis. He had made a preliminary microscopic examination, but, on the invitation of the President, he deferred a full account to the next meeting of the Society.

The meeting then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on Wednesday, October 6th, Dr. Playfair, Vice-president, in the chair, Edward Chaffers, F.R.C.S. (Keighley), and Amos Rogers, L.R.C.P. Ed., were elected Fellows of the Society. Before entering upon the ordinary business of the evening, Dr. PLAYFAIR alluded to the loss sustained by the Society by the death of its honorary president, the late Sir Charles Locock, who had rendered valuable aid to the Society when it was first formed, by accepting the Presidency, and taking a special interest in furthering the aims of the Society. He announced that the unanimous feeling of the Council was in favour of asking Dr. Arthur Farre to accept the vacant post, which was received with acclamation by the Fellows present.

Dr. GERVIS exhibited a Pessary which had been removed from a patient fifty-six years of age. Fifteen years previously it had been introduced into the vagina to relieve prolapsus of the womb. Four years ago she began to feel a weakness in the lower back. Two years ago her legs became weak, and she was unable to walk without assistance. For six months she has been nearly bedridden. For the last six months she has had discharge from the vagina, occasionally tinged with blood, and highly offensive. She can neither stand nor walk, and is able to move her legs in bed with difficulty, being attacked two or three times during the night with cramp in them. On examination, a large round metallic pessary was found imbedded in the vaginal walls, and was removed by the aid of bone forceps, a considerable quantity of brownish purulent discharge, horribly offensive, escaping. All the paralytic symptoms were relieved after its removal.—Dr. CLEVELAND remarked that, apart from the interest attaching to the long impaction of a foreign body in the vagina, there was the notable fact that a quantity of highly offensive putrid matter must have been locked up for a considerable time without the supervention of septicæmia. The case tended to show, in connexion with the recent debate before the Society, the necessity for the co-existence of some peculiar condition of the general system before absorption of morbid matter, followed by blood-poisoning, could be effected.—Dr. BANTOCK had met with a similar case to that given by Dr. Gervis, the pessary being oval in shape, and composed of horsehair covered by india-rubber.—Dr. ROGERS referred to a case he had before mentioned to the Society, of a black boxwood pessary which had been left in eighteen years and had been forgotten by the patient.—Dr. EDIS also alluded to a similar case he had brought before the Society, where a large oval pessary, the size of a goose's egg, had been left in the vagina for eleven years, the case having been supposed to be cancer.—Dr. PLAYFAIR thought the archaic instruments would soon be out of use. Most of us had seen them. He wondered why the ulceration had not extended into the bladder and rectum. As regards Dr. Cleveland's remark, he (Dr. Playfair) had noticed that fetid matter of intense virulence might be present, provided there was an absence of an absorptive surface of a freshly formed wound.—Dr. GERVIS, in reply, stated that in removing the pessary a slight laceration took place. The fetid fluid passed over it, and yet there was no septicæmia.

Dr. HAYES exhibited a Placenta and Stillborn Fœtus from a patient aged twenty-two affected with syphilis. The placenta was pallid, soft, and friable, the villi packed with fat-globules. The fœtus appeared healthy. There were two questions involved in explanation of the death of the fœtus—whether it resulted from syphilis or from fatty degeneration of the placenta.

A report by Drs. Aveling and Hayes on Mr. Wallace's case of Monstrosity was read, as also on a specimen exhibited at a previous meeting.

A case of Complete Inversion of the Uterus, occurring immediately after labour, was communicated by Mr. FREDERICK H. GERVIS. The patient, aged forty-one, was delivered of her sixth child after a slow and tedious labour. The placenta was adherent. After waiting twenty minutes, it was felt projecting through the os, and was gently drawn down, when the uterus was found to be inverted. The placenta was immediately peeled off. The hæmorrhage was slight, but nevertheless the patient was found to be in a state of syncope, and apparently dying. Brandy and ammonia were administered, and after the patient had rallied somewhat, the inversion was reduced, counter-pressure being applied externally to the cervical ring. Galvanism was applied to contract the uterus after its return. The patient recovered perfectly.—Dr. GALTON remarked that the mode of reduction mentioned by the author, although successful in this case, was one hardly to be recommended for general adoption. The author described the reduction as effected by pressing two or three fingers up into the fundus of the uterus. This plan would necessitate the passage of four folds of uterine tissue through the os instead of two folds which would alone require to be passed through were the reduction accomplished by the more mechanically correct and usually recommended method of grasping the whole body and returning first the part latest in coming down.—Dr. GRIGG inquired whether there were any severe cramps and pains in the thighs as well as shock. He remembered a case in his own practice where the uterus came down with the greatest ease without any traction having been exerted.—Dr. BANTOCK thought the treatment was confirmed by the result. He did not agree with the preceding speaker (Dr. Galton) in thinking that the uterus was doubled up by pressing on the fundus, for we were told that the body of the uterus felt hard. It appeared to him that the reduction began at the cervix.—Mr. GERVIS explained that the uterus was exceedingly rigid and hard, and it was difficult to get a fold of the uterus. Whether the fundus or the cervix went up first he did not know. In a previous confinement she had had severe cramps.—Dr. CLEVELAND thought the whole question of inversion of the uterus of such an important character that he hoped he might be excused for inquiring more minutely as to the amount of traction on the cord that had been used. He could conceive that, owing to the administration of ergot before the expulsion of the placenta, especially if it happened to be adherent, the uterus might take on that irregular and spasmodic action which, with only moderate traction on the cord, might eventuate in inversion. He did not, however, for a moment doubt that Mr. Gervis would satisfactorily answer his question.—Dr. GERVIS remarked, with reference to Dr. Cleveland's suggestion as to the production of inversion, that so accurate an observer as Dr. Tyler Smith had in one instance seen the uterus invert itself, and it was now generally allowed that this accident could arise quite independently of traction. He would like to ask whether any Fellow present had ever seen the inverted uterus re-invert itself. He had read recently of such a case, but imagined it must be, at all events, an occurrence of extreme rarity.—Dr. HAYES observed that when we consider what difficulty sometimes occurs in getting the placenta away, the cord giving way first, it was scarcely probable that Mr. Gervis could have excited sufficient traction to produce the inversion.—Dr. AVELING remarked that inversion may be caused by *vis a tergo*, and even post mortem from the development of gas in the abdomen.—Dr. GRIGG mentioned a case occurring five days after labour where no ergot had been given.—Dr. ROGERS had only seen one case, which he replaced by means of an air pessary. He thought Mr. Gervis's plan was the best.—Dr. GERVIS referred to a case reported in one of the early volumes of the Transactions where the uterus had reinverted itself.—Dr. WILTSHIRE admired the courage and candour of Mr. Gervis in bringing forward his case. After fifteen years' experience in practice he would scarcely use immoderate traction; still the process of inversion might have been commenced before. It was a question whether it was not better to peel off and not to pull. We ought to be much indebted to Mr. Gervis for bringing the case forward.

Dr. GALABIN read a paper "On the Occurrence in Normal Labour of Lateral Obliquity of the Fœtal Head." After entering into the views formerly accepted that there is normally a lateral obliquity of the fœtal head to the plane of the pelvic brim, he asserted his belief that the conclusion indicated by theory is confirmed by observation—namely, that in easy labours there is no perceptible lateral obliquity, but that if the head meets with considerable resistance, an obliquity is produced in most cases of such a kind that the right parietal bone lies deepest in the plane of the brim.—Dr. Playfair thought the Society was very much indebted to Dr. Galabin for his erudite paper. The point at issue was one of great interest, and he had failed to satisfy himself whether Dr. Galabin's suggestions were sufficient. He (Dr. Galabin) had neglected to mention a very elaborate treatise on the subject by Dr. Hodge, who had given much attention to the subject.—Dr. Gervis quite concurred in all the President had said as to the value of Dr. Galabin's paper. It was, however, difficult to discuss such a paper without reading as well as listening to it. It would appear to favour the opinion that there was no necessary contradiction between the two opposite views, but that obliquity of the head, depending upon some undue pelvic resistance, was essentially a character of a labour in some degree abnormal, while in perfectly normal labour, the equilibrium between the propulsive force and the resistance of the parturient passages being, as Dr. Galabin expressed it, stable, obliquity did not occur. If further research proved this view accurate, it would account for much of the present dissonance of opinion.—Dr. Galabin thanked the Society for their patient attention.

Dr. J. Braxton Hicks read a paper "On a Dissection of a Uterus pregnant about three months and a half," the placenta being prævia, and fibroids extensively developed in the uterine walls. Attention was directed to three points:—1. Whether there were a circular sinus at the margin of the placenta? 2. The distribution of the curling arteries in the decidua serotina. 3. Whether there was any change induced by pregnancy in the fibroma. The first was doubtful, and is a point yet to be carefully examined. As regards the second, the decidual processes, consequently the separation into lobules, commence later than the third and a half month; there is no proof that any branch from the supplying vessels of the serotina passes into the intervillar space. As to the third point, the fibres were about four times larger than in the ordinary fibroma, very much more distinct and separable from one another. A few had attained the size of the colossal fibre of the ordinary pregnant uterus.—Dr. Edis observed that if the fibres in the fibroma increased during pregnancy, there was no reason why they should not equally be involved in the process of involution following parturition, the same as with the ordinary uterine fibres.

MEDICAL SOCIETY OF LONDON.

This Society commenced its session by a meeting on the 18th inst., Dr. Routh, President, in the chair. There was a large attendance of the Fellows and their friends.

Mr. Henry Smith exhibited a young man on whom he had successfully operated by Sir W. Fergusson's method for a Cleft in the Hard and Soft Palates. After a few congratulatory remarks by Mr. Bryant and Mr. Oakley Coles, the latter gentleman having made an artificial palate for a patient some years ago, where he imagined surgical interference impossible,

The President read a paper "On Hyperpyrexia," viewed especially in its surgical aspects. After a few preliminary remarks, five cases were given, two fatal, and three in which recovery took place. The fatal cases were one of ovariotomy and one of menorrhagia. In the latter a large and three small intra-uterine polypi were removed, and subsequently the case was complicated by the formation of a clot in the heart. The non-fatal cases comprised two of fibroid of the uterus, in one of which the galvanic cautery was applied, and in the other gastrotomy was performed; and one of menorrhagia, in which an abscess at last formed between the rectum and the vagina. These cases were illustrated by charts showing the high temperature attained in the axilla, the mouth, and the vagina; and Dr. Routh entered fully into the methods of treatment employed, strongly advocating and demonstrating the efficacy of the use of the ice-cold bath to reduce temperature, as deduced from the careful study of the above cases.—An animated discussion took place, in which Mr. Maunder, Dr. Thudichum, Dr. Rogers, Dr. Day, Dr. Broadbent, Dr. Theodore Williams, Mr. Jabez Hogg, and Dr. Evans took part, the speakers, with the exception of Dr. Thudichum, all concurring in the President's views.—After Dr. Routh had said a few words in reply, the meeting adjourned.

Reviews and Notices of Books.

The Journal of Anatomy and Physiology. Conducted by Professors Humphry, Turner, Foster, and Rutherford. Vol. X., Part 1. October, 1875. pp. 222. London: Macmillan and Co.

The present part of this valuable periodical is issued, as our readers will see, under new management, the Professors of Anatomy in Cambridge and Edinburgh having associated with them the Prælector of Physiology in Cambridge, and the Professor of the Institutes of Medicine in Edinburgh. As the only journal in this country purely devoted to biological science, it should receive the support of all workers in this country. Amongst other papers, all of which are interesting, the following may be particularly noticed:—1. "On the Primary Vascular Dilatation in Acute Inflammation," by Francis Darwin. In this the author describes the effects observed in the early stages of inflammation, and maintains, in accordance with the view which is supported by Schiff, Vulpian, and others, that the primary dilatation and secondary contraction are due, not to any direct action upon the vessels of the stimulants used to excite inflammation, but to the action of the agent on the vaso-motor nerves. These, however, include both inhibitory and constrictor fibres, and the condition of the vessel at any moment depends on the preponderating influence of one or other of these sets of vessels. 2. Mr. F. M. Balfour gives an account of the Origin and History of the Urino-genital Organs of Vertebrates, which throws much new light on the complicated questions of the origin of the kidneys, testes, and ovaries, and of the oviducts, vasa deferentia, and ureters. This paper is particularly fully and interestingly worked up, and contains the results of much personal observation. 3. Dr. Ogston communicates the results of his observations on Articular Cartilage, which are illustrated by six plates; and shows that the articular cartilages, on the one hand, are being constantly worn down and as constantly renewed on the surfaces which play upon each other; and, on the other hand, are constantly producing new bone to replace the losses, resulting from pressure on the spongy tissue of the articular extremities. This new bone is developed from the ossification of medullary substance, which is in its turn derived from the original cell columns of the cartilage. Dr. Ogston then proceeds to consider the changes that occur in cartilage under pathological conditions, in which he takes occasion to notice that the views of Cohnheim and others on the changes occurring in inflammation, however widely applicable they may be to vascular structures, have little or no bearing on this process in cartilage, and that we are in some danger of ignoring the minute investigations of Goodsir and Virchow on cell-growth. The changes in scrofulous arthritis and chronic rheumatic arthritis are succinctly given. 4. A second paper on Hyaline Cartilage is contributed by Mr. E. Baber, which is chiefly occupied with the consideration of the possibility of effecting artificial fibrillation in it by the action of reagents. Mr. Baber concludes that such fibrillation can be effected. 5. An account of the Brain and Cranial Nerves, with notes of some of the Viscera, of the rare shark Echinorhinus spinosus, by H. Jackson and Bruce Clarke. 6. Professor Turner gives the substance of the three lectures delivered in the College of Surgeons in June last, which have already been reported in The Lancet. 7. Professor Rutherford describes the Freezing Microtome, a most useful addition to the physiological laboratory. Lastly, Mr. Langley describes the action of Jaborandi on the Heart. Dr. Stirling writes the Report on Physiology, and gives an account of a new method of preparing the skin for histological examination.

Gazzetta Medica di Roma, diretta dal Dottore Filippo Cerasi. Si pubblica da Ermanno Loescher, Roma. 1875.

Last summer the physicians and surgeons of Rome, whether attached to the medical schools or devoted to consulting practice, established a medical academy, the programme and first proceedings of which we noticed in The Lancet. The movement, however, for a corporate organisation of the medical work of the city and province could not be regarded as complete without the periodical publication of its results, and accordingly a journal was proposed, and has finally taken shape in the *Gazzetta Medica di Roma.*

The editor bears a name familiar to the world of medicine, and he has had small difficulty in forming a staff of efficient coadjutors. In his introductory remarks he promises a complete survey of the medical field, with an eye, however, to practice rather than theory. The inductive method will be rigorously observed in the recorded investigations, and, naturally enough, these will be contributed from Italian in preference to foreign sources. The discussions of the Roman Academy of Medicine will be fully reported, and reviews of the latest medical literature will keep the reader informed as to the progress of the healing art at home and abroad.

The contents of the first number include an original memoir by the editor, entitled "Physiological Experiments and Clinical Notes on the Polycarpus pinnatus, or so-called Jaborandi," in which he comes to the following conclusions:—1. That the jaborandi of Continho has an elective action on the salivary glands. 2. That it has a secondary action, but less constant and copious, upon the sudoriparous glands. 3. That it has a well-marked diuretic action. 4. That it produces no effect whatever on the circulation, nor on the generation of heat, nor (except in an unimportant degree) on the respiration. 5. That its action is most efficacious when it is injected into the veins. 6. That its after-effects are distinct debility, with an imperious thirst, directly proportioned to the action of the emunctories. These effects, however, are transitory, and soon disappear under restorative diet. This paper is followed by a surgical one from the competent pen of Dr. Filippo Scalzi, of the Ospedale della Consolazione; and that again by a series of well-chosen extracts from other Italian journals, and from the publications of French, German, English, and American schools—The Lancet being laid under special contribution. We wish our Roman contemporary all the success which may be anticipated from its highly promising start.

Quarterly Journal of Microscopical Science. Edited by Dr. Payne and Messrs. Lankester and Thiselton Dyer. No. LX. 1875.

This part contains several excellent papers. The first is by Mr. D. J. Hamilton, on Myelitis, in which he describes the best mode of preparing the cord for examination, and then proceeds to show that in various cases he examined the axis-cylinders had undergone profound alterations, apparently into myelin masses, whilst the cells were converted into molecular masses, which at a subsequent period underwent absorption. The neuroglia was less altered; the bloodvessels had given way, and blood was extravasated. 2. Dr. Macnab gives an abridged translation of Oscar Brefeld's account of the Life History of Penicillium, the most common of moulds. 3. Mr. Worthington Smith describes the resting spores of Peronospora infestans, the fungus causing the potato disease. 4. Dr. Klein gives a description of the Structure of the Spleen, which differs in many points from those of his predecessors. He finds muscular tissue in many of the trabeculæ. He misses the reticulum as generally described, and finds instead a honeycomb of membranes, which only when seen in profile have the appearance of fibres. He thinks the pulp-cells are nucleated buds of the general matrix, and are gradually separated to form lymphoid corpuscles, which are finally carried away by the blood-current. He supports Kölliker's statements in regard to the presence of peculiar multinuclear cells, and he holds, with W. Müller and Frey, that the venous radicles represent merely a labyrinth of spaces in the splenic parenchyma. 5. Dr. C. H. Golding Bird describes and figures a differential warm stage for the microscope of ingenious and useful construction. 6. Mr. Poole gives the details of a mode of double staining with hæmatoxylin and anilin. 7. Mr. J. McCarthy contributes some remarks on Spinal Ganglia and Nerve-fibres. 8. Dr. Klein supplies a note on a Pink-coloured Spirillum, obtained from the fæcal discharges of a patient suffering from enteric fever. Lastly, Mr. Darwin adds an interesting note on the Structure of the Proboscis of Ophideres fullonica, an orange-sucking moth. There is the usual Quarterly Chronicle of Microscopical Science, Proceedings of Microscopical Societies, &c.

STATE MEDICINE EXAMINATION AT CAMBRIDGE.

A list of the successful candidates at the late examination in State Medicine at Cambridge has just been published, and in which we notice the names of the following medical officers of health:—P. Hinckes Bird, F.R.C.S., of Blackpool, Fleetwood, Lytham, and Poulton; T. Britton, M.D., of Halifax; S. Drew, M.D., of Wortley, Sheffield; G. H. Fosbroke, M.R.C.S., of the Rural and Urban Districts of Stratford-on-Avon, Evesham, and Alcester; C. Harrison, M.D., of Lincoln City and Rural District; S. T. Steele, L.R.C.P.E., of Todmorden Urban and Rural Districts, &c.; G. Turner, L.R.C.P.L., of Portsmouth; and A. S. Underhill, M.B., C.M., of Tipton Urban District, Staffordshire. The list also includes the names of A. Carpenter, M.D., J. Cunningham, C.M., A. Dunlop, M.D., B. N. Earle, M.B., W. M'Beath, M.D., H. H. Mason, M.R.C.S., J. Morison, M.D., E. Nicholson, M.R.C.S., H. H. Phillips, M.D., C. E. Saunders, M.D., and E. H. W. Swete, M.D., some of whom have, we believe, obtained appointments as medical officers of health since the beginning of the year.

The list of successful candidates in the examination above referred to was signed by G. E. Paget, A. W. Barclay, E. A. Parkes, and James Dewar, examiners.

Dr. Parkes was unfortunately unable to be present owing to an attack of sciatica, but we believe we are right in saying that the papers of candidates were forwarded to him. It must be gratifying to the University that its certificate has been sought by so many practitioners of credit in different parts of the country. We are able to say that much of the work of the candidates in the examination was very good, and that some of it was admirable. The "sanitary reports" were particularly good, and the great majority of them excellent.

The appearance of this list is most opportune at a time when Dr. Buchanan's address, delivered before the Association of Medical Officers of Health on Saturday last, has directed public and professional attention to the necessity for scientific qualifications in efficient medical officers of health.

The next examination in State Medicine at Cambridge will begin on Tuesday, June 13th. Any person whose name is on the Medical Register of the United Kingdom may present himself for it, provided he is twenty-four years of age. Information respecting the examination may be obtained by application to Professor Liveing, Cambridge.

THE LANCET.

LONDON: SATURDAY, OCTOBER 23, 1875.

Quite recently there have been in London several manifestations of a revival of the interest taken in Antiseptic Surgery. This is due partly to the powerful influence exerted by Mr. Lister's excellent articles on the recent improvements in the details of the system, and partly to the cogency of the appeals to facts made by Mr. Lister during the meetings of the British Medical Association; for it must be confessed that the demonstrations of antiseptic surgery to which we have so frequently referred, and a detailed account of which we published at the time, were both brilliant and highly satisfactory, even though they failed to convince many of the absolute indispensability of all the details of the plan. But this is a condition that the believers in the antiseptic system are apparently quite incapable of understanding. They are unable or unwilling to imagine that an observer of the antiseptic plan of dressing wounds may be perfectly satisfied with the results, though he may entirely repudiate the theory on which the method is based, or place little faith in the necessity of adopting every minute detail in the practical application. Happily, it is no part of the business of the clinical surgeon to bolster up theories, be they good or bad, or to make facts rigidly conform to them. The germ theory may be perfectly well founded; but nine surgeons out of ten do not care much whether it is or not, so long as they cure their cases and reduce their mortality to the lowest possible degree. Mr. Lister tells us that the air is, as it were, darkened with disease-producing germs; and that if we would ensure success we must destroy, not only all the germs in the atmosphere surrounding a wound, but also those that may have found their way into its recesses. Having thus secured an aseptic condition of the part, our care must, he states, henceforth be to preserve it so, by enveloping it with some antiseptic material. And it is on these grounds that he maintains every detail, from the spray producer to the aseptic instruments, is absolutely essential. But it is also on these grounds that his opponents join issue with him. They affirm, and the experience of most persons seems to bear them out, that they have seen cases do perfectly well, notwithstanding the freest admission of ordinary air with its accompanying germs, and where nothing but simple water has been used as a dressing. They urge, therefore, and not without some show of reason, that if all that Mr. Lister and his disciples allege be true, the successes, by no means unenviable, of the older surgeons must be looked upon as inexplicable phenomena—remarkable exceptions, especially as the sanitary condition of hospitals in those days was, as a rule, much inferior to that of modern hospitals. Less attention was paid to the personal hygiene of the patient, and certainly less care was exercised by surgeons, dressers, and nurses to prevent the introduction of organic poisons from the post-mortem room, the dissecting-room, or elsewhere, by means of the fingers, clothes, sponges, or dressings. If the antiseptic theory be true, how shall we account for the great success that, even in the present day, attends the practice of many surgeons who are well known never to employ the antiseptic mode of dressing? What explanation, for example, can be offered of Professor Spence's results in the Edinburgh Infirmary, the same institution, be it observed, in which Mr. Lister has had most of his triumphs? In his Address on Surgery, Mr. Spence stated that he had had, during three years, sixty-three major amputations for disease, with only three deaths, or 4·76 per cent.; and twenty-three cases of excision of the joints, with only two deaths, or about 8·7 per cent. These results were obtained "at a time when the treatment consisted in thoroughly cleansing the cut surface by pouring tepid water over it, and occasionally applying tincture of iodine, alone or diluted, on the flaps; whilst the dressing consisted merely in laying a veil of lint or thin muslin over the stumps." In addition to these numbers, two successful cases of amputation through the hip-joint for disease, recently performed by Mr. Spence, are this week recorded in the "Mirror of Hospital Practice," making in all sixty-five cases of major amputation, with only three deaths, or about 4·5 per cent.; whilst the average mortality in four metropolitan hospitals for major amputations for disease is, according to Mr. Erichsen, 27·4 per cent., and in University College Hospital 18·1 per cent., for forty-four cases. We have expressly taken Professor Spence's statistics as being exceptionally useful for purposes of comparison, the cases having been treated in the same institution at the same time that Mr. Lister was improving and elaborating his antiseptic plan. With such facts before us, surely we cannot be regarded as captious or unreasonable if we press Mr. Lister to declare, by means of statistics, his average success during the same period of three years. Has he had a lower mortality than 4·5 per cent. for major amputations for disease? But if he would make his case good, if he would justify the adoption of all the tedious and complicated details of his system, he must show even a lower mortality than that which has followed the employment of tepid water and thin muslin dressing.

This leads us to consider another important phase of this question. It is too commonly lost sight of that, since the late Sir Jas. Simpson sounded the alarm against large hospitals, special attention has been paid to the condition of general hospitals, and a widespread effort has been made to improve as far as possible the sanitary state of all the departments, but more especially the surgical. No precaution is now considered too trivial, and everything calculated to increase the healthiness of hospital wards or enhance the prospects of recovery is carefully attended to. Curiously enough, the antiseptic system has been contemporaneous with these improvements in the general management of hospitals, and it is more than probable that much of the credit due to increased care and cleanliness has been accorded to the antiseptic plan of dressing wounds. This statement is borne out by the fact that the antiseptic system has perhaps had its warmest advocates on the Continent. The eulogiums of some of the continental hospital surgeons have been extravagant. But no one acquainted with the filthy and neglected condition of many of the continental hospitals fifteen or twenty years ago, and even more recently than that, will be at a loss to understand why the mortality in these hospitals has so greatly diminished since the introduction of antiseptic surgery. Even the moderate use of clean water and the observance of the ordinary habits of personal cleanliness would have sufficed to reduce very considerably the frightful mortality in them. The testimony in favour of the antiseptic system given by surgeons who had hitherto been accustomed to an average mortality of 60 to 70 per cent. after surgical operations is not therefore of much special value, except so far as it shows what may really be done by attending to the ordinary rules of practical surgery.

There is yet another question which we trust will be thoroughly ventilated at this (Friday) evening's discussion on the antiseptic method at the Clinical Society. We refer to the employment of the drainage-tube. Experience has shown that the employment of the drainage-tube, first systematically recommended by Chassaignac, exercises a great influence on the progress of a case treated antiseptically. In fact, the drainage-tube has now come to be regarded almost as essential to success as the antiseptic preparations themselves. It remains to be proved what share the drainage-tube has in the success of the antiseptic system.

If the Clinical Society's discussion elicits answers to the following questions, it will serve a useful purpose:—Are the results of the antiseptic system better than those obtainable by other means? If they are better, are all the details in carrying out the method which are regarded as essential to success really necessary? If not, which may be safely dispensed with? What share has the employment of drainage-tubes in the success? And how much may be attributed to the extreme care, attention, and cleanliness that the antiseptic system imperatively demands?

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PERHAPS no derangement of organic function which finds no place in our text-books of the principles and practice of medicine causes a greater amount of suffering, and is more often a source of real danger to health and life, than sea-sickness. Perhaps also none, whether in or out of our text-books, has baffled more completely the best efforts of therapeutical science—efforts which have been practically, if not absolutely, without result. Old remedies have been tried and tried again. New remedies and new modes of administration have been employed, with little better result. Chloral, indeed, first suggested for the purpose by BODO and DÖRING, gives a certain degree of immunity from the unpleasant malady, but it is only by means of narcosis. Other methods of treatment have been useless or impracticable. Neither drugs nor other medicaments, hypodermic injections, ice to the back or faradisation to the front, have yielded results sufficiently satisfactory to suggest further employment. So at last the engineer has to step in, while we stand by and watch. Nor is the arrangement altogether an unreasonable one. It is but fair that it should be the office of mechanical science to prevent the evil of which mechanical force is the cause. And the success of the attempt is apparently considerable. The testimony of those who have taken part in a recent discussion of the subject, especially the letter of Mr. MARSHALL, leaves little doubt of this; and we may congratulate the projector of the *Castalia* in having shown the way in which, by physical means, the physical evil may be materially lessened.

Of more direct interest to us is the incidental discussion, to which the success of the *Castalia* has given rise, concerning the mechanism by which sea-sickness is produced. The statements on the subject by Mr. MARSHALL, Dr. P. BLACK, and Dr. CLAYE SHAW in *The Times*, and by Dr. WILKS in our own columns, show how much we have yet to learn before we can congratulate ourselves on understanding the effect of the peculiar motion of a ship upon the human frame. Respecting the remote cause of sea-sickness there is indeed a consensus of opinion. It is the vertical movement of the body which is the chief instrument in its production. Mr. MARSHALL pointed this out clearly in *The Times*, but it has always been the popular impression. In every movement of a ship at sea of which a person on board is sensible the upward and downward movements enter; every movement therefore may act as a cause of sea-sickness. The prevalent motion varies with the relation of the waves to the ship's direction, and with their size. The place of least motion in a ship will vary according to the direction of motion. A study of this is important to the indifferent sailor. Places are often chosen as the least exposed to risk which, though best in one form of movement, are worst in another. In a moderately rough sea, when the movement is a "pitch,"—an antero-posterior oscillation on the transverse axis of the ship,—the nearer to that axis the less is the motion, and there is far less on the bridge than at either end of the vessel. When the waves are larger, and a vertical lift and fall of the vessel is combined with the oscillation, vertical lift movement is felt equally in every place. It is a movement which can only be overcome by having a vessel disproportionately larger than the waves. The roll is (approximately) on the antero-posterior axis of the ship. The nearer to that axis the less the motion, and the bridge, which is furthest from that position, is the least quiet position.

It appears unquestionable, also, that the effect of the vertical motion in producing sea-sickness is related, to a certain extent, to the vertical position of the body. Sea-sickness is induced in the horizontal posture less readily than in the vertical. But it *is* produced in the horizontal position, and therefore no absolute effect can be attributed to posture. Moreover, many animals are readily made sea-sick the posture of which is not vertical. An elephant crossing between Boulogne and Folkestone the other day was fearfully distressed, and dogs are not unfrequently sick when crossing the Channel.

Exclusive stress must not, however, be laid on the vertical direction of the motion, because it is impossible to separate sea-sickness from other similar disturbances of nervous and gastric functions which occur in susceptible persons in other conditions. The most familiar example of this is the effect of the motion of a carriage when riding with the back in the direction of movement, to which Dr. WILKS has alluded.

On what organ the cause of sea-sickness primarily acts is still in dispute. The symptoms are those of both nervous and gastric disturbance, and are of such a character, as regards both brain and stomach, as might well result from the influence of the primary disturbance of the function of either. Accordingly the brain and the spinal cord, the stomach and the solar plexus, have each been supposed to be the susceptible spot on which the motion acts. Plausible reasons have been given for assigning to each the chief passive influence in the production of sea-sickness. Perhaps the abdominal viscera are those to which the balance of authority has pointed as most probably the organs primarily disturbed. The chief symptoms are those of gastric disturbance; the nervous symptoms are such as may well be secondary. Intense nausea, malaise, and vomiting point distinctly to disturbance of gastric function. The evidences of primary nervous derangement are not conspicuous. Sensations of discomfort referred to the head are common: headache, more or less severe, is an occasional coincident or subsequent trouble. But any more distinct evidences of brain disturbance are absent. Loss of consciousness hardly ever occurs; and loss of consciousness is a very frequent concomitant of vomiting from cerebral disturbance, especially when the cause of disturbance acts suddenly. Symptoms of spinal disturbance are likewise "conspicuously absent."

On the other hand, it is much easier to understand how a new mode of motion may affect the nerve-centres than the alimentary viscera. The sensory centres—so sensitive to every displacement, to every sudden change of circumstances and of position, so easily influenced by external impressions, whatever be the avenue through which those impressions act—may be more easily conceived to be affected by an unusual and repeated displacement than the viscera of vegetative life. There have, accordingly, been many explanations of sea-sickness founded on supposed primary disturbance of the brain and spinal cord; but of these none has secured any authoritative corroboration except that of Dr. WOLLASTON. The theory, as our readers are probably aware, refers the symptoms to cerebral disturbance induced by the repeated mechanical congestion of the brain which the repeated downward movement of the ship induces. Every time the body descends to a lower level the *vis inertia* of the blood is supposed to be sufficient to determine a certain amount of cerebral congestion, and even, it has been intimated, of cerebral concussion, to which the symptoms have been referred as secondary. The excess of discomfort during the descending, as compared with the ascending, motion has been cited in support of the hypothesis. The explanation commends itself by its ingenuity, by its apparent accordance with the phenomena, and by its suggestion of a mechanism by which the mechanical is transformed into a vital disturbance. That the mechanism is one really at work is shown by the fact related by Dr. CLAYE SHAW, that bleeding at the nose came on during the descent of an incline, and recurred at each frequently repeated descent. It is evident that here the conditions of sea-sickness were all present. But the explanation of Dr. WOLLASTON is by no means conterminous with the facts. Other symptoms of cerebral congestion are wanting in the phenomena of sea-sickness; and, as Dr. MAYO has pointed out, there is a corresponding absence of the most distressing symptoms of sea-sickness among the phenomena of cerebral congestion or concussion. That the symptoms are more marked during the descent than during the rise of the vessel is but in accordance with their physical cause, however it acts; for when the vessel, as a whole, rises and falls, the fall will be always more sudden than the rise, inasmuch as the fall is the sum, while the rise is the difference, of the wave-motion and the effect of gravitation upon the vessel. Moreover, the explanation of WOLLASTON fails to throw any light on the sickness which results from other forms of motion, and which, if less intense, is so similar in character to that of sea-sickness. The difference between motion forwards and motion backwards cannot be referred to the effect on the cerebral circulation. The whole explanation of sickness, it seems to us, has yet to be given. Whatever it may be, it must afford an explanation of many facts which no theory yet offered accounts for. One of them, which no hypothesis adequately explains, is the effect upon the symptoms of sensory impressions. Every bad sailor knows how potent these are in aggravating his distress, and many moderate sailors know how useful they may be made in decreasing their discomfort. The nausea which, with the face to the bows, is trifling, may be increased to immediate vomiting by turning round into the opposite position for a few minutes. The motion in a swing, which is agreeable as long as the eyes are open and the movement watched, is changed to intense nausea as soon as the eyes are closed and the motion unforeseen. In a further stage of sea-sickness it is true the very foresight of the motion adds intensity to the distress; but this is only another aspect of the same fact of the influence of the senses, and all these circumstances of sensory effect must be taken into account in any satisfactory explanation of sea-sickness. It is probable, then, that the phenomenon may be found to be a complex one, in which many factors are at work, and to which many causes predispose. If so, we shall understand, and shall be able to contemplate with more complacency, our non-success in its treatment by drugs, and shall welcome without self-reproach the aid to human comfort the *Castalia* affords.

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THERE are two methods of relieving distress. You may intimate your willingness—or consent—to render assistance if applied to, throwing the onus of deciding when, and how often, to seek relief upon the applicant; or you may put yourself to the trouble of searching out the causes of embarrassment, inquiring into the extent and curability of the evil it is desired to remedy, and bringing your outside judgment, your friendly interest, as well as your means, to bear upon the case, with a view to a radical and complete amendment. In the first system you take up the position of a "resource," and must not be surprised if the poor form a habit of falling back upon you as a reserve in time of pressure or extremity. And, as you bear leaning upon, they will not unnaturally come to rely upon your aid continuously and to draw upon you repeatedly. In the other case you undertake the mission of an active protector, ready to "help"; and you have the opportunity, and a claim, to temper charity with judgment—to see that proper efforts are put forth to make the best possible use of the assistance rendered, and to minimise the drain upon resources actively employed not only to ameliorate poverty but to secure success. The Poor-law system of relief is modelled upon the principle of a resource—created by compulsion and maintained under pressure. It in no sense affects the principle of the method adopted that "relieving" officers are appointed to inquire into the actual poverty of persons seeking aid from the rates. This is only a precaution against imposture. The poor are left to struggle, starve, or sue out the succour they need, at their own discretion; and if anyone complains that they do not come soon enough to ward off the worst evils of penury, it is not their so-called "guardians," although, as might be expected under such a system, it commonly happens that in the long run the relief exacted costs more than it would otherwise, because it is too long postponed. Habitual and hereditary pauperism is probably, in large measure, the fruit of this method of grudging relief, which creates a resource, hedges it round with all sorts of scarecrow difficulties and precautions, and leaves the poor to fight out a claim and establish a settlement on its niggardly bounty. The evils of the system are especially strongly marked in its relations to the sick poor, and it is with this aspect of the subject we are more immediately concerned. It may be idle to hope that anything we can urge will avail to convince the Legislature of the exceeding rottenness of the whole system of the Poor Law, but there are certain powerful considerations which may be enforced as supplying a good and pressing reason why at least one fault of the existing *régime* should be speedily remedied.

As matters now stand it is impossible for district medical officers to do their duty with satisfaction to their own sense of humanity or in the real financial interest of the ratepayers. The proportion of paupers on the "permanent sick-list" is everywhere increasing. It is fed by the short-sighted parsimony that throws obstacles in the way of relief when maladies are in their earliest and remediable stages, and while constitutions are as yet unenfeebled by want and those accumulated small complaints which in the end make up an incurable condition and life-long helplessness and disease. The parish doctor looks round with dismay on the ruin wrought daily by a system against which he struggles in vain. It is not worth while to recount the well-known features of a prospect which is ever present to the medical officer under the Poor Law, and which every social reformer must recognise and deplore. To come at once to the remedy, we think it would be found in a well-organised *system of house-visitation*. It may be difficult, perhaps impossible, to change the principle of sick-relief in the country; but it would not be a task of surpassing difficulty to call into operation, side by side with the existing machinery, an effective system of personal sanitary and health inspection, coupled with such provisions for the treatment of incipient and chronic disease as might place the remedy on a basis of prevention and radical cure. The first step in this reform would be the formation of local committees, charged with the duty of house-to-house inspection, and armed with the power of placing cases requiring medical assistance under proper care. The recommendations of the medical officers charged with the treatment of these cases should be carried out, in the matter of "necessaries," physic, and medical appliances, without the intervention of the relieving officer—at least without the obstruction which this official, looking to the pecuniary code of his employers, the local board of guardians, is apt to offer. Patients should be treated at their homes, or in a convenient hospital. The "order" for the house that breaks up a *home* destroys the influences it is most needful to strengthen, and extinguishes the highest incentive to self-help. It is the instinctive dread of being pauperised which deters the struggling poor—those who by timely aid might be prevented becoming a permanent burden on the rates—from seeking medical assistance when it would be most serviceable. The cost of medical attendance, medical comforts and necessaries, should be defrayed from a central fund by the Local Government Board. The expenditure need not be excessive; it might be carefully supervised by proper auditors, and we are assured it would be found economical. The idea is no longer utopian, because the ice has been broken. A recent order of the Central Authority has given the registrars of births and deaths increased pay, the additional outlay being made up to the ratepayers by being included in the general estimates, and paid out of the Consolidated Fund. The objections of Bumbledom are thus avoided or reduced to their due insignificance. If the same principle were applied to the solution of the problem of bringing timely medical relief and assistance to the aid of the poor, the fruit would soon be apparent in a healthier population, a happier people, and less "habitual and hereditary pauperism"—the product of a system of *resource* which breeds dependence, and only to be eradicated by a system of active and efficient *help*, ministered when and wherever it is seen to be necessary, and with the set purpose of prevention, restoration, and permanent cure. To treat the sick poor as bread-winners temporarily disabled, not parasites, to give them the best help at the time when their maladies are susceptible of remedy, to cure them as speedily as possible, ought to be the governing maxims of a policy which aims to reduce the burden of pauper maintenance. A system under which these intentions become impracticable, and nothing but the most perfunctory discharge of professional and public duty is possible, must be one no conscientious medical officer can regard with complacency, and which the wisdom of an intelligent and far-sighted people should refuse to countenance.

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WHATEVER opinion may be entertained regarding the theories of the nature of Chorea which Dr. DICKINSON laid before the Medical and Chirurgical Society at its last meeting, his investigations into the pathological anatomy of the disease cannot but be regarded as a very important contribution to our knowledge of the morbid processes which underlie or accompany that mysterious disease. Mysterious it is from whatever aspect it is regarded; and so diverse is it in its associations that it seems almost hopeless to look for any theory which shall afford at once an intelligible and harmonious explanation of the varied conditions under which it arises, the strange associations of its course, and of its own remarkable characteristics. Certainly its difficulties, if lessened, are by no means cleared away by the discovery of widespread arterial mischief through the spinal cord and central ganglia, which was the chief result of Dr. DICKIN-

SON's researches. Periarterial erosions, distended arteries, effused blood, are traces of hyperæmia, which constitutes, according to him, the essential character of the disease. The irritation, by the vascular change, of the nervous tissue in which it is found, translates itself in the disordered movement which is the great symptom of the disease. The explanation of the multiform associations of chorea is to be found in the many sources from which such hyperæmia may, hypothetically, arise, and which Dr. DICKINSON would make as numerous as are the distinct clinical associations of the malady, grouping into the two categories of rheumatic and mental or reflex. He finds these changes and these conditions common to other maladies, and determined to a specific end by the coincident conditions of age or special circumstances which are recognised as predisposing causes.

There is nothing, we may remark, absolutely new in Dr. DICKINSON's discoveries. Similar changes were found in the spinal cord in two cases of chorea by Dr. LOCKHART CLARKE seven years ago. The extent and universality of the changes is a matter of the highest importance, and that Dr. DICKINSON has certainly shown. The state of hyperæmia of the nerve-centres accords well with many of the clinical facts of chorea: its frequently sudden onset, its febrile characters, its transitory course. But the association of that hyperæmia with the antecedents and concomitants of chorea is less easy to understand. The association with endocarditis is especially obscure. Dr. DICKINSON would find the explanation in a common rheumatic influence in one class of cases, and in another class he believes the endocarditis to be produced in an almost accidental manner, by the irregular action of the heart. That this latter can give rise to endocarditis is, however, an almost inconceivable proposition, unsupported by any pathological facts; and we cannot but agree with Dr. BROADBENT in rejecting it as an explanation of what is the greatest difficulty in the associations of chorea—the occurrence of endocarditis in cases of chorea of apparently mental origin. In estimating the relation of endocarditis to other maladies, we must remember that its existence cannot be always taken as synchronous with the duration of the signs by which we infer its presence. It may unquestionably exist without a murmur; and this fact, of which Dr. DICKINSON does not take sufficient count, is especially significant, since in hardly any of the fatal cases of chorea has endocarditis been absent. It may be fairly claimed by Dr. HUGHLINGS JACKSON as a reason, if not for the acceptance, yet against the rejection of the explanation of the association of the two conditions which he has so long advocated. Dr. BROADBENT differs from Dr. DICKINSON as to the seat of the malady, believing the central ganglia at the base of the brain to be the chief seat of the morbid process; and he apparently finds in the widespread character of the hyperæmic mischief ground for doubting how far that alone can be regarded as the essential morbid change. This opinion will be shared by many who have observed the remarkable absence of spinal symptoms. Hyperæmia, so widely spread as it appears to be—and from its supposed origin would naturally be,—can hardly be regarded as the only cause of a chorea of strictly local distribution. We are not surprised that Dr. HUGHLINGS JACKSON urged this fact as evidence in favour of a theory which, whatever be its difficulties, affords a better explanation than any other of the unilateral distribution of the affection in certain cases in which cardiac mischief coexists. He urged that none of the pathological facts adduced were really inconsistent with the embolic explanation, and pointed out, with much ingenuity, how well his theory harmonised with many of the hemiplegic resemblances of the unilateral affection. Many of these arguments, however, pointed only to the local nature of the primary change, and were equally applicable to any other morbid process having a local focus.

Whatever may be the fate of the views of chorea which were the subject of the discussion, they cannot fail to serve one great end of hypothesis in scientific progress. Whether right or wrong, whether destined to take their place among the admitted facts of medical science or to be consigned to the limbo of unfounded fancies, they will stimulate observation and incite study of the varied relations and characters of the affection, clinical and pathological. Much evidently remains to be done, even though much has been done; and among the latter the investigations of Dr. DICKINSON will occupy an important place.

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THERE is very much to be regretted, and much that ought to be quickly amended, in the practice of "coroners' courts" and "quest law." We have always insisted, and must still contend, that a searching inquiry into the circumstances and cause of *every* non-natural death is indispensable to the public safety and the common good. Apart from the obvious necessity for such a precaution against secret murder and manslaughter, there is the manifest need of searching out and bringing to light the insidious causes of death which grow out of our high civilisation, our pursuits, our artificial modes of life and intense activity. If there were no fear of intentional wrong-doing, the scientific obligation to prosecute a rigorous inquiry into every unexplained decease of human life would remain. Indeed, the class of cases to which that obligation applies is much the most important falling under the coroner's jurisdiction. The failure to recognise this circumstance lies at the root of all the idle talk about the superior fitness of lawyers for the coroner's office, and it is the cause of that short-sighted prejudice and false economy so strenuously opposed to post-mortem examinations. If the sole, or even the chief, mission of an inquest were to determine whether somebody ought to be prosecuted for killing or causing the death of a deceased person, we might be disposed to agree with those who believe that a lawyer is better qualified to discharge the function of criminal inquisitor than a medical man. But this is not the fact, and we must contend, as we have always argued, that a knowledge of pathology, and the cognate sciences comprehended under the term medicine, is essential to an adequate discharge of the duties devolving on a coroner. Meanwhile, this argument tells lamentably against the existing practice of nine courts in ten, and it bears powerfully upon the mode in which the evidence of experts in medicine is received, and digested in submitting a case to the jury—even by *medical* coroners.

It is painful to watch the continual waste of scientific testimony which the present slipshod practice entails.

The Medical Societies and the professional press do something to collect and collate the valuable data so wantonly cast aside; but the coroner's court, as a piece of constitutional machinery, is practically almost useless. Scarcely a week passes without the slurring over and neglect of some case fraught with lessons of priceless value. Cases of poisoning by agents and with symptoms not clearly defined or accurately recorded; cases of death from the secondary and remote effects of disease or injury not properly traced to their cause or adequately exposed and located; instances of misadventure, malpractice, or neglect left without scrutiny and unexplained,—these are the tares that mar the harvest of information to be gleaned from a court of inquiry properly conducted and duly reported. Can nothing be done to remove a standing and mischievous reproach? Will not some medical coroner devise and inaugurate a scientific code of practice covering the needs we have tried to indicate? It would not, surely, be difficult to lay down some general outline of a method of inquiry and report to which medical evidence might be required to conform. There are systems of pathological research which would form the model for a simple but comprehensive and efficient method of investigating the "cause of death." If medical witnesses clearly understood the kind of questions they would be required to answer at an inquest, and if the "opinion" demanded from them were logically worked out by these questions, the quality of "medical evidence" generally would improve, and, instead of being uninteresting and—for medical purposes—valueless, it would come to be prized by the profession as a calm and accurate account of the symptoms and appearances associated with particular kinds of death, and therefore instructive and practically useful. The reform we suggest is within the scope of any coroner having a tolerably extensive district under his jurisdiction. That the task will call for courage and independence there can be no question. The immediate effect of a resolve to treat the subject of medical evidence on scientific principles, and to make the inquest a reality instead of a farce, must be a strong and clear assertion of the fact that post-mortem examination is absolutely essential to the discovery of truth in *every* case of unexplained death, and in many cases also where the cause is tolerably clear. This position will need to be taken up in disregard of the rule of economy which boards of magistrates are everywhere enforcing. Nevertheless the enterprise is a worthy one, and we trust that some spirited medical coroner will recognise the claims of his profession, and commence the good work in dignified indifference to personal consequences, and without delay.

JUDGING from an article in a local paper on the vital statistics of Hull, we should say the presence of one of the Local Government Board medical inspectors is required in the town. In one district of the town the death-rate lately reached the figure of 44 per 1000 annually. It is alleged that "the pestilential effluvia of the now celebrated manure works" are responsible for the special mortality in this particular district. The sanitary authorities are charged with grave neglect of duty, or, as our contemporary strongly puts it, "the people of Hull are being poisoned with stench by the connivance, if not with the actual co-operation, of the local sanitary authorities."

Annotations.

"Ne quid nimis."

DUCHENNE.

WHEN the day comes in which medical workers of the present generation can be regarded in the perspective of the past, perhaps no figure will stand up so conspicuously among the rest as that of him whose body was lately laid in his native town, towards which he had turned, his life through, with such warm affection. Duchenne "de Boulogne" has written his name among the clinical facts of medical science in indelible characters, and in his own special qualities his form will always tower distinct among his contemporaries. No field of work was ever seized upon with more eagerness, ever cultivated with more earnestness, or perhaps ever made to yield a better harvest, than that which the discovery of induced electricity placed at the disposal of the man whose genius should first recognise and talents secure the opportunity it afforded. The new means of investigation which faradisation presented were prosecuted by Duchenne in every direction. Dark places in physiology and pathology were made plain, and the advance which each science received was real and considerable. Almost the whole of the muscular system of the body was brought by him within the range of experimental observation, and both the mode and form of its function were investigated and illustrated by a method of unrivalled clearness and unsurpassed accuracy. It is not surprising that a key was found to undo more than one hitherto closed, and even unsuspected, door in clinical pathology, and the result has been the distinctive definition of more separable forms of disease than have been discovered by any other investigator of the present century. The credit of discovery can hardly be denied to Duchenne, even in the cases in which he had been, unknown to him, anticipated, as was undoubtedly the case with regard to locomotor ataxy. In labio-glosso-laryngeal paralysis, and in pseudo-hypertrophic paralysis, the palm of first description belongs more clearly to him. His mind, indeed, was hardly less precise in its action, less comprehensive in its grasp, less secure in its results, than the agency which he employed. His energy was inexhaustible. Fed by an unfailing spring of enthusiastic love for his work, it carried him successfully over obstacles which would have arrested many workers of inferior force. No pains were too great that were necessary for the full investigation of a case in the most laborious manner; no time or trouble too much to secure accuracy of detail and result. No one who had witnessed his demonstrations of pathological or physiological fact could fail to be struck with the remarkable care and quickness, but, withal, painstaking precision, with which he worked. Somewhat profuse in description, his utterance had that sharp emphasis which, as it were, italicised the salient points of his discourse. A rather quaint mannerism marked his delivery, which was accompanied with the demonstrativeness of style so common to his nation, and which he possessed, perhaps, in less degree, but to a greater extent, than most. Few will forget the quiet explosive "Bon!" with which he used to announce a satisfactory result of his experiment.

As a writer he was clear and precise. Perhaps, indeed, his love of precision sometimes carried him into unwarranted antithesis. His style of description was graphic, but, to an English reader, diffuse and a little tedious, especially when drawn on, by the attraction of past polemics, to "fight his battles o'er again." While not perhaps naturally pugnacious, Duchenne was, in early life at least, jealous of encroachments on his own special province, and was certainly not disposed to accept new light from whatever quarter it might come to him. His position in his great controversy with Remak, concerning the constant current, cannot be altogether admired. But for much of this he atoned in later life. Even the despised "constant current" he adopted into his repertory, and one of his latest *brochures* was concerning its employment in a form of muscular over-action. Nothing, too, can be more admirable than his readiness to reconsider the most cherished pathological conclusions which he had based upon his therapeutical results, and indeed the character of those therapeutical results themselves, in the light of modern discoveries in the minute anatomy and pathology of the nervous system. For the researches of Lockhart Clarke he had an unbounded admiration, and some of his latest labours were devoted to a not very successful attempt to secure by photography permanent records of these and other investigations.

Taking his work at its lowest estimate, he was a man to whom medical science owes a large debt of gratitude, and whose memory deserves a warm tribute of regard.

THE SALE OF FOOD AND DRUGS ACT.

A CIRCULAR official note has recently been issued from the Local Government Board to county authorities drawing attention to this Act, summarising the material amendments and generally explaining its provisions. We have already reviewed the Act in detail, and the authorities at Whitehall take great credit to themselves in having presumably simplified as well as condensed the law on adulteration. The circular recites that the Act as it now stands protects the seller—(1) by permitting those practices in the established usage of trade with respect to the addition of harmless ingredients not intended fraudulently to increase the bulk or weight of the article or to conceal its inferior quality, which clearly ought not to constitute an offence; (2) by enabling him to protect himself in the case of a mixed article by affixing a label to it; (3) by giving him the right, when he has a written warranty, to plead the warranty as a defence; (4) by providing that, if convicted, he may, in an action against the wholesale vendor for breach of contract, recover the costs of his conviction, if he proves that the article was sold to him as being of the same nature, substance, and quality as that demanded of him, that he purchased it not knowing it to be otherwise, and that he afterwards sold it in the same state; (5) by requiring the purchaser, when he intends to have the article analysed, to divide the sample, and leave one part with the seller; (6) by providing that in the case of tea it shall be examined by officers of Customs at the port of landing; (7) by enabling the seller and his wife to be examined as witnesses on his behalf; (8) by authorising the justices, where the result of the analysis is questioned, to have the article referred for analysis to the laboratory at Somerset House. And it is declared to protect the interests of the public—(1) by protecting the purchaser against the delivery of any article which differs in substance, nature, or quality from the one demanded; (2) by punishing the seller who abstracts any part of an article so as injuriously to affect its quality; (3) by preventing the sale of articles mixed with ingredients not in accordance with that demanded by the purchaser, without a label indicating that they are mixed; (4) by enabling medical officers of health and police constables, in addition to the inspecters authorised by the former law, to obtain articles and submit them for analysis when directed to do so; (5) by assisting the local authority of a small district to obtain the services of an efficient analyst by empowering them to engage the analyst of another authority, and by enabling a purchaser in a district where there is no analyst to obtain analyses from the analyst of another district; (6) by compelling the trader to sell a sample for analysis on demand; and (7) by rendering the law more intelligible, and therefore more practicable, accessible, and certain. We commend those interested (and who is not?) "unto this last" advantage, and trust that this enactment may be fully intelligible to the community. The above-detailed advantages appear to us to be on the side of the seller. Be this as it may, we prophesy again that one practical result of the Act will be to give the laboratory officials at Somerset House plenty of work to do.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

DURING the past week six fresh cases of enteric fever have been admitted into the Seamen's Hospital from the *Cornwall* school-ship. This makes the number of cases admitted during the last three weeks 26. Besides these, there are 28 cases treated in a temporary hospital on shore near the ship. So that the total number of cases suffering from fever amounts to 54, out of a crew of nearly 200. The cases admitted at the Seamen's Hospital are nearly all progressing favourably. There is only one case about which any anxiety is felt. The chief complication has been pneumonia, and in one case there has been severe cerebro-spinal symptoms. Some cases of simple pneumonia have been sent from other training-ships on the river to the Seamen's Hospital, and this fact is interesting in connexion with the outbreak on board the *Cornwall*. We are this week enabled to give a brief summary of a report that has been submitted to the authorities of the school-ship by Dr. Harry Leach, medical officer of health for the port, who was directed to this step by the Port Sanitary Committee of the Corporation.

In searching for the cause of the outbreak attention was, of course, directed to the water-supply. The ship is furnished with water from a main that proceeds from the Grays waterworks through the villages of Stifford, Warley, and Brentwood, to Purfleet, where at the end of the village a pipe branches off to the edge of the river, on what may be called the *Cornwall* wharf. There is no reservoir on this wharf, for the water has hitherto been delivered by means of a flexible hose directly over the bank into an open boat, which conveyed it in bulk from the shore to the ship, where it was pumped into the tanks. This open boat, when not in use, lay under the ship's side, exposed to leakage from without, any chance washings from above, and near to the outlets of the galley scupper, of one set of closets and of the sick-bay closet. And it is matter of common observation that at certain times a large amount of decomposing sewage from the metropolitan main drainage outfalls at Barking and Crossness is left on the banks by the ebb tide immediately opposite the ship. These conditions existing, it is no matter of wonder to find by analysis that the difference between the two samples of water, as obtained from the standpipe on shore and from the tanks on board the ship, is very great indeed, and very much to the disadvantage of the latter. And so, as we suggested in THE LANCET of the 9th, the proximate cause of the outbreak is clearly due to very distinct water contamination. Several other predisposing causes were found, but, as they are common to nearly all school-ships, we need not recapitulate them here, especially as they will be found in detail when the report is published. From notes taken by Mr. Glen Bott, of Aveley, surgeon to the ship, it appears that the first case was diagnosed by him on September 14th, was kept in the hospital of the ship for five or six days, and was then sent to the Seamen's Hospital at Greenwich. No further sickness occurred among the boys until the 2nd of the current month, when three cases were found and removed. On the following day two more occurred, and from this date the numbers increased rapidly. The direct connexion between the first case and those that occurred subsequently remains to be proved, although the indirect evidence is abundant. Among the victims is the carpenter of the ship, who became ill shortly after the commencement of the epidemic.

The principal remedy advised is the adoption of a direct water communication from the shore to the ship by means of a hose from the main to the tanks. There is no practical difficulty in this plan, which was adopted in the old *Dreadnought* many years before its disestablishment, and, with proper care, worked well. Meanwhile, it is recommended that tanks be used to convey the water instead of casks, as the former can be examined and cleansed much more effectually than the latter. Many minor suggestions, made by the health officer and the surgeon, have been already adopted.

This outbreak must necessarily show to all authorities connected with floating establishments the necessity, among other things, of obtaining and preserving a good supply of potable water. But in point of fact, as we have often before indicated, all school-ships and training-ships, whether receiving financial aid from the Government or not, should be under the supervision of the Board of Trade, and that Board, in conjunction with the Admiralty, should decline the use of the ship, or to allow her to be inhabited by boys, unless certain prescribed sanitary requirements were complied with. We are informed, on good authority, that no two school-ships in the kingdom are alike, even in their general internal arrangements, and in fitting out no common principles are adopted. This is a subject well worthy the attention of port sanitary authorities and their officers.

ARROW-WOUNDS AND COMMODORE GOODENOUGH'S DEATH.

THE sad news of Commodore Goodenough's death from wounds received by him on the 12th August last at Carlisle Bay, Santa Cruz, has given rise to a very general feeling of regret. The commodore had landed for the express purpose of conciliating the natives, and of entering into friendly intercourse with them, when the attack, which was entirely unprovoked by anything which his party had done, was made. An occurrence of this kind naturally awakens a feeling of indignation at the treacherous conduct of the natives; but it is much to be feared that in this case, as in that of Bishop Patterson—who, it will be remembered, lost his life under precisely similar circumstances in the Santa Cruz group of islands,—the innocent have been victims to feelings of revenge which the cruel and treacherous practices of others, such as slavers, have aroused in the minds of the natives. Be this as it may, the official list of wounded comprises seven names in all, and of that number no less than three died. The wounds were inflicted by arrows, which are said to have been poisoned, and the same cause of death is assigned in all the fatal cases—namely, tetanus. From the brief description given of the wounds it would not appear that any of them were of a severe character, and with the exception of one, which was but a scratch of the left shoulder, accidentally received, those cases reported as doing well seem to have been as serious as those which proved fatal. We are, therefore, inclined to attribute the fatal issue entirely to the supervention of tetanus—a very fatal disease, especially when, as ordinarily happens, it is of traumatic origin. It is very probable that some climatic peculiarities, together with the nature of the wounds, may have been predisposing causes of this complaint, with the production of which it is extremely improbable that poison had anything to do. Time out of mind poisoned arrows have however, been mentioned and dreaded as weapons of warfare, and woorari is one of the agents employed for the purpose The arrows used by the North American Indians are commonly reported to be poisoned, and it is said that these Indians dip their arrow-heads in rattlesnake poison; but repeated experiments have been made of inserting the points of the arrow-heads beneath the skin of small animals without injury to them. Baron Percy was wont to declare that military surgery had its origin in the treatment of wounds inflicted by darts and arrows. The Surgeon-General's Third Report of the Surgical Cases of the United States' Army contains the most recent account of this description of wounds. In the record of eighty-three cases of arrow-wounds in the Surgeon-General's Report, twenty-six, including nearly all in which the great cavities of the body, or the larger bones or joints, were involved, proved fatal. Dr. Bill, in an interesting essay on Arrow-wounds, remarking on the rapidity with which the American Indians discharge their arrows, states that it is exceptional to meet with a single wound; that if one arrow takes effect it is immediately followed by two or more others.

THE DUTIES OF HEALTH OFFICERS FROM A SCIENTIFIC POINT OF VIEW.

THE Society of Medical Officers of Health auspiciously inaugurated the session of 1875–6 on Saturday evening last, when a considerable number of health officers, including a fair proportion holding appointments in distant parts of the country, assembled to hear an introductory address delivered by the new President of the Society, Dr. Buchanan, of the Local Government Board. The subject of the address was "Some directions of scientific work by medical officers of health." After describing the special opportunities which are open to the medical officers of both large communities and of small rural districts for adding to the information we possess with reference to the nature and causation of disease in general, the President addressed himself especially to impress the importance of scientific inquiry as to the means by which so-called zymotic diseases originate and spread. Above all, he urged the utmost necessity for caution before pronouncing that cases of this class of disease—typhoid fever for example,—however remote and shut off from infection they may appear to be, have a *de novo* origin. Phenomena relating to scarlet fever, its origin and fatality, were also pointed out as awaiting a solution that can only be arrived at by careful investigation extending over a wider field of study than falls to the lot of ordinary medical practitioners. Dr. Buchanan, moreover, pointed out the incompatibility of these important and necessary investigations with the cares and anxieties of medical practice, and thus implied that medical officers of health should form a distinct and specially trained branch of the profession, who, by devotion to the scientific aspect of their duties, would enlist the practising profession as fellow-workers, to the great advantage of science. Such a result would afford some consolation for the frequent inability of medical officers of health to enlighten vestrymen and boards of guardians, and to arouse in them a due appreciation of their sanitary responsibilities. A considerable portion of the address was devoted to the consideration of epidemic diarrhœa, which a study of the old Bills of Mortality has induced Dr. Buchanan to think may possibly be of comparatively modern origin. It was pointed out how little is at present known as to its exact causation, and the reasons for its variable degree of fatality in different town populations, apparently of very similar constitution. Information which might reasonably be expected to result from the various lines of observation and inquiry suggested by Dr. Buchanan, could not fail to be valuable alike to pathologists and to health officers. The failure of a limited inquiry into the causes of the excessive mortality from diarrhœa in Leicester a year or two since to yield satisfactory conclusions should not deter other inquirers in the same field. These, and similar investigations, come especially within the province and opportunities of officers of health, and Dr. Buchanan urged that the analysis and accumulation of the results of such investigations, for the use of other workers, were among the chief functions of the Society of Medical Officers of Health.

Dr. Buchanan's conception of the duties and opportunities for useful work of medical officers of health, as worked out in his excellent address, which we have thus briefly noticed, stands out in pleasing contrast to the idea which too long prevailed at the Local Government Board that the medical officer of health was little more than a head inspector of nuisances, who, by a blunder of the Public Health Act of 1872, was obliged to be a medical man. It is clear that a large majority of health officers have been appointed under a very different conception of their duties from that formed by Dr. Buchanan, but it is easier to see the blunders that have been made than to secure their being corrected. We trust that the publication of Dr. Buchanan's address will render it accessible to all medical officers of health, as well as to the profession generally.

SANITATION IN THE CITY OF LONDON.

DR. SEDGWICK SAUNDERS, medical officer of health for the City of London, has reported 478 houses, comprising 2116 rooms—in which 4315 persons reside,—covering 380,369 square feet, or nearly eight acres and three-quarters, distributed over the City, as "unfit for habitation if a high standard of health is to be maintained." This looks like business, and will be hailed with satisfaction by sanitary reformers. Some isolated parishes in the metropolis, Birmingham, and the City of London, have now the honour of leading the crusade against the conditions inducing disease and decrepitude. We trust it will be remembered by corporations and local sanitary authorities of all classes that when once a medical officer has made his official "representation" the case is out of his hands; he has done his duty. It would be illegal for him to amend his report so as to meet the wishes or the convenience of his employers. The onus of declining or determining to carry out such repairs as the "representation" may declare necessary rests entirely upon the sanitary authority, and, whatever decision they may arrive at, the communication of the medical officer's report to the confirming authority (in London the Home Secretary) is a proceeding which cannot be evaded. If medical officers bear in mind where the appeal now lies they will not hesitate to discharge their public duty.

INFANT MORTALITY IN MANUFACTURING DISTRICTS.

INFANT LIFE is especially sensitive of sanitary condition hence all urban populations show a large excess of infant mortality compared with that which prevails in rural populations. This excess is proportionally largest in manufacturing urban populations. In the year 1874 infant mortality, measured by the proportion of deaths under one year to births registered, averaged 124 per 1000 in the rural population of Wiltshire, Dorsetshire, Devonshire, Cornwall, and Somersetshire; whereas it was 172 per 1000 in the West Riding of Yorkshire, and 181 in Lancashire. In other words, 3768 infants under one year of age died during the year in the West Riding, and 6885 in Lancashire, who would have survived if the rate of mortality had not exceeded that which prevailed in the rural counties before mentioned. Infant mortality in the eighteen largest English towns, measured as above, ranged in 1874 from 151 and 153 per 1000 in Portsmouth and Bristol, to 200, 215, and 233 respectively in Leeds, Leicester, and Liverpool; it was equal to 189 in Bradford, and 195 in Nottingham. Leicester and Nottingham are examples of towns in which the death-rates at all ages in 1874 were below the average rate in the eighteen towns, but in which the rate of mortality among infants under one year of age showed a marked excess. This fact is suggestive when taken in connexion with the large proportion of women engaged in manufactures in those towns.

This marked excess of infant mortality in manufacturing populations, although often commented upon, has scarcely yet received the attention from medical officers of health which it deserves; and it is only by local investigation that the influence of female labour in factories upon infant mortality can be correctly determined. In the meantime, however, much may doubtless be done in manufacturing towns to control and reduce this infant mortality, by providing institutions where infants may be properly tended while their mothers are employed in mills and factories, instead of being put out to nurse with old women, or left in charge of children little more than infants themselves. We are glad to notice that a Children's Day Nursery has recently been opened in Bradford under very favourable auspices, for the reception of infants aged between one month and five years. The institution is not intended to partake of a charitable character, as the fees that are to be charged for the care of the infants will, it is hoped, make it self-supporting. The whole is under the care of a competent matron, who will be responsible for the judicious feeding of the infants with wholesome food. The ladies and the employers of labour in Bradford will do well to impress upon the workpeople the advantages of this institution, which, if freely used by those for whose benefit it has been started, will doubtless soon tend to reduce the present high rate of infant mortality in this busy manufacturing town.

THE RELATION OF THE DISCHARGE OF OVA TO THE PERIOD OF MENSTRUATION.

THE interesting question of the relation of the discharge of ova to the period of menstruation has recently been the subject of a paper by Dr. John Williams, of University College Hospital, which has been read before the Royal Society. It was not till a comparatively recent period that the connexion between menstruation and the discharge of ova was ascertained, and we owe to M. Coste the determination of the fact, that though the rupture of a Graafian follicle is usually synchronous with the epoch of menstruation, the coincidence in point of time between the two is not absolute; for cases are on record where menstruation has occurred, yet in which the minutest investigation has failed to discover the presence of a ruptured sac. Nevertheless, in the great majority of cases there can be no doubt that the escape of an ovum from the ovary and the discharge of blood from the uterus are associated events. The point that Dr. Williams has endeavoured to determine is, at what period in the course of the month the separation of the ovum takes place. He has had the opportunity of examining a series of cases, in all of which the period of menstruation was known. In some of these a Graafian follicle had been matured and had actually ruptured. In others, a Graafian follicle had been matured, and hæmorrhage had taken place into the cavity, but no actual rupture had occurred. In one case a Graafian follicle had matured, but neither rupture nor hæmorrhage had actually occurred; and, lastly, in three cases no Graafian follicle had become enlarged to the size exhibited by it at maturity. From his observations, Dr. Williams has come to the conclusion that, in the great majority of cases, the discharge of ova takes place *before* the appearance of the menstrual flow with which it is connected; for in ten out of fourteen cases rupture of a follicle or hæmorrhage into its cavity had occurred before the return of the catamenia; in one it was doubtful whether rupture of a follicle or the appearance of the discharge would have taken place first; in two a menstrual period had passed without the maturation of a follicle; and in one a periodical discharge was imminent, though the ovaries contained no matured Graafian follicle. It is not improbable, he thinks, that the follicles which were found in the last three cases, and which were enlarged to the size of a small pea, would have become mature by the next return of the flow. An interesting point was long ago made out by Coste, that in rabbits the excitement of the act of intercourse, and even of the desire to copulate, makes a difference in the period at which the Graafian follicles rupture, since when two sets of these animals were examined, one of which had been allowed access to the male and were taken away before connexion, whilst others were not allowed to see the male, the follicles, when the animals were killed, ten or twelve hours after, were ruptured in the former and unruptured in the latter.

RESEARCHES ON THE OVARY OF THE FŒTUS AND NEW-BORN CHILD.

Two sets of investigations on this subject have just been published, one by Dr. Haussmann in the *Centralblatt* (No. 32), and one by Dr. Sinétz in Brown-Séquard's *Archives de Physiologie* (No. 5). It has long been known, in fact it was observed by Malpighi and Vallisneri, that the Graafian follicles are occasionally found fully developed in the fœtus at about the full period, and Grohe and Slawjansky, as well as Haussmann, have satisfactorily shown that the constricting off of the primordial follicles and the growth of the Graafian follicles, though not their rupture, is quite independent of the menstrual period. Haussmann's observations, which were made upon eighty-four subjects, show that such premature development of the follicles takes place in about 10 per cent. of all cases, and he alludes to it as a possible and hitherto unsuspected cause of amenorrhœa and sterility. Dr. Sinétz goes so far as to maintain that at about the period of birth a sudden development (*poussée*) of the internal organs of generation always takes place in connexion with the development of the mammæ that occurs at the same period. The hypertrophy of the Graafian follicles observed at this age must not, however, he thinks, be regarded as the point of departure of ovarian tumours, but of a normal, more or less active, physiological process.

VENTILATION OF SHIPS.

This subject appears to have attracted some special attention lately, as evinced by communications that have appeared in the *Shipping Gazette* and elsewhere. Until, however, in this, as in other matters afloat, the Admiralty set some sort of example by building ships on sanitary as well as offensive and defensive principles, very little good will be effected in the mercantile marine. With some few exceptions, no trouble whatever is taken, when her lines are laid, to render a ship habitable. Cowls and so called up-casts and down-casts are put in here and there in a haphazard way after the vessel is built, no principle at all being evident in the process. It is now generally admitted by those who have studied the matter that efficient ventilation afloat, particularly of the nethermost parts of the ship, as the skins, bilges, and holds, is best promoted by adhering to the "exhaust" system in its entirety, leaving the fresh air to find its way in as best it may. This was well shown in detail in a lecture delivered last year at the United Service Institution by Admiral Ryder (an abstract of which appeared in The Lancet at the time). The exhaust principle can be applied equally well to ironclads and monitors as to ordinary steam- and sailing-ships. In other vessels the curved syphon exhaust-pipe makes a good up-cast if properly attended to. In all vessels the skins and the bilges should be ventilated either by syphoned goose-necked tubes with outlets just above the bulwarks, or, as we think, better still, by the "patent self-acting ship ventilator," which has been fully described in The Lancet, and can be arranged so as to eject foul air and also bilge-water. It must be remarked, however, that this latter plan does not work in ships at fixed moorings, and so is not applicable to school-ships or training-ships. All communication between the framing of the ship and the inhabited decks should be cut off. In large passenger-ships it will be found that if plenty of properly arranged up-cast ventilation be provided, fresh air will readily find its way down the hatchways, companion-ladders, skylights, &c. In the best-arranged school-ships, however, the reverse obtains, for the fresh air is brought in through the ports or scuttles and conveyed to the floor of the decks by large tubes, the hatchways then serving as up-casts, so that under such circumstances the lowest deck is usually most free from impurities. In small vessels trading in the tropics lower forecastles ought to be abolished altogether, and deckhouses erected between the fore and main masts. Much of the sickness and mortality off the West Coast of Africa arises from the disgraceful way in which the crews of these small vessels (that trade between this country and Lagos) are lodged.

These are merely fragmentary jottings on a very large and important matter, which ought to be dealt with as a whole. But ventilation afloat cannot be effective until the naval architect, in considering form, speed, strength, durability, and appearance, considers also how health and comfort can be best maintained in the ship that he is about to design.

THE CHOLERA IN INDIA.

The reports from India show that cholera has been prevailing of late in that country to an extent calculated to give rise to some apprehension. The disease has not, however, extended itself regularly, rapidly, or widely, after the manner of progression of one of those great epidemics which have been the scourge of India; but it has still been very widely distributed, outbreaks of cholera or sporadic cases of that disease having occurred at a great number of stations and places in the different presidencies. It would be nearly impossible to enumerate the names of all the places at which it has appeared. Judging from the reports, we should say, speaking generally, that the disease has of late greatly subsided, and that it is still subsiding. In the North-Western Provinces, though still lingering in certain districts, it is uniformly on the decrease; and the districts chiefly affected in the Punjab have been Delhi, Umballa, Jullunder, Rohtur, and Simla. As regards the last-named place, we learn that the disease appears to have begun soon after the middle of June, and to have been mainly confined to the natives, although not by any means exclusively so, for several deaths from cholera occurred among the European residents and visitors of all classes. Whether it were a case of importation, as some think, from the people along the foot of the hills, where cholera was very prevalent, we cannot say; but one thing is certain—viz., that nothing could be worse, from a sanitarian's point of view, than the condition of Simla bazaar; and the state of the water-supply has also been frequently adversely reported on. The disease has not, however, exclusively attacked those residing in the most insanitary places; on the contrary, it is said to have prevailed relatively quite as much, if not more, among those more favourably circumstanced in this respect. Dr. Cunningham, the sanitary commissioner, without attempting to unravel this knot, thinks to cut it by his proposed total abandonment of Simla for three years at least. As the *Pall Mall Gazette* remarks, the Prince of Wales's visit to India is fortunately so timed that there is no prospect of his being tempted to visit Simla. Cholera has also prevailed in many parts of the Madras Presidency, chiefly among the native population, at Madras, Trichinopoly, Bellary, and Mysore; and Bangalore has not escaped. The cholera season, as it is termed, will however soon be over in India, and already, as we have said, there is every indication, by the decreasing number of cases, of its disappearance before the arrival of the Prince of Wales in that country.

SANATORIA FOR INFECTIOUS CONVALESCENTS.

A WRITER in *The Times* of Wednesday suggests that sanatoria for the upper classes should be established at seaside places; we presume he means for all classes that can afford to use them. It is amazing that such establishments have not been realised ere this. But they have become an urgent necessity. We shall also need special trains or carriages for the conveyance of the sick. The reckless way in which infectious convalescents travel about would be incredible apart from experience. Sometimes it is done furtively and in pure selfishness, sometimes in ignorance. Two illustrations have come to our knowledge within the last few days. A respectable woman at Folkestone, who lets apartments, always makes it a point of conscience to ask applicants for her rooms if they have had any infectious disease. On putting this question to a lady lately, the lady was mightily offended, and said she regarded the question as a piece of impertinence. She promised to call again in the afternoon, but did not. The reason may be surmised. Probably she found a landlady less conscientiously inquisitive. A still worse case occurred lately at Margate. The owner of certain rooms there let them to a family. She found after admitting them that they had had scarlet fever a month before. Her own children, three in number, took the disease, and have had prolonged and nearly fatal illnesses. Nothing more gratifying has lately occurred than the fining of a gentleman for conveying his son in a cab to the Fever Hospital. But this is no remedy for such a calamity as that which is conveyed to healthy people by infectious convalescents. These cases show the need both for a sanatorium and for a law to punish more effectively the disastrous selfishness of those who propagate disease, believing that they can do it without being detected.

COOKING FOR THE SICK.

WE have heard a great deal of late about the need of better cooking for the poor. It has been shown that improved results, as regards the quality of food, can be obtained with greater economy by new processes. The value of these suggestions cannot be exaggerated. Meanwhile the needs of the sick and convalescent ought not to be overlooked; they are urgent and special. Nothing so much conduces to the successful treatment of patients in all stages of a malady as good nursing, and cooking plays a prominent part in the *régime*. Notwithstanding this circumstance, which must be universally recognised, it is the exception to find a cook who can serve up a basin of gruel or arrowroot, a cup of beef-tea or broth, or any simple beverage suited to the sick chamber, in a fashion likely to tempt the failing, whimsical appetite, and humour the digestive powers of an invalid. So apparently simple a culinary process as beating up a new-laid egg in a cup of warm milk or tea without curdling it, is a feat which can rarely be accomplished. Every practitioner who has looked into these matters carefully must have felt the need of a system of special cookery for the sick. If someone would devote sufficient attention to the subject to produce a clear, explicit, and yet concise manual of cookery for invalids, with intelligible recipes and directions, the gain to patients and medical practitioners would be considerable, and the appearance of such a brochure would be hailed with pleasure and attended with success. Attempts have from time to time been made to supply the need, but they have failed from being treated as complementary to some general effort to improve the art of cookery, or adapted only to a class of society in which every want can be supplied without stint or trouble. The object to be obtained is more simple and yet not less difficult. It is to show persons of ordinary intelligence and with limited means how to compound and serve up the common necessaries of the sick diet with cleanliness, taste, and delicacy. For such a boon everybody concerned would be exceedingly thankful.

GLANDERS.

THE minute anatomy of the morbid changes in glanders has been carefully examined by M. J. Renaut, and his observations have been communicated to the Académie des Sciences. He has found that the pulmonary "tubercles" in the horse are composed of a number of granulations, commonly united in a racemose arrangement, and often grouped around a small bronchus. These recent granulations, composed of embryonal cells, usually fill each a pulmonary alveolus, and differ very little from those found in pyæmia in man. The neighbouring alveoli of the lung are filled with blood—in some undergoing retrogressive changes, and in others more recently extravasated. In the older granulations the centre had undergone fatty degeneration, and the cellular elements had become transformed into true pus, which ordinarily undergoes a caseous change. The cheesy nodule subsequently becomes softened, or undergoes slow atrophy. Meanwhile the lung becomes the seat of chronic inflammatory processes, points of sclerosis are found around the smaller bronchial tubes and in the tissue of the lung around the cheesy nodules. These changes, it will be seen, are by no means peculiar to glanders. The granulations of the mucous surfaces are closely analogous to those of the lung. The central growth is surrounded by an area of chronic inflammatory change in the mucous membrane, the lesion ultimately becoming stationary or undergoing caseation. The arterioles also become inflamed; their diameter is lessened, they cease to be permeable to blood, and ulceration is the common result of their obstruction. The author points out the curious analogies of this condition with many forms of blood-poisoning, which all have the common origin in septic material derived from without.

THE EPIDEMIC OF FEVER IN CROYDON.

THE Registrar-General, in his return for the week ending 16th inst., calls attention to the continued prevalence of fever at Croydon, and notes the fact that 62 deaths have there occurred since the outbreak of the epidemic towards the end of February last. Whether the epidemic may have been due to the intermittent water-supply, or to the sewage farming, or to the combined effects of both, or to some entirely distinct and at present unsuspected cause, the long-continued prevalence of the disease and its recently increased fatality invest it with more than local importance. It may be useful to notice, chronologically, the fatal results of the outbreak. One death was referred to fever in the sub-district of Croydon during the week ending 16th January, but the next fatal case was not registered until the week ending 27th February. In the following six weeks the deaths averaged one per week, while in the next nine weeks, ending June 12th, they increased to rather more than 3 per week. During the next twelve weeks only 14 fatal cases were recorded, whereas in the following six weeks ending 16th inst., they were again more numerous, and averaged rather more than 2 per week. It should be stated that these numbers are derived from the Registrar-General's weekly table of deaths in the "Outer Ring" of London, and that they all relate to the sub-district of Croydon, which includes a considerable population in addition to that of the parish and Local Board District of Croydon. It is probable, however, that nearly all the deaths from fever occurred within the parish of Croydon.

HYPODERMIC HYDRIC INJECTIONS.

IT is generally considered that subcutaneous injections of alkaloidal solutions are of great value. M. Lafitte, however, at the Congress of Nantes, attempts to demolish the whole thing, and contends that, not the alkaloid, but simply the water, distilled or not, has the merit of allaying pain. Startling cases are mentioned (*l'Union Méd.*, Nos. 113 and 114, 1875), and from these we find that severe lumbago, obstinate neuralgia, &c., are instantly relieved by the injection of about thirty drops of water. Failures are but few, and the author consoles himself respecting these by the consciousness of not having done any harm if he did no good. And here, as a matter of course, follows a rather exaggerated picture of the evil consequences of the different alkaloidal injections.

M. Lafitte now asks himself how the simple water acts, and he throws out the theory that the ultimate nerve filaments are compressed by the water, and, being thus paralysed, can no longer convey the sensation of pain. Be this as it may, M. Lafitte goes the whole length of maintaining that all the hypodermic injections hitherto performed acted through the agency of the water, and he is very particular in stating that his operations were never followed by abscesses or any unpleasant symptoms. We have failed to ascertain, however, whether these aqueous injections, besides relieving pain, may induce sleep.

As a set-off we have, on the other side, M. Pillet (*l'Union Méd.*, No. 116, 1875), questioning the soundness of M. Lafitte's doctrine, and stating that both in public and private practice he met with signal failures in following it. He, however, asks which are the cases best suited for the hydric injections, and the proper steps of the operation. The question will, of course, immediately arise whether the patient's mind is not an important factor in the results obtained. But M. Lafitte has taken care to operate almost unknown to the patient; he has injected without apprising the latter of his purpose, and pain was always instantly relieved. These affirmations are worthy the attention of our hospital surgeons.

THE LOCAL GOVERNMENT BOARD AND COMPULSORY VACCINATION.

THE board of guardians of the Stockport Union have appealed to the Local Government Board for advice as to how the guardians should deal with six persons who had already been convicted under the Vaccination Acts. The drift of the reply of the Local Government Board is that the guardians must use their discretion in each case. A repetition of legal proceedings has in numerous instances had the effect of procuring vaccination when a first prosecution has not succeeded. On the other hand, the Board admits that in some cases the continuance of a fruitless contest might have a tendency to produce mischievous results, by exciting sympathy with the person prosecuted, and thus creating more extended opposition to the law. The Board's advice is good. No abstract rules will do away with the need for discretion on the part of the guardians. One prosecution is altogether right and healthy; it educates public opinion and does not irritate. But even stupid people are apt to excite sympathy when twice fined for an offence which they have not brains to understand.

EFFECT OF ACID VAPOURS ON HEALTH.

DR. ANGUS SMITH, in his eleventh annual report of proceedings under the Alkali Acts, just issued, gives some interesting information on the influence of acid vapours on health. Among other observations, the inspector says it may be taken for granted that where trees flourish there also man is uninjured by acids such as are given out by chemical works, the effect on vegetation being more striking than upon human beings. The general conclusion is that gases from chemical works are hurtful to the health; nor can they, on the other hand, be said to be curative in certain diseases, as so many suppose. In collating the statistics of a district peculiarly exposed to the fumes from alkali works, Dr. Smith was struck with the following points:—1. That bronchitis was not high. 2. That scarlet fever, which gases might be supposed to disinfect, was very high; whilst whooping-cough, often thought to be benefited by the fumes, was low.

MEDICAL PSYCHOLOGY AND THE EDINBURGH CURRICULUM.

THE University of Edinburgh has lately made an important change in its curriculum for the degree of M.D. Previously to last year the candidates for that degree must have passed an examination in Arts on certain subjects, of which Moral Philosophy was one; but in the course of last winter it was decided to allow Bachelors of Medicine, going up for the higher degree, to profess in Medical Psychology as an alternative subject for Moral Philosophy. The change came into operation on the 13th inst. We understand also that provision will be made for encouraging the practical study of mental diseases by candidates for the degrees of Bachelor of Medicine and Master of Surgery, by allowing three weeks' clinical clerkship at a public hospital or asylum for the insane to be taken alternatively for the same period of out-door hospital or dispensary practice. By this means a more thoroughly practical knowledge of insanity will be got than by mere attendance at the visits of the superintendent.

SUDDEN DEATH AFTER THORACENTESIS.

M. LEGROUX, deputy professor at the Faculty, brought before the Medical Society of the Paris hospitals the following case at the meeting of July 23rd, 1875:—The patient was a prisoner, aged fifty-two, and being admitted into the infirmary was found to be suffering from effusion in almost the whole of the left side of the chest, in consequence of pleurisy. The latter complaint had been caused by a severe fall on the ribs. The dyspnœa was so distressing that M. Legroux decided on thoracentesis, and plunged the trocar, in the axillary line, into the seventh intercostal space. As much as two quarts of yellowish-pink serum was obtained. The patient had then a little cough, and expressed himself much relieved. The operator, thinking that all was now right, left the hospital; but three-quarters of an hour afterwards the patient exclaimed suddenly, "I feel faint"; his head fell on the pillow, and he expired. The autopsy did not reveal any tangible cause of this sudden and fatal issue.

ENTERIC FEVER IN PARIS.

The weekly report on the sanitary condition of Paris, relating to the seven days ending the 15th inst., showed a marked increase in the fatal cases of enteric fever, which were returned as 52, against 19 and 12 in the two preceding weeks. The deaths in London referred to this disease in the same week were but 22. They would have been 97 had enteric fever been as fatal in London as in Paris.

In the annual report of Mr. Dyke, medical officer of health for Merthyr Tydvil, to which we have already briefly alluded, will be found some opportune testimony in favour of the innocuousness of sewage farms, and which may be influential in removing some of the violent objections raised against this method of disposing of sewage in many parts of the country. Mr. Dyke describes how cleanly, odourless, and perfect in all its details is the action of the system. He has frequently examined the water "flowing out," and satisfied himself that there has been no perceptible increase in the amount of organic matter dissolved therein. The growth of vegetables on the surface and the drainage, do the work of purification effectually. Lastly, Mr. Dyke says that at Merthyr there are hundreds of young children brought up on the milk of cows fed partially on grass grown on sewage-irrigated meadows, who exhibit exceptionally good health.

It is, perhaps, not generally known that the London Fever Hospital, while receiving patients of a certain class free of charge, is yet able to afford separate accommodation for those in a position to pay for their treatment and keep. The Board of Management wish it to be known that their private wards are always open for the reception of paying patients, who may be visited at any time by their customary medical attendants; and that domestic servants or persons employed in shops are received on a payment of two guineas for the entire illness. Poor working people brought from their own homes are admitted free, and if required the hospital ambulance will be sent for them conditionally on reimbursing the hospital authorities for the sum actually paid for the hire of a horse. Heads of families and others should be made aware of the great facilities offered by this institution for the reception and treatment of cases of infectious disease.

Dr. Thorne Thorne, medical inspector of the Local Government Board, who some time ago visited Cleveland in order to report on the continued prevalence of fever in the district, has recently issued a statement in which the results of his inquiries are embodied. It is shown that the epidemic was due in a great measure to easily preventable causes. The condition of some of the villages inhabited by miners was filthy in the extreme. There is little doubt that a moderately vigorous sanitary administration would soon reduce the death-rate from zymotic disease in the district. Dr. Thorne's report has been forwarded to the local authorities, and will, it is to be hoped, receive earnest consideration.

The Local Government Board have authorised the appointment of a medical officer of health for the Atcham Bridgnorth, Church Stretton, Cleobury Mortimer, Clem Forden, Ludlow Madeley, Newport Shiffnell, and Tenbury rural districts, and the Much Wenlock and Tenbury Wells urban sanitary districts. The future salary is reported to be £800 per annum.

Dr. James Adams, medical officer of health, in reporting on the sanitary condition of the Richmond Rural District, gives a favourable account of all portions of the district save Mortlake. In the latter place diseases of the zymotic character have been very prevalent, in especial a serious outbreak of diphtheria caused much trouble and anxiety. It was found, on examining the houses where this disease showed itself, that the sinks, waterclosets, &c., had direct communication with the sewers; there was no provision for ventilating the drains. The whole of the sewers were in an extremely foul condition, unventilated and unflushed, and charged with noxious gases which could find vent only into the dwelling-houses. Means for rectifying these gross defects have been generally adopted, but there is clearly yet a great deal to be done in Mortlake if it hopes to diminish its mortality from preventable diseases.

The Indian correspondent of *The Times* states that a new Opium Bill has been introduced into the Legislative Council by Sir William Muir, and is now before a select committee. Its object is "to assimilate the laws relating to the growth and manufacture of the drug in Bombay and Madras to those in force in the Bengal Presidency." In Madras there is no check whatever on the growth of opium, while in Bombay it is practically the same. We may here state that in Bengal no one is permitted to cultivate opium who will not undertake to deliver the entire crop to Government agents at the contract price. The opium is, after preparation, sent to Calcutta, where it is sold by auction, in which Chinese agents buy largely. The drug contributes more than six millions of the gross annual revenue of Bengal.

The Local Government Board, in replying lately to a communication on the subject of the payment of Poor-law medical officers for the supply of returns of sickness, states "that it is competent for the sanitary authorities, if they think proper to do so, to enter into an arrangement to pay district medical officers reasonable remuneration for supplying the medical officer of health with information which he requires for the efficient discharge of his duties." After this sanction to pay parochial surgeons, local authorities will now have no excuse for pressing a laborious class of public servants to perform gratuitous work, and it would only be right for these gentlemen generally to insist on "reasonable remuneration."

In London last week 1442 deaths were registered, including 1 from small-pox, 23 from measles, 122 from scarlet fever, 9 from diphtheria, 37 from whooping-cough, 29 from different forms of fever, and 78 from diarrhœa. Different forms of violence caused 44 deaths. The fever and small-pox hospitals contained last Saturday 320 patients, of whom 250 were under treatment for scarlet fever, and 1 only for small-pox. In the outlying suburbs cases of enteric fever continue to be reported.

The managers of the Haverstock-hill Provident Dispensary, being dissatisfied with the award of the Hospital Sunday Committee last year (£12 15*s*. 6*d*.), thought themselves justified in asking the local clergy for special grants from their Hospital Sunday collection. These amounted to £70. The Dispensary is well worthy of a better grant than was awarded by the Hospital Sunday Fund. The institution has now 4000 members on its books.

Official reports have been made by the Medical Inspector of the Board of Trade during the past week as to two more vessels that have returned to England with cases of scurvy on board.

IN an article on the Recognition of Sanitary Medicine, which we published last week, we attached some blame to the Royal College of Physicians of London for its want of interest in this important subject. Whilst still adhering to the general charge of remissness, we are reminded that Dr. Acland, in 1871, delivered a lecture before the College on Sanitary Medicine and the Mode of Dealing with Preventable Diseases.

WE regret to have to announce the death, at the early age of forty, of Dr. W. J. Hunt, who for some years filled the position of resident physician and superintendent of the Hoxton House Asylum. He was also assistant-physician to the Metropolitan Free Hospital, and latterly had lectured on mental diseases at the Charing-cross Hospital.

DR. AQUILLA SMITH has again been reappointed to represent the King and Queen's College of Physicians in Ireland on the General Medical Council, this being his eighteenth anniversary. Dr. Smith is also an active member of the Executive Committee of the Medical Council.

THE Metropolitan Board of Works has instructed its chemist, Mr. Keates, to analyse samples of mud taken from the bed of the Thames near the main-drainage outfall. We shall be curious to learn the result of the examination, which cannot fail to be interesting.

UNDER the Apothecaries' Act the East London British Medical Defence Association have recovered two penalties of £20 each from persons who were illegally practising in the East-end of London.

SMALL-POX.

THE recent epidemic of small-pox in the United Kingdom, in its relation to vaccination and the vaccination laws, forms the subject of an important paper compiled by Dr. Seaton, and which forms part of the Appendix to the fourth of the new series of Reports recently submitted by Mr. Simon to the Local Government Board.

The epidemic, which commenced in England towards the close of 1870, and terminated about the middle of 1873, was part of a general outbreak of the disease, as Dr. Seaton remarks, "of world-wide diffusion, marked wherever it occurred by an intensity and malignancy unequalled by any previous epidemic of the disease within living memory." It appears to have commenced in France towards the end of 1869, but, except that in some cases it was conveyed direct by the French prisoners, no extension into Germany or elsewhere took place until the close of 1870, when it became established in London, in some towns of Holland, in Milan, and Geneva, and soon became rapidly diffused throughout. In 1871 the full force of the epidemic was felt; the disease commenced also in Denmark and Iceland, and spread to various places in Africa (where it raged along the Gold Coast), to the West Indies, and to North America. The inhabitants of St. Petersburg and Vienna were extensively victimised in 1872, but about the middle of 1873 the spread of the disease may be said to have terminated, and since then small-pox has been quiescent, with the exception of some few considerable local outbreaks.

The information gleaned by the writer showed that the peculiar intensity of this epidemic was manifested by the great diffusiveness of the disease, by its attacking an unusual proportion of those who were regarded as protected against the disease either by previous small-pox or vaccination, and by the occurrence of frequent cases of a malignant or hæmorrhagic type. The actual mortality, however, varied very considerably, being determined in different countries by the state of their respective populations in regard to vaccination.

The occurrence of this epidemic had been anticipated by previous observation and experience, and the gradual rise of mortality during 1870 (most marked in London) induced the authorities of the Privy Council, with whom then rested the supervision of public vaccination, to give official warning to certain metropolitan boards of guardians who had been negligent in the administration of the Vaccination Act of 1867. The intensity of the outbreak was manifested in an extraordinary degree, the ordinary mortality of natural small-pox increasing from 35 to 47 per cent. on all cases admitted into the Highgate Hospital, and the post-vaccinal cases from 7 to 10 per cent. London and Liverpool first felt the force of the epidemic. They contributed together 879 to the 1229 deaths that occurred in the last quarter of 1870, and the apparent decline of the epidemic in England in the third quarter of 1871, with its apparent subsequent rise, were owing to the fact that the disease had subsided in these two great towns, while it was steadily progressing over the rest of the kingdom. The mining districts in the North of England and parts of South Wales were next affected, and during the entire epidemic the south-eastern and south-midland counties, notwithstanding the proximity to London, suffered least. The mortality in all the mining districts was exceptionally high, influencing in a marked degree the death-rates of the counties in which they are situated.

The epidemic invaded Ireland in the third quarter of 1871, and lasted until the second quarter of 1873. Belfast and Dublin suffered most, but the chief mortality was in Dublin and Cork, at which latter place the death-rate reached to 9·6 per 1000 of population, a higher rate than that of any large town in England.

Scotland was attacked in 1871. The deaths of that year amounted to 1432, or 0·42 per 1000 of the population, but statistics as to the following years are not yet forthcoming. Edinburgh, Leith, Glasgow, Dundee, and Aberdeen contributed chiefly to the mortality, and the epidemic lingered in Glasgow and Greenock until the spring of last year.

The history of the epidemic as it affected the continent of Europe is incomplete and faulty, because in most of the States statistics of the causes of death are either not kept or kept very imperfectly, and also because the abstracts of others are not yet completed. In Prussia, which, after France, was the first continental State to feel the force of the epidemic, had a death-rate for the disease in 1871 equivalent to 2·43 per 1000 of population, or nearly twice and a half the small-pox death-rate in England for the same year. Holland, where the official information on sanitary questions in this case is always very complete, shows a death-rate in 1871 of 4·3 per 1000 of population. Sweden was little affected by the epidemic, and Denmark in 1871 and 1872 had a small-pox death-rate of only 0·2 per 1000 of population. In the State of Hamburg the epidemic was very severe, and the total small-pox deaths in 1871 amounted to 3647, or 10·76 per 1000 of population. No official account of Saxony are forthcoming except that of Leipsic, where the death-rate amounts to 10 per 1000; and no general records of death cases exist either for France or Belgium. In Austria the small-pox death-rate in 1871 was 0·36 per 1000, and in 1872 1·8 per 1000 of population; but it was very fatal in 1873, the returns for which are not yet forwarded. No accounts are given as to Italy, Spain, or Portugal, nor as to Russia except St. Petersburg, in which city 1850 deaths were reported between April, 1872, and June of the following year. The above *résumé* shows that, with the single exception of Denmark, no country has exhibited so low a rate of mortality as the United Kingdom. The death-rate of Prussia was considerably more than twice and that of Holland three times as great as that of England, and the difference is still greater on comparison with Ireland.

An analysis of the mortality of the epidemic in England at different ages shows that of the 42,220 small-pox deaths which took place in England in 1871 and 1872, 5817 were in children under the age of one year. This, of course, brings us to the consideration of small-pox in its relation to vaccination and the vaccination laws, and this must be reserved for a future notice.

Correspondence.

"Audi alteram partem."

"A STANDARD SPHYGMOGRAPHIC TRACING."

To the Editor of THE LANCET.

SIR,—It appears to me more than probable that some member of the profession far more competent than myself to give an opinion upon the subject will take notice of the letter with the above title, which appeared in your journal of October 16th; but if I am mistaken, I shall feel obliged by your allowing me a small space for the following remarks.

We have recently been told a great deal about the physical condition of Captain Webb, and now Dr. Fancourt Barnes has kindly given us a pulse tracing, for which I at least am much obliged to him, as I was anxious to know what was the state of heart of the man who has performed one of the most marvellous feats on record, and one which perhaps no medical man had deemed possible.

But I would ask Dr. Barnes upon what grounds does he expect physiologists and other students of the sphgymograph to accept this tracing as the type of a healthy vigorous heart? Is it from his own personal experience, or is he guided alone in his opinion by the history and powerful frame of the individual in question?

If the former, I can only say his experience is quite contrary to that of all men (so far as I am aware) who have recorded their observations, and who accept the perpendicular up-stroke and the immediate gradually sloping downstroke (with an almost imperceptible convexity at one point to indicate the secondary wave) as the normal radial pulse-tracing.

I quite agree with Dr. Barnes that, in connexion with Captain Webb's recent feat of strength and endurance, it is especially interesting to put this tracing on record, for there are some very characteristic observations to be made concerning it, provided that immediately prior to the application of the sphygmograph Captain Webb had done nothing to excite the heart to more than normal action.

The first point to which I would draw attention is the numerical force of this pulse, of which no mention has been made by Dr. Barnes, but it is at once observable how very close to one another are the individual pulsations, indicating a rate of over 120 per minute, if the instrument used was a "Marey," in which the five-inch slide completes its transit in about ten seconds. The second point to be observed is the slight curve to the left of the up-stroke and the very sudden fall of the down-stroke, indicating an abnormal forcible contraction of the left ventricle. And, lastly, the marked dicrotism or convexity due to the secondary wave, produced by the consequent sharp recoil of the column of blood on the aortic valves.

The tracing is, in fact, typical of a heart that has undergone some inordinate strain and has taken on a condition of irritability, with probably some hypertrophy, which after a certain period of rest would return to its normal state.

It is precisely the character of pulse which I invariably find in those young soldiers whose hearts have been overstrained in their special calling, a subject to which I have devoted some attention,* and it is in this functional derangement of the heart, when the stethoscope can reveal little or no defect, that the sphygmograph may be found, I believe, of great diagnostic value.

No one can doubt that Captain Webb's heart must have undergone a terrible strain, and whilst I think some apology is due to him from me for making the above strictures upon its present condition, as shown by the sphygmograph, I may add that this temporary disturbance of healthy action is by no means surprising to

Your obedient servant,
A. B. R. MYERS,
Surgeon, Coldstream Guards.

Coldstream Guards Hospital, Vincent-square, S.W.,
October 18th, 1875.

P.S.—Let me add that a tracing very similar to that given by Dr. Barnes may generally be obtained by making a healthy man run, or by other sudden excitement of the heart's action, previous to the application of the sphygmograph.

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* *Vide* Diseases of the Heart amongst Soldiers.

THE EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—Now that you are directing your attention to the sanitary condition of public schools, I think it may not be inopportune if I mention to you the fact that there have been several cases of scarlet fever at Epsom College—several mild cases towards the latter end of last term. The boys have only returned to the College about a month, and several cases have occurred already.

I have heard from many Epsom boys great complaints of the badness of the water and the food.

I am, Sir, yours faithfully,
A GOVERNOR OF THE MEDICAL BENEVOLENT COLLEGE.

October 17th, 1875.

IRELAND.

(*From our own Correspondent.*)

THE state of the houses in many parts of Dublin has attracted the attention of all having the public weal at heart. The local daily papers are now occupied with corporate discussion and public comment on the subject. Sanitarians have long since and again invited the notice of our civic authorities to the unhealthy as well as unsafe condition of the tenements of the working classes here, the pertinacity with which different forms of zymotic disease haunt certain unsavoury localities having convinced such philanthropic persons of the importance of remedial measures, whilst recent events have shown the danger from actual collapse which exists in not a few instances. The coroner's jury, in the case of the house that last fell, has returned the following verdict:—"Anna Maria Flynn was accidentally suffocated by the fall of the house No. 16, South Great George's-street, on the 6th of October, 1875, and there is no evidence to enable us to say what caused the fall of the said house." To this they added: "We desire to express our deepest commiseration for the poor inhabitants of this house, who have lost every vestige of their property by the accident, and we consider their case one eminently deserving of assistance towards relieving their distress." As this is the second house that has fallen within a short time, and as the engineer of the corporation has stated there are a good many houses which ought to be taken down altogether, it is to be hoped that a step which is so evidently necessary for the public health and public safety will be taken without further delay.

The improvement rate and the main drainage of Dublin also at present occupy public attention.

Zymotic disease continues to hold its own in those parts of Dublin where neglect of sanitary matters and superstition favour its course; thus a large number of individuals have been attacked in a neighbourhood where a wake was lately held upon the remains of a child. The same neighbourhood, too, is notorious as being the site of Maclean's-lane, where every form of noxious filth is collected by numerous manure-mongers, some of whom have been fined by the City sanitary authorities, and ordered to relinquish having all depôts within the City bounds. Much difficulty and delay were encountered by the Corporation in inducing the magistrates to inflict fines, because the Corporation itself carries on a traffic in the manure line on a most extensive scale in localities where epidemics of zymotic disease have exhibited great intensity. From time to time loud protests have been entered by hospital physicians and others against the continuance of these civic depôts so far in vain. This matter deserves special attention just now, because it is rumoured that the Corporation have allowed the continuance of the nuisances in Maclean's-lane provided coal ashes be mixed with the offensive matter.

Dublin, 19th October, 1875.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 14th :—

Collier, Herbert, Bohemia House, Turnham-green.
Ellis, Joseph Watson, Willingham, Cambs.
Flood, John, Penton-street, Islington.
Mathias, James, Penycoed, Blanenyffos, S.W.
Norris, Richard Hill, Birchfield, Birmingham.
Walmsley, Francis Henry, Higher Broughton, Manchester.

The following gentlemen passed the Primary Professional Examination on the same day :—

George Farncombe Blake, Queen's College, Birmingham ; Robert. Alex. Jackson, University College ; William Semple Merriman, Manchester Royal School of Medicine.

MR. WILLIAM EBDEN, Surgeon, of Haughley (who was deputy to the late coroner), is a candidate for the vacant Coronership of the county of Suffolk.

AT the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 12th inst., Sir Edward Hilditch, Inspector-General, in the chair, the sum of £90 was distributed among the various claimants.

THE Royal Aquarium and Summer and Winter Garden Society's second ballot for the election of Fellows was held on the 18th inst. Seven hundred and fifty-nine ladies and gentlemen came up for election, of whom five hundred and ten were duly elected.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes met at 13, Delahay-street, on Tuesday. There were present—Viscount Cardwell, Mr. W. E. Forster, Sir John B. Karslake, Mr. T. H. Huxley, Mr. J. Eric Erichsen, Mr. R. H. Hutton ; and the Secretary, Mr. N. Baker.

COLLEGE OF PHYSICIANS, IRELAND.—At a meeting of the College, held on the 18th inst., the following office-bearers were elected for the ensuing year :—President: Samuel Gordon. Vice-President: Lombe Atthill. Censors: Lombe Atthill, A. W. Foot, Thomas Hayden, J. W. Moore. Registrar: J. Magee Finny. Treasurer: Aquilla Smith. Examiners in Midwifery: Fleetwood Churchill, jun., and E. B. Sinclair. Professor of Medical Jurisprudence: Robert Travers. Representative on the General Medical Council: Aquilla Smith. Librarian: Hugh J. Fennell.

KING'S COLLEGE, LONDON.—The following Scholarships and Exhibitions have been adjudged at the opening of the academical year :—1. Science Exhibition (open) given by the Clothworkers' Company, to J. F. W. Silk. Special Extra Exhibition, W. P. Root. 2. Theological Department: Resident Studentships to F. H. A. Hawkins, H. B. Hyde, and E. R. Hayne. 3. General Literature and Science Department: Freake Exhibitions to C. H. K. Harper and T. F. Hobson. 4. Applied Science Department: Freake Exhibition to H. Nettlefold; College Exhibitions to J. P. Kirkman, D. S. Marjoribanks, and J. L. Rigden. 5. Medical Department: Warneford Scholarship to Norman Dalton. 6. Whitworth Exhibitioners: G. C. Marks, Denis McDonnell and F. H. Norvill (equal), W. J. Tilbrook, and William Walker.

NORTHERN COUNTIES' ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The autumn meeting of the Association was held in the St. John's Library-room, Keswick, on October 6th. The chair was occupied by the President, R. Elliot, M.D. (Carlisle). The following gentlemen were nominated for election :—As Member: J. Mackie, L.R.C.S., Medical Officer of Health, Darlington (R.S.D.). As Associates: J. W. Eastwood, M.D., Dinsdale Park ; G. H. Philipson, M.D., and Luke Armstrong, M.D., Newcastle-upon-Tyne; A. A. H. Knight, M.D., Keswick. After the completion of the routine business of the meeting, H. J. Yeld, M.D. (M.O.H. Sunderland), was elected President-elect of the Association. The following papers were read :—"On the results to be expected from the carrying out of the Artisans' Dwellings Act," by Dr. H. J. Yeld; "On the Powers and Duties of Medical Officers of Health," by Dr. J. M. Maclagan (M.O.H. Hexham R.S.D.); "Notes on Food-Inspection," by Mr. Henry E. Armstrong; "Two Years' Experience of the Cockermouth Village Closet System," by Mr. J. M. Fox.

Medical Appointments.

ANDERSON, G. H., M.D., has been appointed Certifying Factory Surgeon for Lofthouse, Yorkshire.

ARMSTRONG, L., M.R.C.S.E., has been reappointed Medical Officer of Health for the Dawlish and Wolborough Urban, and the Newton-Abbot Rural, Sanitary Districts: £400 per annum for two years.

ASHBY, A., M.B., F.R.C.S.E., has been appointed Medical Officer of Health for the Spittlegate Urban Sanitary District.

BASKERVILLE, J. D., L.R.C.S.I., has been appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.

BREDIN, J. N., L.R.C.S.I., has been appointed Surgeon to the Ancient Order of Foresters, No. 4168, vice Sankey, resigned.

BRODIE, M., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Bellingham Union, Northumberland, vice Sutherland, resigned.

BUCHANAN, W., M.R.C.S.E., has been appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.

BULLMORE, W. K., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Falmouth Port Sanitary District for six months.

CLARKE, T., M.D., C.M., L.M., has been appointed Assistant Medical Officer to the Workhouse, Brownlow-hill, Liverpool, vice Hamilton, resigned.

CLAYTON, R., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Accrington District of the Haslingden Union, Lancashire, vice Gillespie, deceased.

COLMAN, T. J., M.D., M.R.C.S.E., has been appointed Public Vaccinator for the whole of the Parish of St. Philip and Jacob, in the Clifton Union, vice Evans, deceased.

CORBET, D., M.R C.S.E., L.M., has been appointed Medical Officer of Health for the Kidderminster Urban Sanitary District at £50 per annum for five years.

DE LA MOTTE, P. W., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer of Health for the Swanage Urban Sanitary District.

DUFFEY, G. F., M.D., F.K.Q.C.P.I., has been appointed Lecturer on Materia Medica in the Carmichael School of Medicine.

DYKE, T. J., F.R.C.S.E., has been appointed President of the newly formed Society of Medical Officers of Health for South Wales and Monmouthshire.

GADDES, T., L.D.S., has been appointed Assistant Dental Surgeon to the National Dental Hospital.

GRAY, F. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Honiton Rural Sanitary District.

GRAY, J. R., M.B., C.M., has been appointed Medical Officer for the Knayton District of the Thirsk Union, Yorkshire, vice Buchanan, resigned.

HART, P. N., M.B., C.M., M.R.C.S.E., has been appointed a House-Physician to the Queen's Hospital, Birmingham, vice M'Queen.

HAY, Mr. J. H., has been appointed House-Surgeon to the Dumfries and Galloway Royal Infirmary, vice Scott, resigned.

HEALY, M. J., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, Registrar of Births &c., and Sanitary Medical Officer for the Monasterboice Dispensary District of the Drogheda Union, vice Callan, appointed to the Workhouse and Fever Hospital, Ardee Union.

M'BRIDE, J., L.R.C.P.Ed., L.M , M.R.C.S.E., has been appointed Medical Officer for the No. 2 North District of the Clifton Union, vice Evans, deceased.

MAC QUEEN, T., M.B., C.M., has been appointed a House-Surgeon to the Queen's Hospital, Birmingham.

MALONE, M. J., M.D., F.R.C.S.I., has been appointed an Examiner in General Education at the Royal College of Surgeons in Ireland, vice Tweedy, whose appointment has expired.

MEAD, Mr. G. O., has been appointed Assistant House-Surgeon to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary, vice Gibbons, resigned.

MONCKTON, W., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed a Medical Officer of the Rugeley District Hospital and Provident Dispensary, and of the Rugeley Convalescent Home.

MOORE, J. B. G. G., L.R.C.P.L., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the Ongar Union, Essex, vice Markby, resigned.

MORTON, R., M.B., F.R.C.S.I., has been appointed an Examiner in General Education at the Royal College of Surgeons in Ireland, vice Woodhouse, whose appointment has expired.

MOSS, C., M.R.C.S.E., has been appointed Administrator of Anæsthetics to the National Dental Hospital.

RANKINE, Mr. J., has been appointed Assistant House-Surgeon to the Dumfries and Galloway Royal Infirmary, vice Lorraine, resigned.

RAWSON, W. F., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the North Bierley Urban Sanitary District: £70 per annum.

ROBERTSON, J. D., M.D., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Penrith Urban Sanitary District: £75 per annum.

ROSSITER, D., M.R.C.S.E., has been reappointed Medical Officer for the Leverton District of the East Retford Union, Notts.

ROW, C., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer for the No. 6, or Lostwithiel District of the Bodmin Union, vice Blewett, resigned.

SANDIFORD, T. H., M.D., C.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilshannig Dispensary District of the Mallow Union, Co. Cork, vice White.

SAUNDBY, R. M., M.B., M.R.C.S.E., has been appointed House-Physician to the Royal Hospital for Diseases of the Chest, City-road, vice Bennett, whose appointment has expired.

SCOTT, R., M.B., C.M., has been appointed Medical Officer to attend Patients of St. Mary's Hospital and Dispensary for Women and Children, Manchester, at their homes, vice Richardson, resigned.

SHORLAND, E. P., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Westbury, vice G. Shorland, M.R.C.S.E . deceased.

STEDMAN, F., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Castleton, Derbyshire, vice Haslewood.

SUTHERLAND, W., L.F.P. & S. Glas., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 6 District of the Bellingham Union, Northumberland, vice Brodie, resigned.

SYMPSON, T., F.R.C.S.E., has been appointed an Honorary Surgeon to the Lincoln County Hospital, vice Snow, deceased.

Births, Marriages, and Deaths.

BIRTHS.

DIVER.—On the 11th inst., at Yateley House, Caterham-valley, the wife of E. Diver, M.D., of a daughter.

GIBBS.—On the 12th inst., at Barham House, Harrold, Beds, the wife of Robert Gibbs, M.R.C.S.E., L.S.A., of a daughter.

ROGERS.—On the 14th inst., at Stanford-road, Kensington, the wife of H. Rogers, M.R.C.S.E., of a daughter.

SCHÖN.—On the 13th inst., at Warley Lodge, Brondesbury, the wife of J. E. Schön, M.R.C.S.E., of a son.

TIZARD.—On the 10th inst., at Weymouth, the wife of H. Tizard, M.D., of a daughter.

WEBB.—On the 13th inst., at Northleach, the wife of Hugh G. Webb, L.K.Q.C.P.I., of a son.

MARRIAGES.

DODD—PERKINS.—On the 13th inst., at Laughton, Leicestershire, Alex. Russell Dodd, L.R.C.P.L., M.R.C.S.E., of Seymour-street, Portman-square, to Mary, daughter of Joseph Perkins, Esq., of Laughton House.

HART—PRESTON.—On the 13th inst., at St. James's, Belfast, Wm. Hume Hart, M.D., to Margaret Adelaide, daughter of John Preston, Esq.

DEATHS.

DICKSON.—On the 13th inst., at Harmondsworth, Slough, Robt. Dickson, M.D., aged 70.

HARRISON.—On the 9th inst., at Sumner-terrace, Onslow-square, John B. Harrison, M.R.C.S.E., late Surgeon-Major Bengal Army.

HEYGATE.—On the 12th inst., at Hanslope, Bucks, Thos. Nicholas Heygate, M.R.C.S.E., aged 64.

HUNT.—On the 13th inst., Wm. James Hunt, M.D., M.R.C.P., Medical Superintendent of the Hoxton House Lunatic Asylum.

JOHNSON.—On the 15th inst., at Cavendish-place, Edward Johnson, M.D., aged 60.

LUSH.—On the 18th inst., at Weymouth, Ann, wife of Wm. Geo. Vawdrey Lush, M.D., for six years Sister Mary, and for twelve years Sister Elizabeth, of St. Bartholomew's Hospital.

MACPHERSON.—On the 8th inst., at Craven-hill-gardens, Geo. G. Macpherson, late of the Bengal Medical Service, aged 76.

ROBERTSON.—On the 3rd ult., at Kelso, John Robertson, M.D., aged 54.

ROBINSON.—On the 15th inst., John E. Robinson, L.R.C.P.Ed., of Westville, Rotherham, aged 27.

WATMOUGH.—On the 8th inst., at Pocklington, Yorkshire, Isaac Watmough, M.D., aged 66.

WILLIAMS.—On the 12th inst, Edward Williams, M.D., of Pendoylon House, Glamorganshire, aged 57.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Klein: The Anatomy of the Lymphatic System.
Mr. Erasmus Wilson: Lectures on Dermatology. 1874–75.
Dr. Parkin: Climate and Phthisis.
Mr. Hartley: Air, and its Relations to Life.
Dr. W. Brett: The new Physiology of the Vital Organs!
Dr. Nicholson: Zoology.
Mr. Jonathan Hutchinson: Illustrations of Clinical Surgery.
Dr. Leishman: A System of Midwifery.
From Madras to Delhi and Back *viâ* Bombay.
Professor Attfield: Chemistry.
Dr. Leared: Imperfect Digestion.
Comte's Positive Polity.
Prof. Max Müller: Chips from a German Workshop. Vol. IX.
Clinical Society's Transactions. Vol. VII.
Canon Kingsley: Lectures delivered in America in 1874.

Notes, Short Comments, and Answers to Correspondents.

THE BUDGET OF THE HOSPITALS OF PARIS.

THE budget for 1876 has been published. For the year 1875 it was £1,180,000; for 1876 it will be only £980,000, being a diminution of £200,000. This is owing to the completion of extensive works undertaken in 1875. The actual income of the hospitals amounts to £529,000, hence the Board requests from the municipal body a grant of £447,600. In 1875 the grant amounted to £448,800, the difference being £1200. The Board consider that about 3200 children will in 1876 be received and treated in the Foundling. The former has also the charge of about 30,000 children being brought up in the country at the expense of the Board. The insane of Paris will cost in 1876 £160,600.

An Enquirer.—The Crown nominees on the General Medical Council, as at present constituted, consist of the following members:—Dr. Sharpey, Dr. Parkes, Dr. Quain, Sir Wm. Gull, Dr. Begbie, and Dr. Stokes. On referring back we discover that two vacancies will occur during the forthcoming year. Dr. Sharpey's term of office will expire in May, and Sir Wm. Gull's in June, 1876.

Dr. R. J. Metcalfe's letter shall receive attention in our next issue.

ACTION OF METALLIC ZINC ON NITRATE OF SILVER.

PROF. CORRADI has proposed, after an ulcer or wound has been cauterised with nitrate of silver, to touch the spot with metallic zinc. The caustic action is thereby increased, and from a minute study of the phenomena it is concluded that nitrate of zinc is produced. M. Jullien, deputy professor at the Faculty at Nancy, introduced this method at Lyons, after a journey to Italy; and M. Jules Chéron, Surgeon to the St. Lazare Infirmary of Paris, has just published a paper on the subject. This paper has been the subject of an article in the *Lyon Médical* (Oct. 17th, 1875) by M. Aubert. M. Chéron has applied this method especially in fungating syphilitic ulcerations. 18 patients treated by the nitrate of silver aided by the zinc were well in 9 days on an average; whilst 23, on whom the acid nitrate of mercury was used, took on an average 29 days to recover; and 26 patients treated simply by rest, inert applications, and baths, averaged 59 days before they were well. Of course such data are rather vague, as it is not said whether all the patients had the same *internal* remedies. It may be observed that the stick of zinc immediately applied to the locality touched with the nitrate of silver produces a black coloration, which is owing to a chemical change, the nature of which is a subject of controversy. M. Aubert, as we stated above, considers that a nitrate of zinc is formed; and hence he proposes, considering the success obtained, to substitute the latter salt for the nitrate of silver, which is expensive and apt to stain the linen and fingers.

G., (London.)—We never recommend a particular physician or surgeon.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—In your issue of the 7th of August you were good enough to publish the following appeal:—

"I respectfully invite the attention of the medical officers of the public services to the following particulars of a sad case.

An assistant-surgeon, whose name it is not, perhaps, necessary to give, but which can be given to any subscriber who desires to know it, lost his health in the Crimea, and, after a lingering illness, died from softening of the brain, leaving a widow and five children in circumstances of extreme destitution. This officer's ill-health was not brought on by imprudence or bad habits. Those who have interested themselves in this case, and whose names are given below, know that his habits and conduct were always such as to command the respect of his friends. It must also be added that he made such provision as he could for his family by insuring his life in the Army and Navy Insurance Office, afterwards amalgamated with the 'European.' It is useless to add that no benefit was derived from this insurance, as this Office disastrously failed. When this occurred the state of the assistant-surgeon's health was such that a second insurance on his life was impossible. For several years before his death he supported his wife and family, and met all the expenses of his long illness, on his half-pay of 8*s.* a day. Not having served for ten years, his widow is not entitled to a pension.

"It is proposed to raise a sum of money for the purchase of an annuity for the benefit of the widow, who at this time depends on the charity of her neighbours for daily bread for herself and children.

"The following gentlemen will be happy to receive subscriptions in aid of this fund:—Major-General Lewis, Shirley, Southampton; Lieutenant-Colonel Begbie, Shirley, Southampton; Dr. Parkes, F.R.S.; Surgeon-General Longmore, C.B.; and Surgeon-General W. C. Maclean, C.B., Royal Victoria Hospital, Netley.

"I am, Sir, your most obedient servant,
"Netley, 30th July, 1875." "W. C. MACLEAN, M.D.

This appeal has been most kindly responded to, and I have to announce that Messrs. Atherley, Hankinson, and Darwin, Bankers, High-street, Southampton, who have been good enough to take charge of the fund, have in their hands the sum of £178 19*s.*, contributed for the purpose indicated in the appeal. I have acknowledged in every instance the receipt of contributions, with the exception of the sum of 5*s.* in postage stamps sent by H. P., R.N., whose address I did not know, and who wished his "mite" to be acknowledged through your columns.

The sum mentioned above is not inconsiderable, but it is quite inadequate to meet the requirements of the case. I have been advised that my appeal was published at the most unsuitable time of the year, when all the world is on the move, and when many professional men are abroad seeking relaxation. I, therefore, venture to ask you to give space in your columns once more to my appeal on behalf of this widow and her children.

I am, Sir, your obedient servant,
Royal Victoria Hospital, Netley, Oct. 19th, 1875. W. C. MACLEAN.

F.R.C.S.—1. An examination has just been held, and the next will take place on June 13th, 1876.—2. Parkes; Wilson; Local Government Board Medical Reports.—3. We cannot give an instance at present.

Dr. Woodward.—We cannot insert copies of letters addressed to other papers.

Mr. W. Story is thanked for his communication.

PALLIATIVE TREATMENT OF ULCERS.

To the Editor of THE LANCET.

SIR,—On reading in the "Notes" &c. of your valuable journal of the 2nd instant a communication from Mr. Rendle on the "Palliative Treatment of Ulcers," two inquiries occurred to me. 1st. Does Mr. Rendle mean that from *two* to *three and a half* grains of acetate of morphia dissolved in five drachms of water are to be applied to the ulcer at one time? 2nd. How often is the application of the charcoal dressing to be renewed? and is the solution of morphia to be used at each dressing of the ulcer?

If your correspondent would kindly take the trouble to answer these inquiries, he would greatly oblige, Yours truly,
Leicester, Oct. 14th, 1875. AN OLD PRACTITIONER.

A Model Seaside Watering-place.

The *Leeds Mercury* reports that it is projected to build at Salt Dean, a few miles east of Brighton, a model village, to consist of small houses, suited to the means of artisans, clerks, and others whose means are limited; such houses as might be let at rents which should commence as low as 5*s.* a week. There can be no question as to the great boon which such a seaside village would prove to the class for whose benefit it is proposed to be erected. At present the only way that is open to the working classes to visit the sea is by availing themselves of the cheap day excursions on bank and other general holidays; and we entirely agree with our contemporary in believing that in the majority of cases these long and fatiguing single holidays to Brighton or elsewhere do more harm than good, even when the fatigues of the day do not lead, as they so often do, to excess of drinking. A holiday to a working man, whether he work with his hands or his brain, to be a beneficial holiday, should be more or less a day of rest; and a day excursion to the seaside can never in any sense be called a day of rest. This proposed new watering-place is not only to be cheap, but the construction of the houses is to be as nearly perfect, so far as sanitary appliances are concerned, as recent knowledge on the subject renders possible. Places for public worship and for recreation, as well as reading-rooms, are to be provided; but, following the example of the Shaftesbury Estate, no public-house is to be erected. If this scheme should ever be carried out and become an established fact, its public utility will much depend upon its treatment by the London and Brighton Railway Company. Want of liberality shown by this Company to the public is, however, again improving the prospects of a new and competing line to Brighton, which, for a time at least, would be a great boon to the metropolis.

Mr. L. Tomlin.—We would advise our correspondent to advertise.

Mrs. Rusher's Convalescent Home.

To the Editor of The Lancet.

Sir,—It is possible that Mr. Morton's ill-advised letter may have the effect of drawing public attention to the special merits of the Dover Home, as it differs in many important respects from other institutions established for convalescent purposes.

It was Mrs. Rusher's desire in originating the Home to divest it as much as possible of the rigid discipline which is thought necessary for the successful working of most public institutions, and to render it a home in the strictest sense of the word—a place where the inmates would meet with the social comforts of domestic life, with the minimum of restraint essential to a well-ordered household. That she has succeeded in her laudable object, no one who has visited the Home can for a moment doubt. I have had occasion to send hundreds of individuals of both sexes to the Home, and they have spoken in the highest terms of the kindness they have received, and of the admirable manner in which the business of the establishment is conducted. The Home, which was formerly the old Ship Hotel at Dover, was kindly granted for its present use by the Directors of the London, Chatham, and Dover Railway. It contains accommodation for upwards of a hundred inmates, and during the summer months it is fully occupied by the industrious and sickly poor, who, on the recommendation of a clergyman or a medical man, are received on payment of a weekly charge, varying from 7*s.* to 9*s.*, according to sex. One special feature in the management is the facility given to members of the same family to enjoy together the privileges of the seaside. A man and his wife in shattered health, or a mother with a sickly child or two, may be accommodated in a separate room; but all dine at the same table, or at separate tables in the same room, for there is no class distinction. With our experience of similar establishments, it is not easy to reconcile this freedom of intercourse and economy of management, in which this institution stands pre-eminent, with administrative success; but the explanation is obvious to anyone who takes the trouble to inquire into the matter for himself. It will be seen that the lady who first founded the Home not only contributes much of her private income to its support, but that she also resides on the premises, combining in her own person the multifarious offices of lady superintendent, secretary, treasurer, and head nurse, watching over her charge as the one aim and object of her life. While other establishments depend for their support on the patronage of the rich, and spend a considerable portion of their income on incessant appeals in the daily press, it is refreshing to meet with one which has never advertised its claims, and to see how much can be done by patient self-denial and individual energy properly directed.

I am, Sir, yours &c.,

Guy's Hospital, Oct. 19th, 1875. J. C. Steele, M.D.

Fatal Catheterism.

The French pharmacien as well as the British pharmaceutist is apt to prescribe, and even at times to undertake surgical operations. At Bordeaux, a short time ago, a man suffering from stricture applied to Mr. B., a pharmacien of the place. He at once sent his son to the patient, and the young gentleman immediately sounded him so roughly that he died in a short time. A post-mortem examination was ordered by the authorities, and extensive urethral lacerations were found. The case will be sent to the sessions.

A. H. B. is entitled to his fee, and would have a good chance of getting it by suing in a County Court. It has often been granted. Sometimes it has not.

"On a New Urethrotome for Internal Urethrotomy."

We have received the following communication from *Dr. Patrick H. Watson*, but too late to append to his paper published this week in another part of our columns:—

> "The draughtsman has not done justice to his pattern, as he has not made the different sizes of the thick and slender parts of the staff sufficiently distinct, nor the transition of the one into the other as abrupt as it is in the actual instrument."

Dr. J. Cheeseman.—1. Decidedly unwholesome.—2. Unfit for food.

Life Assurance and Medical Fees.

The London Life Association object to pay to medical men the customary and very legitimate fee. The proposer is furnished with a printed form in the shape of a letter to his medical attendant, requesting him to supply the Office with minute details of the proposer's health. The latter is requested to sign the letter and forward it to the surgeon. By these means the Office has the information, and leaves the medical man to seek remuneration from his patient. We know of two instances in which the surgeon declined to accept any fee from the patient, and sent back the form to the Office, with the promise that it would be filled up if the proper fee were forwarded. In each instance the Company chose to do without the information, and accepted the life.

Mr. B. Walker's paper has been received, and will be published.

Maunsell Memorial Fund.

The following additional subscriptions have been received on behalf of the above:—

Amount already acknowledged £249 16 0

Dr. Boyd, Strabane	£1	1	0
Dr. Burgess, Fethard ...	1	1	0
Dr. Blaquiere, Conna, Cork	1	1	0
Dr. Chaplin, Kildare... ...	1	1	0
The Right Hon. the Lord Chancellor of Ireland ...	3	0	0
Dr. Corley	1	0	0
Dr. Denny, Birmingham ...	1	0	0
Dr. Dorman, Kinsale... ...	0	10	0
Thomas Fry, Esq., T.C. ...	1	1	0
Dr. T. J. Gelston, Limerick	1	0	0
Dr. Given, Blessington ...	1	0	0
Sir A. Guinness, Bart., M.P.	5	0	0
Dr. Head	2	2	0
Dr. Hetherington, per G. St. G. Tyner, Esq., Downpatrick	0	10	6
Charles Kennedy, Esq. ...	2	0	0
Dr. Langstaff, Athlone ...	1	1	0
Dr. Le Clerc...	1	1	0
Dr. Morgan	£2	2	0
Dr. Maconchy, per G. St. G. Tyner, Esq., Downpatrick	1	1	0
Dr. O'Brien	1	0	0
George R. Price, Esq. ...	1	1	0
Dr. Sheridan, Wexford ...	0	10	0
Dr. W. G. Smith...	1	0	0
Dr. Thetford, Strangford, per G. St. G. Tyner, Esq.	1	1	0
Dr. Todd, Newtownstewart	1	0	0
Dr. Toler	1	1	0
Dr. Todhunter, London ...	1	1	0
Moses Taylor, Esq., per Dr. Chaplin	1	0	0
G. St. G. Tyner, Esq., Downpatrick	1	1	0
Dr. Ussher, Dundrum ...	1	1	0
Dr. West, Rathmullen ...	1	0	0
Dr. Wharton	2	0	0
Dr. E. P. Wright	1	1	0

Subscriptions will be received by Dr. Joseph Rogers, 33, Dean-street, Soho, London.

How not to do it.

The papers contain a curious inquiry into the cause of death of one Stephen Walker, aged eighty-one, which admirably illustrates the way in which some people, in reasoning often, as well as in practical life, manage to overlook that which is readiest and nearest at hand. The poor old man was found by his son and daughter hanging from the staircase. They were too frightened to cut him down, and ran for a policeman. The constable went for a doctor instead of himself rendering prompt assistance, and the doctor on arrival severed the rope, but found life extinct.

Dr. Hugo Senftleben is thanked.

Dresses for Nurses.

To the Editor of The Lancet.

Sir,—In the very kind notice you gave of my paper on "Sick Nursing" in *Chambers's Journal* of the 11th of September, you expressed an opinion as to *print* dresses being better than what I advised—namely, black merino or lustre, as a dress for the sick-room.

Will you permit to say that there appear to me to be two strong objections to cotton dresses: first, they show every stain with glaring distinctness; secondly, they are a chilly sort of garment to sit up in all night. There is no necessity for a plain black dress to look gloomy, since a white collar and cuffs and a bright knot of ribbon at the throat obviate that at once.

Several papers have, I find, followed suit in discussing the very important subject of conduct and dress in the sick-room, and various objections have been made to the dress worn by our various sisterhoods. Now, I think those who make these objections do so in ignorance of the many *strong* reasons that exist for the adoption of a distinctive dress in such cases, and the idea that there is any dislike among the poor to the sister's sombre attire is quite erroneous; on the contrary, I have myself seen several instances where the outward appearance of the sister has carried weight, commanded respect, and caused advice to be listened to and acted upon, which I am convinced would have been otherwise neglected. On one occasion I was accompanying a friend who wore the sister's dress on an errand where time was valuable. We went by the Underground, and when the train came up every carriage was full, crowded with working men returning to their homes. The guard shook his head, and evidently considered our case hopeless; but no sooner did my friend appear at the door of a third-class carriage than the working men expressed in homely but forcible language a determination she should find a seat; for who knew but she was going to some "poor sick crittur or another?" So two of the men stood for the rest of the journey, and tried to make her as comfortable as circumstances would permit, evidently showing a certain amount of deference to me, simply because I was in such good company.

I remain yours &c.,

London, Oct. 14th, 1875. Bertha Leith Adams.

The Colchester Union.

This union is in some embarrassment by the resignation of Dr. Brown, the medical officer of the second ward. The medical officers of the remaining wards decline to take the duties permanently, and the other medical men of the place show no disposition to take them at all. In these circumstances the other medical officers are to be asked to do the duties for a month on their own terms. Would that scarcity of medical service were a little more common.

Oculus.—We do not know the gentleman's present address; but a letter addressed to the India Office would reach him.

"Schools for Scarlet Fever."

Our contemporary and good friend, *Punch*, publishes a few observations this week under the above heading, which are founded on a recent letter of "A Medical Man" in the *Standard*, complaining of the ignorance and ill-directed zeal of School Board visitors. It is argued that for "hyper-zealous visitors" not to know the dangerous nature of scarlet fever and other infectious diseases is ignorance quite as criminal as any which, when it kills people, juries find to be manslaughter. We commend our contemporary's remarks to the consideration of School Board officials.

B. H. H.—If our correspondent will refer to a Parliamentary Return relating to appointments of medical officers of health and inspectors of nuisances, published during the session 1873, and to be procured for a few pence at Hansard's or through a bookseller, he will there find all the known facts upon which answers to his questions can be based, and will be able to form his own opinion.

Army Medical Service.

To the Editor of The Lancet.

Sir,—It seems to me a pity that the grievances of a certain number of medical officers of the army should have been represented in Parliament as pertaining to the whole department, whereas a large proportion of it has no grievances to represent. This, I think, I can easily point out. In the first place, the juniors, or those who entered the service after the publication of Mr. Cardwell's Warrant in 1873, have nothing whatever to complain of. They entered under certain terms, which they were aware of, and are bound to abide by them, and Government has every right to obtain her servants at the lowest market rates. In the next place, the seniors, or those who came into the service prior to the publication of the Warrant of 1858, are certainly in as good a position now (if not better) with regard to pay and allowances as they would be under the old terms, and, in my opinion, they have reason to be thankful for being allowed the forage allowance of their rank, which was not at first guaranteed to them.

With reference to the remaining portion of the department, or those who were enticed into the service by the terms of the Warrant of 1858, which terms Government has latterly thought proper to repudiate, I presume it was the grievances of these officers Dr. Lush kindly endeavoured to lay before the House; and as Mr. Hardy's reply on the subject was most evasive, I trust that those concerned will not allow the matter to rest. It is of little consequence to us whether Mr. Hardy can or cannot procure doctors for the army under existing rules. I can most positively state for my own part that on such terms I never would have entered Her Majesty's service.

The loss of forage, including a groom, amounts to at least £60 a year, and is no trifle in these times of high prices and costly living, to say nothing of the indignity it entails, which is only equalled by the derogatory position of a medical officer when sent to march with a regiment of cavalry, and provided with the horse and equipment of a common soldier. It is hard to expect that we can be respected in the service when Government does not respect us.

The restriction put upon sick leave is utter ruination to the unfortunate whose health breaks down from climate or service, and I submit that it can justly be applied *only* to those officers who entered the service after it became a rule, and were aware of its existence.

In case our rights are still withheld from us, I would suggest that a fund be raised by those interested, with the view of obtaining the opinion of Sir Henry James on the subject, as I have been informed by high authority that it is not in the power of the Secretary of State to deprive officers of the privileges secured to them by the terms of a Royal Warrant.

I remain yours &c.,

Loongabhudra, Sept. 10th, 1875. A Grievance-walla.

New Sanitary Periodical.

We have received the two first numbers of the *Journal d'Hygiène*, lately started at Paris by Dr. de Pietra Santa. It is to be published twice a month, and to comprise climatology, mineral waters, winter resorts, sea-bathing, and epidemics. This is certainly a wide range, and, judging from the first numbers, we may look forward to much information on the subjects just named.

A. J. K.—The charge is not excessive. Something will depend on circumstances, such as previous custom, number of visits, &c.

Sea-sickness.

To the Editor of The Lancet.

Sir,—In Dr. Wilks's letter on Sea-sickness, he refers to a cause which coincides with an opinion I formed (from actual observation) on the same subject many years ago. It is this, that after the upheaval of the vessel by the action of the sea, the sudden sinking, as it were, of the deck, and the feeling of having the ground or support slipping from under you, produce that peculiar and horrible sensation through the spine and sinking at the epigastrium and faintness that result in sea-sickness.

Now, the remedy for this, which I practised with complete success on one occasion in a very rough passage from Rotterdam to London, is *to carefully attend to the motion of the vessel, and to accompany in your mind*, even by a slight stooping or pressing downwards of the body, the sinking down of the vessel's deck. It is well known that many sailors, when first starting on a voyage, suffer from sea-sickness, but soon get over it. I believe they as well as others who are good sailors do so by acquiring what may be almost called a new sense, that of closely following the movement of the vessel both physically and mentally, or through the nerves, and that this ultimately becomes so instinctive that sailors are not aware of exerting such a faculty. I shall be glad if anyone seeing this would try this simple and, I believe, efficacious remedy. I may add that during my voyage I felt very qualmy, and only kept off sickness by assiduously practising the above manœuvre. Nor could I stay any time downstairs, but always remained on deck.

Yours &c.,

Bristol, Oct. 18th, 1875. R. M. Ellis, M.R.C.S. Eng.

P.S.—The faculty is similar to the one acquired by the mason and builder and the chamois hunter, who are accustomed to look down fearlessly from a height which infallibly produces giddiness, a sense of danger and of falling in those not used to it.

To Young Ladies.

The following advertisement was cut out of the *Western Gazette*. The construction of the paragraph is somewhat involved, and, in spite of its delightful frankness, it is not quite clear whether Mr. Young is most anxious to get an increased practice or to secure a wife:—

> "I, Charles Young, Surgeon, requiring a wife, seek a larger practice. If I cannot leave advantageously, I hope to remain."

We have no doubt there will be quite a rush of young ladies and patients towards this interesting advertiser. The profession in the district, though, might wish him to "leave advantageously."

A Nurse.—We really do not know.

H. S.—Apply to Fraser Brothers, 98, Commercial Road East.

The Goodchild Fund.

The following subscriptions in aid of the widow and children of the late W. H. Goodchild have been received:—

T. Corbett, Esq.	£1	1	0
George Hastings, Esq.	0	10	0
W. Odell, Esq.	1	1	0
Mrs. Travers	1	1	0
W. G. Bacot, Esq.	1	1	0
J. R. Fielding, Esq.	0	10	0
James Griffin, Esq.	1	0	0
Septimus Scott, Esq.	25	0	0
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The Hon. F. G. Molyneux	1	1	0
Lady Georgina Molyneux	1	1	0
Mrs. Vardon	1	0	0
Edmund Janson, Esq.	2	2	0
Thomas Barton, Esq.	5	0	0
Dallas Beeching, Esq.	0	10	0
Stamford Felce, Esq.	£1	1	0
D. H. Goodsall, Esq.	1	1	0
L. H. Worger, Esq.	1	1	0
Messrs. Maw, Son, and Thompson	5	0	0
Dr. Nath. Goodchild	21	0	0
A Friend	5	5	0
W. Morrant Baker, Esq.	2	2	0
Mrs. E. Hall	0	10	0
Samuel Wix, Esq.	5	0	0
Dr. Southwood	10	0	0
Dr. Magrath	2	2	0
The Trustees of Berman's Charity, per T. F. Gibson, Esq.	5	0	0

6, Bedford-place, Oct. 16th, 1875. F. de Havilland Hall.

"Cheap Doctors."

To the Editor of The Lancet.

Sir,—My letter in your journal of October 2nd did not pretend to be an exposition of *how* to establish a dispensary, but a defence of its existence; hence your objection to its incompleteness placed at the foot of the letter of "M.D." in your last week's issue is devoid of point, as my letter could not be "incomplete" in a direction in which my arguments were not aimed. I have much pleasure in supplementing that letter with this further one, and in saying the mode I adopted to establish my dispensary was to let all patients know it as they came to me, and the institution grew with time. I charge 1*s.* for seven days' attendance at my place, and 3*s.* when I attend at patients' homes. In all cases I insist on prepayment, and will not go without, unless I know my people. I make all comers provide their own bottles or pay for them, come for their own medicines, and attend at my hours, from 10 to 12 A.M., and from 7 to 9 P.M. (Sundays excepted, on which day I see only those out-door cases that are very ill). These arrangements obviate all collection and attendant expenses, which latter with me are limited to drug bill and assistant. It will be found advisable to head the dispensary letter or card with the day of the week, as constant endeavours will be made to crowd two Mondays or Saturdays, as the case may be, into one week. This trick is then detected at a glance. The letter or card serves to prescribe upon, and is retained by the patient, as in out-door hospital practice. The working of a dispensary is also much assisted by the establishment of a pharmacopœia; for if my prescriptions had to be made up at the moment, the work would be immense and much delayed, and I have always found expedition a great element in success, as the poor have but little spare time, and quickness prevents crowding and its unpleasant aroma.

Yours obediently,

London, Oct. 11th, 1875. S.

Aneurism of the Pulmonary Artery.

To the Editor of The Lancet.

Sir,—The following brief case seems to me to be noteworthy, as I am informed that there are only two cases of aneurism of the pulmonary artery on record.

Walter D——, first mate of a ship, had a dispute with one of the seamen, which ended in a violent struggle between the two. They were twice separated, and twice broke away again in continuance of their fight. During this the seaman was seen to draw a knife and stab his opponent, who shortly afterwards became pale, staggered, and expired in a few minutes.

At the post-mortem examination, which was made the next day (June 12th, 1873), I found no external marks of violence, except a small incised wound, about an inch and a quarter in length, on the upper and outer part of the front of the chest on the left side. It did not extend to the cavity of the chest. On opening the chest, an extensive collection of coagula and liquid blood was found, and on further examination a small aneurism of the pulmonary artery perforated by a somewhat ragged hole.

The mate was described by one of the witnesses examined at the inquest as being a "very excitable man," and there can be little doubt that the excitement of the struggle produced the fatal result.

I am, Sir, your obedient servant,

Yokohama, Japan, Aug. 5th, 1875. W. Buckle.

Typhoid Fever at Gunislake.

To the Editor of The Lancet.

Sir,—The outbreak of typhoid fever at Gunislake, as reported in the *Western Morning News* of the 19th instant is substantially correct, but exaggerated. The greater number of cases, which are of a mild type, are near the main outlet of the drain, which is of glazed earthenware, and broken some distance from its end. This drain was flushed by a stream of water, which, from some accidental cause, was perverted from its course; hence the sewage, slop-water, &c., soaked into the soil, and at my visit emitted sickening effluvia. This will be immediately remedied. The village, as reported on former occasions, is in a very unsatisfactory condition.

Yours obediently,

R. Eliot West,

Tavistock, October 20th, 1875. Medical Officer of Health.

P.S.—The water was analysed a few months since, and found to be uncontaminated. It will be again examined forthwith.

Uncertified Deaths.

Dr. Goldie, medical officer of health for Leeds, in his last monthly report to the Sanitary Committee of the town, alludes to this subject in the following words:—

> "I am anxious to mention some facts with regard to those deaths not certified. First, you will find them chiefly amongst children under the first year of life, and the characters of those diseases which are generally put down at 'hap-hazard' as the causes of the deaths are either diarrhœa or some convulsive disease. Those certificates are generally from chemists and unqualified practitioners. And here let me show that chemists and such like persons are not altogether to blame for this. The analysis of the whole secret I find is this: That mothers generally endeavour to treat the cases at home, either from a pecuniary motive or a total indifference to the troubles of their young. They allow the disease to sap the constitution till they see danger and death near at hand; then they run to the first shop at hand with the sign of a druggist over its door, very anxiously seeking assistance, when neither the ordinarily skilled chemist nor the most erudite physician in the world could do anything that would stop the child from dying. Medicine, however, is given, and the deluded mother (consoled that she has done something towards the cure, which she cannot have been anxious about) returns home. Her child dies, and the only person able to give her a certificate of death is this unfortunate chemist. Now what I wish to show is that this chemist is not to blame, but the people themselves. They don't wish any better result than death, but only that they should be screened from an inquest. I would have every one of the cases uncertified made the subjects of a most careful inquiry before the coroner."

Erratum.—In our article last week on the "Recognition of Sanitary Medicine," in the fourth line from the top of the second column, page 566, for "Cambridge," read "London."

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from — Prof. Bentley, London; Dr. G. Johnson, London; Prof. Maclean, Netley; Mr. Savory, London; Dr. B. W. Richardson, London; Dr. Macdonald, Edinburgh; Dr. Cameron, Bath; Dr. de Havilland Hall, London; Dr. Grigg, London; Mr. Ewen, Long Sutton; Mr. Story, London; Mr. Maunder, London; Dr. Steele, London; Dr. Duffy, Dublin; Dr. Tanner, Ledbury; Mr. Hebb, Lincoln; Dr. Deane, St. Ives; Mr. C. Blake, London; Mr. Ellis, Bristol; Dr. Haughton, Norwood; Dr. Cheeseman, Buckingham; Mr. Thomas, Hemel Hempstead; Mr. Tomulen, London; Mr. Nicolls, Kensington; Mr. Poole, London; Mr. Robinson, Denbigh; Dr. Watson, Edinburgh; Dr. Sheen, Cardiff; Mr. Owen, London; Mr. Rendle, London; Dr. Caton, Liverpool; Mr. Ringland, Cirencester; Mr. Buckle, Yokohama; Dr. More, Rothwell; Mr. Armstrong, Newcastle; Mr. Corley, London; Mrs. Adams, London; Mr. Robertson, London; Dr. Whitmore, London; Dr. Moor, Sunderland; Dr. Woodward, Worcester; Dr. Lloyd Roberts, Manchester; Dr. Speedy, Dublin; Surgeon Myers, London; Mr. Bramwell, Newcastle; Dr. Laffan, Cashel; Dr. West, Tavistock; Dr. Clarke, Lynton; Dr. Waters, Liverpool; Mr. Hockley, London; Mr. Griffiths, London; Dr. Dickson, Buxton; Mr. C. Quinton, Grosmont; Dr. Grove, St. Ives; Mr. Brietzcke, London; Mr. Cooke, London; Dr. Redwood, Rhymney; Dr. Budgett, Eastbourne; Mr. Wreford, York; Dr. Metcalfe, Beccles; Mr. Walker, Spondon; Mr. Hooper, London; Mr. Noble, Chart Sutton; Mr. J. Jones, Walton; Mr. Watkin, Birmingham; Mr. Haynes, Stansted Montfichet; Dr. Rose, Hampstead; Mr. Henderson, London; Mr. R. Gibbs, Harrold; Messrs. Meier and Co., London; Mr. Robatham, London; Mr. Hanbury, London; Dr. Lush, Weymouth; Royal Institute of British Architects; Register-General of Edinburgh; H. G.; Medicus; A Grievance-walla; A Governor of the Medical Benevolent College; A. S. X.; Sting; O. K. R.; Oculus; An Old Practitioner; B. R. N.; A Nurse; M.R.C.S., London; Enquirens, &c. &c.

Letters, *each with enclosure*, are also acknowledged from — Dr. Medwin, Christchurch, New Zealand; Mr. Sherwood, Surbiton; Mr. Wostenholme, Sheffield; Mr. Reed, Market Rasen; Mr. Heaton, Leeds; Dr. Harris, Leighton Buzzard; Messrs. Morris and Cooper, Ross; Mr. Brocklebank, Islington; Mr. Saul, Glasgow; Messrs. Oliver and Boyd, Edinburgh; Mr. Milne, Aberdeen; Mr. Watson; Mr. Stewart, Hexham; Mr. Dean, Slaithwaite; Mr. Robinson, Folkingham; Messrs. Cadbury, Birmingham; Mr. Lankester, Leicester; Mr. Greaves, Weldon; Mr. Hall, Lockwood; Mr. Bennett, Burnley; Mr. Morgan, Bradford; Mr. Wicks, Bicester; Dr. H. C. Lawrance, London; Mr. Chandler, Tewkesbury; Dr. Adamson, Hetton-le-Hole; Dr. Turner, Burmah; Dr. Hughes, Llanberis; Mr. Hale, Chesterfield; Mr. Leggatt, Eastry; Mr. Seymour, Coventry; Dr. Fraser, Kilsyth; Mr. Baker, London; Mr. Procter, Shifnal; Mr. Wilson, Chatteris; Dr. A. Forbes, Glasgow; Mr. Worger, Bradstock; Dr. Hulme, Wigston; Dr. Batt, London; Dr. Harding, Whittlesea; Dr. Dunbar, Blackburn; Sentry; Medicus, Gainsborough; Chirurgeon; F. R. C. S.; W. W.; L.R.C.P., Southampton; R. W. J.; Medicus, London; F. W. C.; M.R.C.P., Birmingham; E. R., Malden; M.D., Birmingham; Yorkshire; Omega; M. B., Stamford; R. R., Chirk; Surgeon, London; Medicus, Sheerness; E. H., Bruton; M. B., Brixton; Alpha, Newcastle-on-Tyne; Cecil.

Newcastle Chronicle, Cork Constitution, Western Morning News, Record, Local Government Chronicle, East London Observer, Metropolitan, Surrey Advertiser, Hackney and Kingsland Gazette, Huddersfield Chronicle, Sussex Daily News, Manchester Guardian, Birmingham Morning News, Leeds Mercury, Wrexham Guardian, Hull News, Liverpool Mercury, Dover Telegraph, Welshman, Colchester Mercury, and *Brighton Guardian* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Oct. 21st, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Oct. 15	29·49	N.E.	47	49	...	56	45	...	Overcast
" 16	29·69	N.W.	46	48	...	60	45	...	Foggy
" 17	...	...	...	...	...	...	...	...	...
" 18	29·87	E.S.E.	48	50	...	58	40	...	Fine
" 19	29·78	E.S.E.	48	50	...	52	48	0·75	Overcast
" 20	29·51	E.S.E.	49	50	...	54	48	0·20	Raining
" 21	29·57	S.	50	54	...	...	49	0·65	Cloudy

Medical Diary for the ensuing Week.

Monday, Oct. 25.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ A.M. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ P.M. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 A.M. and 2 P.M.

Metropolitan Free Hospital.—Operations, 2 P.M.

Medical Society of London.—8 P.M. A Clinical Evening.

Tuesday, Oct. 26.

Guy's Hospital.—Operations, 1½ P.M., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 P.M.

National Orthopædic Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 3 P.M.

Royal Medical and Chirurgical Society.—8½ P.M. Dr. Greenhalgh, "On the Use of the Actual Cautery in the Enucleation of Fibroid Tumours of the Uterus." — Dr. Lawton Moss, "On Pathological Absorption Spectra."—Mr. E. J. Spitta, "On a Movable Model of the Larynx."

Wednesday, Oct. 27.

Middlesex Hospital.—Operations, 1 P.M.

St. Mary's Hospital.—Operations, 1¼ P.M.

St. Bartholomew's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ P.M., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 P.M., and on Saturday at 1½ P.M.

Great Northern Hospital.—Operations, 2 P.M.

University College Hospital.—Operations, 2 P.M., and on Saturday at the same hour.

London Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2½ P.M.

Thursday, Oct. 28.

St. George's Hospital.—Operations, 1 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 29.

St. George's Hospital.—Ophthalmic Operations, 1¼ P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

Saturday, Oct. 30.

Royal Free Hospital.—Operations, 2 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

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Agent for the Advertising Department in France—

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Clinical Lecture
ON
FEIGNED "ERYTHEMA GANGRÆNOSUM."
(A CASE OF MALINGERING.)

Delivered at University College Hospital,

By TILBURY FOX, M.D., F.R.C.P.,
PHYSICIAN TO THE DEPARTMENT FOR SKIN DISEASES.

Gentlemen,—From time immemorial diseases of various kinds have been simulated amongst all classes of society. As has been well said, "the monarch, the statesman, the priest, the soldier, and the criminal have alike feigned mental and bodily infirmities for the advancement of their own ambitious or nefarious designs," whilst others have found, in such deception, the ready means of exciting pity and of securing charity, or extorting claims unfairly. Very many feigners suffer from ill-health, or are the subjects of hysteria or morbid habits, manners, or tastes, and, indeed, are such as one may fairly expect would be likely to be under the influence of the stimulus to morbid actions. In some instances, however—and I shall bring under your notice to-day, as I believe, an instance of the kind,—individuals feign diseases who are *apparently* quite healthy in mind and body, and without there being seemingly any kind of motive or object in their so doing.

There are not many skin diseases which are feigned. Malingerers generally copy the pustular or ulcerative diseases, since these may be readily simulated and kept agoing at will by the application of local irritants. The case which I wish to speak to you about now was one in which a number of semi-gangrenous spots were developed in different parts of the body, and which, I doubt not, were produced by the patient herself. The disease answers to what has been termed erythema gangrænosum, which I have always regarded with grave suspicion, at least in almost all cases, as a feigned disease. Here are the notes of the case.

Previous history.—Patient has been a general servant without interruption since February, 1874. She is single, has lived well, and is well clothed. She has been in one situation only since she went out to service; the house is dry and very open. Has lived in London or its suburbs all her life. She is short for her age, and rather stout, of lively disposition, pale and sallow complexion. She has four brothers and one sister all healthy. Has had good health, is well nourished, and strong. Last December had dropsy, which lasted about a month. Has never had rheumatism or scarlet fever.

Present illness.—On Thursday, August 20th, she first noticed a long red patch on the front of the lower part of her left leg, about three inches long and an inch wide. This itched a great deal both day and night. On Friday, the 21st, she found a scab formed over the outer part of the patch, leaving a narrow red rim round it. A short time after the appearance of this first patch, five others were seen, one on the left cheek, a second on the back of the left hand, a third on the outer side of the right thigh at the junction of the lower and middle thirds, a fourth on the back of the left forearm about two inches below the elbow, and a fifth to the inner side of the first patch on the left leg over the tibia, and to its inner side, about the lower part of the middle third of the leg. All the patches formed on the same day. The chief patch is over the left mamma; this first showed itself towards the evening of the 20th as a scarlet patch about 4 in. by 4 in., the lower border being about an inch and a half above the nipple, the outer border reaching the anterior margin of the axillary fold, the inner border being about half an inch outside the left margin of the sternum. On the 21st (Friday), on waking, she found that the patch on the breast had become broken up into irregular patches of white, dead-looking skin, surrounded by a reddish halo. Over the parts of the patch which did not become red a slight, thin, brownish-yellow crust formed, as of eczema. About eleven of the white patches have formed altogether on the breast. Since then patient has not noticed any material change in appearance. On the 21st she discovered that the white patches were anæsthetic.

On the 25th of August the patient presented herself at the out-patient department, with a condition of skin as already described. The health is good; patient does not complain of pain, discomfort, or malaise. Menstruating at the present time; began to-day. Over the left mamma, extending over the area just described, is a mottled irregular patch of redness, consisting of many (five or six) isolated patches of various sizes. In each of the smaller patches are one or more depressed dead-white areas, surrounded by a red halo, the intensity of redness being greatest at the edge of the white patches, and fading abruptly at the periphery into the healthy skin. The breadth of the halo varies in different parts; in some cases it is not more than about one line, while at other parts it is two, three, or more lines. The redness of the halo fades a little on pressure, but does not disappear. In some parts there is a wider extent of redness than above described, where the skin is covered with a brownish-yellow crust, as is seen in ordinary eczema or in the later stages of herpes.

The depressed white patches are anæsthetic. The patient can feel, when pinched, to the extreme inner margin of the halo, but loses all sensation immediately the white patches are touched. The white patches feel decidedly colder than the healthy skin. Temperature taken and found to be higher than in other parts. Even over the areas of redness minute white anæsthetic spots may be detected, the size of some of the spots being not larger than millet-seed. In all the parts of the skin that are not white the patient has sensation, although even in the red parts the feeling is perceptibly diminished as compared with the adjacent healthy skin. All the other patches of the body furnish similar results.

It may be observed that all the affected parts lie on the left side of the body except the patch at the lower and outer part of the right thigh, the parts affected being the left mamma, left forearm, left hand (back), and left leg and slightly the left cheek, and, as just said, the lower and outer part of the right thigh. The patch on the right thigh is general, diffused, about 3½ in. in its largest (horizontal) measurement, and about 2 in. in the vertical measurement, the anæsthetic patch within this being 1¾ in. horizontally and 1¼ in. in its greatest vertical direction. On the front of the left leg are three streaky patches, the innermost one being about 1¼ in. long and ⅛ in. broad, and situated at the lower part of the middle third of the leg, just behind the inner edge of the tibia; this runs obliquely downwards, inwards, and backwards. Side by side with it is another patch about an inch long, and varying from a line to ⅕ in. in width. Nearly the whole of the skin on these patches is white and anæsthetic, there being only a narrow red halo, about a line in length, round them. The remaining patch in this situation is six inches long, but is not quite continuous, there being a break of half an inch at the lower part of the middle third; its width is half an inch above the break, one-eighth of an inch below. The lower portion runs obliquely outwards, downwards, and backwards, in the direction of the external malleolus; the upper portion is vertical, and on the inner side is an irregular portion of white anæsthetic skin extending at the upper and lower ends more than half-way across the patch, in the middle for about one-third of the distance; on the outer side there is a streak a quarter of an inch wide, which is partially anæsthetic, but is of a mottled appearance; between them there is a portion of skin which is red, but which retains its sensibility. The lower segment of this patch below the break is white and anæsthetic, surrounded by a red halo a line in width. The general appearance of these patches, taken collectively, gives the idea of some strong corrosive liquid having run down the front of the leg and caused the skin to lose its vitality. On the back of the hand is a circular diffused patch three-quarters of an inch in diameter, the white anæsthetic portion within this being about the size of a large pea. On the back of the arm there is also a circular diffused patch an inch in diameter, the skin within this being dark red, but more or less anæsthetic. On the cheek there are a few irregular spots, which are anæsthetic; they are surrounded by a narrow red halo, which is not so distinct as round the other patches. The portions of skin which were yesterday of a dull pearly whiteness, have to-day assumed a greenish tint. Temperature of white skin taken on the largest patch on the mamma 94·4°; healthy skin, 92·8°.

Aug. 27th.—The patches have not altered much in character, except that the yellowish scabs on the left mamma are thicker. Patient slept well. Bowels open. Takes her food well. General temperature 98·6°; temperature of white patch on left mamma 94 2°; of healthy skin of right mamma, 92°. Heart examined and found normal. Urine acid, 1020, no albumen, no sugar. The patches are now of yellowish tinge, and not dead white, as when first seen. The patient states that the skin surrounding the patches is painful, and that it has always been so. Some simple ointment has been applied to the patch on the right thigh, and the patient says now that she feels over the part when touched. This part is now covered with a dark honey-coloured crust. Over some of the patches the cuticle is beginning to loosen. Repeat yellow mixture and simple ointment. Patient states that she already feels better after a few doses of the mixture, though she did not complain before of feeling ill in the least. A question as to this point was put on admittance.

29th.—On Thursday, the 27th, there being reason to doubt the truth of the patient's statements with regard to the loss of sensibility of the white patches, the patches on the front of her left leg, being obscured from her view, were touched four times in succession with the point of a steel pen on the same spot. Twice she said she felt, and twice she said she did not. This afternoon Mr. Tweedy tried the patch on the breast with a pair of sharp-pointed scissors, sometimes using one point, sometimes two. It was then found that when she could not see the part she made guesses at random, sometimes saying she could feel, and at others that she could not, though the same spot was touched in each instance.

Sept. 1st.—The cuticle forming the white patches on the front of the left leg which has been treated with spermaceti ointment has been shed, leaving deep sharp-cut ulcers, surrounded by slightly raised, red, inflamed margins. There is no material alteration in the patch on the left breast beyond a thickening of the yellow honey-like scabs. There is also a thickening of the scabs of the patch on the right thigh. The other patches appear to be dying away. The scabs on the left hand and forearm, and also on the cuticle forming the white patches in those situations, have come away, leaving in the place of the former a red blush, of the latter white cicatrices.

5th.—The white patch of cuticle on the left breast is evidently much thickened and hardened, and there is some amount of serum effused beneath it. The scabs are still thickening. Ordered quinine and iron three times a day.

8th.—The scabs on the breast have been shed, leaving a red blush. The large patch of white skin is still *in situ*, and has not changed its appearance.

10th.—The patch of white cuticle on the breast was yesterday rubbed off by the patient's dress, leaving a weeping surface of true skin, which has this morning scabbed over. The ulcers on the left leg are in much the same condition as on the 29th ult. They have been treated with opium and lead liniment since the 26th.

15th.—The scabs have all come away, leaving a red blush. The ulcers on the left leg are slowly healing up. To be dressed with red-wash.

23rd.—There is a red mottled appearance of the skin in the situation of all the sores, except those on the left leg, the ulcers of which are healing more rapidly. Patient discharged this afternoon.

Now, gentlemen, I will give you the reasons which induced Mr. Tweedy and myself to come to the conclusion that this was a case of self-induced disease, and not one of erythema gangrænosum.

In the first place, there was no evidence of any disturbance of the general health, such as would explain the local lesions. The girl at the date of the attack of eruption was apparently in excellent health; she had never been subjected to any deprivation or been placed under any insanitary influences such as might have induced a cachectic or morbid state of body. It is impossible to suppose that gangrenous spots could spring up idiopathically and extensively over the surface unless there were very serious disturbance of the nutrition of the body to account for it. In cases of undoubted erythema gangrænosum of the skin the patients have been rather moribund than anything else; the nutrition of the body has been profoundly altered, and the mischief in the skin has constituted only one of a series of phenomena indicative thereof. For instance, in certain paralytic cases, when death has not been far off, in cases of ossified arteries, in the instance of severe purpura, erythema followed by gangrene has been observed. But in the case I bring under your notice there was not to be found a jot or tittle of evidence of ill-health or malnutrition. It is true the girl had what she termed "dropsy" a few months before, but it is difficult to say what she meant by this term; it may have been swelling of the legs from anæmia; but, at all events, for some time before, and at the time of the attack of the disease in the skin, the girl was in good health, and erythema gangrænosum does not occur under these circumstances.

Secondly. The onset and course of the disease were not those of a gangrenous disease, but just those of severe blistering. The patches began by active hyperæmia, assumed the aspect of a vesicated surface, and not the livid sphacelated aspect of a gangrene, whilst a healthy reparative process was speedily set up in them. As before observed, patches of erythema gangrænosum often begin as purpuric or livid spots, and certainly not by active hyperæmia, which in the present instance was more like that induced by a local irritant, as was also the vesication, or what appeared to be gangrene; whilst the speedy advent of active repair indicated that the nutrition of the body was good. As soon as the patient came into the hospital and had no further chance of practising deception, fresh supposed gangrenous patches ceased to appear, and the whole of the diseased spots began to take on the healing process, which proceeded at a rapid rate. It was, indeed, the general aspect of the pathological changes, especially the exact similarity of the changes to those which occur in a severe vesication in a healthy subject (the whitened centre and the red halo around), which led us at once to suspect malingering; because it seemed to us clear that, if the disease were an idiopathic one, a state of nutrition which could induce so profound a change in the tissues as gangrene was altogether antagonistic to the occurrence of the most active reparative process. The fact of the existence of the latter, indeed, gave the lie to that of the former. The changes in the patches ran the course of those of healthy wounds, and hence the disease could hardly be idiopathic gangrene.

Thirdly. The distribution of the patches was very peculiar. They were all but one on the left side, and exactly in the sites most accessible to the right hand—viz., over the mamma, the cheek, back of the hand, back of the forearm, and over the front of the tibia. The patch on the right thigh was at its lower and outer part, or the place most conveniently reached by the hand. There was nothing in the shape of the patches to call for much notice, save that the patches on the left leg were long and narrow, the long axis of the patch corresponding to that of the limb itself; and, as stated in the notes, their appearance collectively gave the idea that some strong corrosive liquid had been allowed to trickle down the leg, and to have been diverted laterally on either side below, as would indeed occur if fluid of a certain character were allowed to flow down the front of the leg. The non-symmetrical distribution of the disease, its presence in the parts of the body most accessible to the hand, and the appearance of the streaky patches on the left leg, point to a simulated and not a real disease.

Fourthly. The statements of the patient with reference to anæsthesia conclusively showed that, at least, the patient knowingly deceived us in regard to certain features of the cases. You will remember the notes stated that at first it seemed to be certain that the white areas of the diseased patches were anæsthetic; but on further testing this point, whilst the patient's view was obscured, her statements were found to be contradictory and untrustworthy. This, of course, must be regarded as very strongly confirmative of my view of the case.

Fifthly. The effect of pseudo-physic in this case confirms me in the view I take of it. The patient was ordered some yellow mixture, and told she would have some medicine, whilst the wounds were dressed with the simplest unguent. After some few doses of the sugar-and-water, she expressed herself as feeling already very much better, the fact being that she had never complained of feeling in any way ill or unwell before, though she was expressly interrogated upon this point on admission, and subsequently. She, in fact, assumed that she was and had been ill, and was better after taking the medicine, whilst she had before expressly stated that she was quite well. This seemed again to point to deception, the patient having forgotten to act up to the *rôle* assumed on former occasions.

I do not enter into any other considerations. I think the above quite sufficient, and especially the pathological aspect, to show that the case could not have been one of idiopathic erythema gangrænosum, but a self-induced one. The difficulty of discovering any motive for the feigning of gangrene does not alter the matter at all.

If you ask me what irritant did the girl use, I answer candidly that I do not know. It is not unlikely that it may have been hydrochloric acid, which has been used to produce "white gangrene" of the skin.

I beg of you to be very cautious in dealing with instances of so-called erythema gangrænosum of the skin, especially in hysterical subjects. Why individuals should take a fancy into their heads to produce vesicated patches of disease here and there about their body may be difficult or impossible to determine, yet that they do so cannot be doubted; but whenever you observe a case of the kind, you will know it is not one of idiopathic erythema gangrænosum if it occurs in a healthy subject, is accompanied at its outset by active hyperæmia, by an absence of purpuric symptoms, and if the patches speedily undergo repair. In other words, a gangrenous condition is incompatible with the phenomena of acute inflammation and rapid repair; at least, this is my experience.

One word before concluding touching the moral treatment of the case. When you have detected a case of malingering, do not be too hasty to deal harshly with the patient. There may be some morbid state of mind in him or her, unappreciable to the ken of the physician, which impels the malingerer to his feigning. Therefore be tardy in treating him or her as a wilful misbehaver; the duty of the physician is to be kind under all circumstances, and never cruel.

NOTES OF FIVE CASES OF ARROW-WOUNDS (RECEIVED IN THE SOUTH SEA ISLANDS), TWO FOLLOWED BY TETANUS AND DEATH.

By SURGEON ALFRED CORRIE, R.N.

CASE 1.—F. S——, nineteen, seaman, a strong, muscular, healthy lad, was struck when on shore at Santa Cruz Island by an arrow (which is supposed to have been poisoned by being in contact for some days with a dead body in an advanced state of decomposition). The wound, a small punctured one of the scalp, extended down to the skull, and on passing a probe a roughness was felt about the bone in that particular spot; the arrow broke in the wound, but the broken bit was at once removed, and the wound immediately sucked and bathed by some of the seamen. The man was stunned for the time, but soon recovered himself; felt a little giddy and sick. Fifteen minutes after the accident, after he was brought on board, he was seen by the medical officers, the wound enlarged, well explored, nothing found, nitrate of silver applied, and a small quantity of brandy-and-water administered; patient ordered to keep very quiet.

The accident took place on August 12th, at 3.30 P.M. At 8.30, some five hours after the affair, the patient complained of nothing but a little headache and some pain about the wound.

Aug. 13th.—Passed a good night; vomited this morning; slight headache; more pain about wound; no chills; tongue coated with a white fur; bowels regular. Ordered water dressing to wound. Temperature 99·2°; pulse 64.—8 P.M. (some thirty hours after accident): No headache or vomiting; slept much during the day; taken food fairly; bowels been open. Temperature 99·6°; pulse 64.

14th.—Passed a good night; less pain in wound; no headache; states he feels better. Ordered some opening medicine, and linseed-meal poultice to remove eschar. Temperature 99·8°; pulse 68.—8 P.M.: A little discharge from wound; no sickness, headache, or rigors; bowels freely open; taken food well. Ordered to continue poultice. Temperature 98·4°; pulse 64.

15th.—Slept well; a little more discharge from wound; pain in part much the same; the wound was enlarged to give exit to any pus that might be there; taking food well; tongue clean; very slight constitutional disturbance. To continue poultice. Temperature 100°; pulse 80.—8 P.M.: Discharge coming from scalp; less pain in wounded part; taking food well; slept during the day; a little vomiting; no fever. Temperature 98·4°; pulse 60.

16th.—Still some discharge from wound, not much; passed a good night; no headache or sickness. To continue poultice. Temperature 98·8°; pulse 60.—8 P.M.: Much the same as this morning; wound redressed. Temperature 98·4°; pulse 60.

17th.—Wound discharging; general health good; sleeping and taking food well; bowels regular. To continue poultice. Temperature 98·6°; pulse 60.—8 P.M.: No change in patient. Temperature 98·4°; pulse 60.

18th.—Patient much the same as on previous day; wound discharging a little still. Continue poultice. Temperature 98·6°; pulse 56.—8 P.M. (sixth day of accident): Has complained during the day of stiffness about the jaws, unable to open mouth so freely as usual; some pain in swallowing; a peculiar expression of countenance as if suffering great pain, but complaining of none; no change in wound, no sickness or headache, taking food well. No signs of fever or any general constitutional disturbance. Temperature 98·4°; pulse 48, slow, but regular.

19th.—Patient slept well; complains of no particular pain about wound, but a nasty, unhealthy-looking discharge coming from it. A feeling of stiffness and soreness about the jaws and throat; unable to open mouth widely or protrude tongue freely, which is now covered with a dirty white fur; countenance assuming that peculiar expression of pain and anguish; features somewhat fixed; angles of mouth drawn down, constituting that appearance called the "risus sardonicus"; a general uneasiness of the whole body, and slight pain complained of about the dorsal region. No headache or sickness; slight thirst. Ordered beef-tea, jelly, wine, &c. Temperature 99·4°; pulse 60.—8 P.M.: Perfect trismus; can hardly separate teeth at all; much difficulty in swallowing, liable to bring on spasms of the facial muscles; more pain in cervical and dorsal regions; no spasms as yet of the lower extremities; slept some hours during the day; passed water freely; wound in the same condition; taken a fair amount of nourishment in the shape of beef-tea, jelly, wine, and brandy. Temperature 98·4°; pulse 56.

20th.—Patient very restless during the night, the spasms very slight; several doses of chloral hydrate were administered, and nutritious fluids given whenever the patient could take them. At 8 A.M. the patient got out of bed to be shifted, when a very severe spasm came on; the whole body was convulsed, the head thrown back and fixed by the powerful contraction of the muscles of the neck, the countenance pale and anxious, and greatly disfigured by the perverted action of the muscles; jaws firmly fixed; breathing short and hurried; the body became covered with profuse perspiration, and the patient greatly exhausted after the attack. Temperature 98·4°; pulse 80. Soon after this an enema of beef-tea and one drachm of chloral was given. The patient slept a little after this, but was disturbed by incessant twitching of the muscles.—At 10 A.M. another spasm came on, very similar to the one I have described.—At 1 P.M. another enema of beef-tea and chloral was given. Patient remained quiet after this, but did not sleep.—At 3 30 P.M. an injection of morphia was ordered hypodermically. He slept a short time after this, and on awaking stated that he felt better; able to open mouth a little more freely, and articulate with less difficulty; constant twitching going on in the muscles, but he had not had a severe spasm since 10 A.M.; the only thing he can swallow is jelly—taken several ounces of it. At 6 P.M. an enema of strong beef-tea, two ounces of brandy, and one drachm of chloral was given. The patient went to sleep soon after this, and slept soundly, with little or no spasmodic action until 8.30 P.M., some two hours and a half. He awoke refreshed, and took a small quantity of nourishment.—At 10.30 P.M. a severe fit came on, very similar to the one he had in the morning, but of greater intensity; the body suddenly raised; muscles of back of neck, trunk, and lower extremities powerfully affected; body regularly formed into a bow (opisthotonos); an expression of great mental distress and anguish in the countenance; jaws firmly fixed; the whole face greatly distorted and disfigured; breathing hurried and short; pulse weak and irregular; surface of body covered with profuse sweat; muscles of chest and abdomen felt like hard pieces of board. Patient fell back perfectly exhausted and gasping for breath. He was offered a variety of things in the shape of nutritious fluids; he could swallow nothing; a horrible dread if he took anything that another spasm would come on. Injections of morphia were given with no benefit, the spasms coming on with greater frequency and severity. Between the fits the body was hot and damp; temperature 104·6°; pulse rapid but weak; the slightest noise or movement brought on fresh convulsions.

At 6 A.M. of the morning of the 21st the patient was attacked with a final spasm; gave a sudden jerk, and was completely thrown off the bed; took two or three men to hold him during the fit; features assumed a horrible appearance, lips becoming blue; body fearfully convulsed; muscles rigid and tense. Death closed the awful scene.

The man died on the ninth day of the accident, and some fifty or sixty hours after the first signs of tetanus set in. The mind was clear from the beginning to the end, and there was no want of control over the bladder or bowels. Death appeared to take place from suffocation combined with extreme exhaustion.

(To be continued.)

NOTES ON A

CASE OF TUMOUR OF THE CEREBELLUM.

By RICHARD CATON, M.D.,

LECTURER ON PHYSIOLOGY, LIVERPOOL SCHOOL OF MEDICINE; ASSISTANT-PHYSICIAN TO THE INFIRMARY FOR CHILDREN.

On the 15th January, 1875, I was asked to see A. B——, a man somewhat under the middle height, of healthy appearance, aged twenty-eight, the manager of a large farm.

History.—About fifteen years ago patient had an attack of rheumatic fever, which was believed to have left behind it some cardiac affection, which, however, of late years had produced no symptoms of importance. Patient described himself as enjoying excellent health, and was apparently capable of active muscular exercise. About four months ago, when spending too much time in reading after his day's work was over, he suffered for a day or two from occipital headache. On discontinuing the reading this ceased.

Fourteen days before I saw him, having been somewhat short of labourers on his farm, he had helped the men to carry some distance, and to lift up a ladder, a large number of sacks, each weighing about 1½ cwt., the exertion being extremely severe. On that evening he was attacked by a violent pulsating headache in the occipital region. This had remained almost constant up to the time of my seeing him, and was so severe as to prevent sleep and render exertion impossible. He had had two or three attacks of vomiting.

Symptoms when first seen.—Severe pulsating headache in the occipital region complained of. Patient, who is a highly intelligent man, is quite clear intellectually, but is unable to bear much conversation, is very sensitive to noises, and suffers much from tinnitus. He exhibits some degree of difficulty and unsteadiness in walking; has no paralysis of motion or sensation; sight unaffected. He cannot recline on the back without increase of pain. Tongue furred; bowels constipated; no appetite; respiratory sounds normal; a remarkably loud, double aortic murmur; cardiac dulness perhaps slightly increased; pulse about 120, markedly aortic; temperature rather above the normal range; urine normal. He has always been strictly temperate, and has never had syphilis.

The *diagnosis* presented some little difficulty. I was in doubt between two theories—firstly, that of the existence of structural lesion of the brain; secondly, cerebral anæmia or some disturbance of brain circulation, due perhaps to mechanical injury of a previously diseased valve, sustained during the violent exertion on the day from which the symptoms dated. I rather inclined to the latter theory.

The *treatment* consisted in rest, the employment of counter-irritation over the nape of the neck, gentle aperients, and bromide of potassium, and subsequently iodide of potassium.

Progress of the case.—Coincidently with the treatment referred to, improvement took place in some of the symptoms. The headache, instead of being constant, became intermittent, the remissions became longer, and, finally, in about ten days the headache had become only occasional; any excitement or over-exertion would bring it on. The appetite returned. Notwithstanding improvement in these respects, great and increasing muscular weakness was observed; the muscles were largely developed, but the patient, who a fortnight ago had been capable of muscular exertion such as few of his farm labourers could surpass, now could not ascend two pairs of stairs without assistance. His gait began to be more unsteady; he could not turn round with the eyes shut without falling. Eyesight perfectly good, but a remarkable slowness in accommodation manifested itself. In adjusting the focus of the eye from an object one foot distant to another at fifty feet, a delay of three seconds took place. I measured this carefully on several occasions. The movements of the eyeball were normal; spectra in the form of blue rings were described.

These symptoms again excited fears of the existence of some structural lesion (perhaps of the cerebellum), and I decided to have a careful ophthalmoscopic examination made. Mr. Edgar Browne, surgeon to the Eye and Ear Infirmary, reported the presence of commencing optic neuritis about both discs, with dilated and tortuous vessels and one or two small hæmorrhages. This evidence was considered conclusive as to the existence of coarse disease, tumour, apoplexy, or abscess of the cerebellum being suggested. A very unfavourable prognosis was given. The eyesight as yet was quite good, but, notwithstanding appropriate treatment, the clouding of the retina was seen by us to spread steadily day by day, until at length, within about ten days from its first discovery, it produced loss of sight. About the same time the general symptoms became more severe, pulse and temperature rose, and occasional delirium occurred. Rheumatic symptoms were complained of, and pain in the loins drew attention again to the urine, which a few weeks back had been quite normal, but now was found loaded with albumen and containing numbers of granular tube-casts. Severe night-perspirations occurred; temperature often rose to 103°; pulse ranged from 110 to 130. The patient's hearing, which had formerly been morbidly acute, was now noticed to be defective on the left side. Several weeks now elapsed, during which no important change took place. Pain in the cardiac region and left hypochondrium were occasionally complained of. He suffered from a sense of oppression in the head, but only at intervals from headache, and was usually quite clear intellectually.

Towards the end of April, œdema of the legs appeared, and some fluid collected in the peritoneum. Occasional squint and signs of partial paralysis of the facial muscles of the right side became manifest. About the 1st May he began to have difficulty in expressing himself, on the 3rd became gradually hemiplegic on the right side, and died on the 4th.

Autopsy.—Cerebral hemispheres normal externally. A tumour, the size of a small walnut, was found on the under surface of the left hemisphere of the cerebellum, adjacent to the pons, and beneath the auditory nerve, which was stretched over it. There was a small embolus in the left middle cerebral artery, beyond its first anterior branch. The ventricles contained two or three ounces of fluid.

Remarks.—The sudden onset of the symptoms immediately after violent muscular exertion, valvular disease being present, was very misleading, and caused at first an error in diagnosis. Subsequently the diminution of muscular power without paralysis, the ataxia, together with the occipital headache and optic neuritis, formed a group of symptoms on the whole characteristic of tumour of the cerebellum. The affection of hearing gave, later on, a clue as to the probable locality of the tumour. The slowness of accommodation is a symptom which I have not seen described before. It was very marked. If the patient glanced up from the book he was reading towards the figure of any person entering the room, he described himself as only being able for two or three seconds to see a dim haze, then he saw quite distinctly. Changes in focal adjustment were obviously made slowly and with difficulty. Prof. Ferrier has shown how largely the cerebellum is concerned in the co-ordination of the muscles of the eyeball; has it a like control over the ciliary muscle and the mechanism of accommodation?

Liverpool.

EMPYEMA, FOLLOWING SCARLET FEVER: THORACENTESIS; RECOVERY.

By BENJAMIN WALKER, M.R.C.S., L.R.C.P., &c.

Sarah Jane W——, aged two years and a half, the child of healthy parents, was seized with convulsions on the 5th of April. The attack lasted about half an hour, and the left half of the body was chiefly affected, the left hand being very blue and the face much distorted. The left half of the body was quite powerless. Speech was not affected. On the following day the characteristic rash of scarlatina appeared. The nearest medical man was called in, and he attended her till the 16th, when she came under my care. This was the twelfth day of the illness. There was then considerable though not complete loss of power of the left half of the body; tongue dry and glazed; pulse 130, feeble and compressible; skin hot and dry. The temperature could not be taken at any time through the illness on account of the restlessness and fear of the child when approached. Throat affection slight. There was great thirst. The bowels had been freely opened by my predecessor. Bark and ammonia were now ordered, with beef-tea, egg, and brandy mixture at regular intervals, and, to quench the thirst, milk and lime-water *ad lib.*

May 1st. — Condition was one of hectic, with frequent flushings and rigors, and the child was greatly emaciated, the support being taken in a very desultory manner.

8th. — An abscess of considerable size under the left pectoral muscle was opened, and gave exit to about three ounces of fairly formed pus; there was a slight drain for a few days and then the discharge ceased. In the course of two weeks the left side of the chest began to increase in size, so that the measurement exceeded the right by about an inch; the heart was displaced to the right, so that the apex beat was to the right of the sternum, a little below and to the inner side of the right nipple. There had been a troublesome cough for three weeks past, latterly increasing in severity, but without much expectoration, till the 17th, when there was a copious discharge of pus tinged with blood, denoting the occurrence of bronchial fistula. Some relief followed this, and purulent matter was from time to time expectorated with the cough, in greater or less quantity; the chest measurement, however, was little affected, and the child continued in much the same state for the next six weeks, when the dyspnœa became daily more marked, and it was evident that, unless relief were obtained by other than nature's method, there would soon be a fatal termination, for the little patient was emaciated to an extreme degree and rapidly sinking from hectic.

July 15th.—With the assistance of my friend Mr. Foulds, who saw her in consultation, a medium-sized needle of Maw's bottle aspirator was inserted, between the sixth and seventh ribs near their angles, and 20 oz. of odourless pus of the consistence and exact appearance of pea-soup drawn off. A little blood commencing to flow warned us to withdraw the needle. The lung gradually expanded whilst the fluid was being withdrawn, as indicated by the cough, and afterwards verified by auscultation and percussion. No anæsthetic was used, and the operation was the simplest in performance, only a sharp twinge of pain being felt at the moment of inserting the needle. Immediate relief followed the operation; the breathing was easier, the cough less troublesome, and purulent expectoration ceased from this date. Next day the child was better, and there was no irritation or discharge at the seat of puncture, which was seen as a mere spot, and soon entirely disappeared. The relief, however, was but temporary; for in three days (the 18th) the distension of the pleura was as great as before, and the aspirator was again employed, and a little more than a pint of odourless pus similar to the former drawn off, with relief to all the urgent symptoms.

The exhaustive and able "Clinical Remarks on Tapping and Draining the Pleura," by Mr. Berkeley Hill, appeared in The Lancet just at this time (July 17th), and I derived practical benefit from the excellent rules there laid down.

The purulent effusion again distended the pleura, displacing the heart as much as before, but more slowly. The condition of the child was one of extreme emaciation, the limbs being apparently little more than bones covered with skin. The two aspirations having yielded perfectly inodorous pus made me unwilling to insert a drainage-tube; but, as she was evidently sinking, with the assistance of my former colleague, a trocar and canula was introduced, which gave exit to about a pint of similar pus. The opening was then enlarged, and a No. 9 Holt's winged catheter introduced. Through this a pint more, at a moderate computation, gradually drained in the next twenty-four hours. The end of the tube was surrounded by a loose pad of tenax to absorb the discharge, and this changed daily. The steady improvement inaugurated by this operation showed it to be the correct one. The child lost all its former hectic and febrile symptoms, and began to take nutriment in almost any shape in which it was offered. In the course of a week or two the appetite was ravenous, and chops and steaks were disposed of in a manner which would certainly have taxed the digestive powers of a healthy adult. Sleep became sound and refreshing, the child awaking once or twice in the night, only to ask for food. In addition to solids, large quantities of milk, and of egg and port mixture, were disposed of in the twenty-four hours. The cough and expectoration both disappeared, and in a month's time she was as plump and firm-fleshed as ever in her life. The increase in the girth of her limbs could almost be graduated daily.

Aug. 28th.—Began to take cod-liver oil emulsion, and, in addition to bark, Parrish's syrup.

At present (Oct. 20th) the discharge from the tube varies, some days being very slight, others more profuse, the weather influencing this in some measure; besides which, the house in which the patient lives is very damp. She runs about as in health, and on fine days goes into the air.

Remarks.—The advantage of giving free and permanent opening in empyema, at whatever age occurring, is clearly exemplified by the result of this case. The milder operation of removing the fluid by aspiration is less repugnant, especially in so young a patient; but the reaccumulation in so short a time as three days, with its accompanying hectic, shows that it is but tentative; and on a similar case recurring I should advise drainage after a first aspiration, as giving a better chance of recovery than a repetition of the less severe operation, regardless of the state of exhaustion of the patient.

The subject of antiseptic surgery is again coming to the front, as appears from a leader in The Lancet of the 16th inst.; where there is also recorded (at p. 577) a case of Mr. Pemberton's, at Birmingham, in which "extremely successful results" have been obtained in a case of empyema, "where the chest was opened antiseptically and a drainage-tube run through it, the man having gained weight in a remarkable manner." I think, without any invidious comparison, this little patient shows that equally satisfactory results may be obtained, with care and cleanliness, without antiseptic surgery.

I would also say a word in favour of the simple and inexpensive bottle aspirator of Messrs. Maw and Son, which acts most efficiently. The winged catheter makes an excellent drainage-tube, though it is well to attach it by a thread secured by a strip of diachylon, as, if the wings alone be trusted to, the tube may escape (as occurred once to me), and give some trouble in its reinsertion, especially in a very young patient.

The parents will be most happy to show the child to any practitioner desirous of seeing it.

Spondon, Derby.

NOTES OF SIXTEEN CASES OF ABORTION.

By JOHN DOUGALL, M.D. Glasgow.

(Concluded from page 588.)

Case 12.—Mrs. E——, aged twenty-four, in third month, second abortion, second pregnancy, on a journey from London to Glasgow by railway, became ill soon after leaving Carlisle, but bore up till her destination was reached. She had lost a deal of blood, the result of which was obvious in her feeble polycrotic pulse, exsanguine lips, and anæmic features. An ounce of brandy was at once given, the shoulders lowered, and the pelvis raised. The os was slightly open, and what seemed a portion of ruptured ovum involucra hanging from it. As she was still bleeding, the vagina was stuffed with sponge wet with a solution of tincture of perchloride of iron, and warmth applied to the feet. She began to revive, but being too weak to bear any attempts at extracting the fœtal structures, I resolved to wait, and ordered beef-tea and wine with chicken broth and arrowroot. Next day she was much better; and had slept a few hours, though wakened several times by uterine pains. On withdrawing the plug it was followed by several large clots and fresh hæmorrhage. A cold astringent lotion was injected. The os was somewhat open, but no projecting body felt. The plug was again used successfully, and the extruded coagula were carefully searched, yet no traces of embryo or membranes were seen. That night the plug was once more removed, but had to be replaced. Next day I proposed to give chloroform and explore the uterus, but patient and husband objected. Ergot, strychnia, and steel were prescribed, and for nearly a week the treatment was merely a repetition of the foregoing. Latterly the hæmorrhage so far lessened that the plug could be dispensed with. Astringent injections were continued for some days, when the discharge gradually assumed a lochial character, and ultimately ceased. Convalescence was protracted. She was in fair health and menstruating six months after.

Case 13.—Mrs. F——, aged thirty-two, in third month, first abortion, second pregnancy. I found her in a most perilous state from loss of blood, her features sunk and blanched, her extremities cold and pulseless; in fact, *in articulo mortis.* The vessel contained about half a gallon of blood, while a great portion of her bed and body clothes were saturated with it. As there were no stimulants in the house, I had to wait till some were procured. In the interval the pillows were removed from under her head and placed beneath the pelvis, and cold applied to the vulva and pubes. A friend having returned with half a tumblerful of whisky, she was at once made to swallow about three-fourths of it, while heat and friction were applied to the extremities. Either from nearly absolute depletion, or from general vascular contraction caused by the muffled and weakly flicker of the heart, or more likely from both, the hæmorrhage had spontaneously ceased before my arrival, or was easily arrested by the means stated. In a short time the radial and temporal pulses could be detected—quivering threads, and she answered one or two questions in monosyllables. A mixture of egg and brandy was now given in small and frequent doses, and in an hour after she was much improved; pulse 160. A vaginal examination now made showed the os uteri much dilated, and a round body protruding, which I slightly tried to extract, but failed. Next morning she was further improved. I liberated the body from the os, which proved to be a large black coagulum. For some days she was carefully fed and nursed. There was no more hæmorrhage, and, being naturally healthy and muscular, she made a rapid and uninterrupted recovery. No portion of the ovum was found.

Case 14.—Mrs. T——, aged twenty-eight, in seventh month, third abortion, third pregnancy. Is tall and heavy, but lax of fibre, anæmic, and weak. The night previous she had been doing some extra housework, though suffering from diarrhœa. I found her in bed, with the body of a dead female fœtus protruding from the vagina. The liberation of the head was only wanted to complete the birth, and was easily done, previous to which I gave ergot and borax in cinnamon water. The placenta came away easily, followed by considerable hæmorrhage. She progressed favourably till the thirteenth day, when pain commenced in the right inguinal region, with increased swelling and stiffness of the corresponding leg (her limbs were anasarcous previously), thirst, and headache—symptoms indicative of phlegmasia dolens. She was kept in the horizontal posture, with the affected limb raised, four leeches were applied to the most painful part, hot fomentations, liniments, and dry friction used, milk, wine, raw infusion of muscle, and chicken soup ordered, and a mixture of steel and strychnia prescribed. Under this treatment she improved, and was out of bed in three weeks. She then stayed two months in Arran. At present (eight months after her confinement) the limb is still much swollen. She complains of a dull and constant pain in the knee-joint, while her general health is obviously impaired.

Case 15.—Mrs. C——, aged twenty-six, in third month, first abortion, first pregnancy, married two years and a half, first consulted me in regard to general debility and leucorrhœa. She was much improved by a course of tonics and vaginal injections. Soon after she had a large vulval abscess, which discharged copiously and reduced her health considerably. She then had fistula in ano, and was operated on. After this she was put on steel and cod-liver oil, by which she laid on flesh very rapidly. I then advised her to stop the oil and continue to take ten minims of tincture of perchloride of iron thrice daily. About eight weeks afterwards she called to say she had missed two of her monthly periods. In less than a week I was requested to see her. She had been losing a little blood for two days, and had now bearing-down pains. "She was sure it was not because she had not taken the steel drops, as she had not missed a single dose." Though I had an idea that the iron might have contributed to causing her pregnancy, I now thought that her taking it after might be the cause of her aborting. The os was slightly open, but no ovum could be felt. Opium, digitalis, and sulphuric acid were prescribed, with light diet, the horizontal posture, and quietness. This treatment seemed successful, but next day the pain and bleeding returned, and the bag of membranes was felt dilating the os. Ergot was given, and, after four hours' severe suffering, the ovum was shed entire. She made a good recovery. The fistula was unhealed four months afterwards.

Case 16.—Mrs. B——, aged thirty, in fifth month, first abortion, fifth pregnancy. The previous evening she fell from a chair while adjusting some clothes on a rope. I found her on the verge of syncope from loss of blood and in great pain. On examination the membranes were found entire and beginning to part the labia pudendi. They were at once ruptured, as recommended by Prezos,* and almost immediately the fœtus was expelled by the breech. Ergot was given, and in five minutes the placenta was easily removed, hæmorrhage and pain quickly ceasing. Patient was up in a week.

Remarks.—Some points in these cases are common to all such, as the period when abortion took place, its cause, chief symptoms, &c. But there are others, illustrating certain doctrines in regard to abortion generally, to which the following remarks apply.

1. The removal of a retained ovum or placenta is effected in three ways: (*a*) by the giving of substances which stimulate the uterus to contract; (*b*) by the avulsion of the ovum or placenta with forceps, &c.; (*c*) by passing the hand into the vagina and the fingers into the uterus and turning out its contents. (*a*) Cases 1, 2, 5, 6, 7, 9, 10, 11 show that, whatever effect ergot or borax had in lessening hæmorrhage, they had little if any in causing uterine contractions. (*b*) The use of the ovum forceps, wire crotchet, &c., for dragging away the ovum or placenta is generally and justly condemned from the obvious risk of wounding the uterus. Only in Case 2 was the ovum forceps used and without benefit. (*c*) Cases 1, 2, 10 show that the placenta may be retained a considerable time without danger, also the success attending its removal by the hand in the vagina. In Case 10, where the placenta was adherent, and uterine stimulants failed, obviously no other procedure could have resulted nearly so satisfactorily.

2. There is a strong presumption that the cause of abortion in Case 4 was uterine flexion and adhesion prior to pregnancy. Madame Boivin found, in the course of her dissections, that in many of those women who always

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* Rigby's Midwifery, p. 95.

aborted when they arrived at a particular period of pregnancy, the uterus had contracted adhesions with the neighbouring viscera and the general pelvic cavity.*

3. Plugging the vagina with sponge wetted with some astringent fluid was done nearly a dozen times with unvarying success, the speculum being used in most cases. While admiring the scientific manner of plugging with tangle, recommended by Dr. Barnes, I have found it comparatively difficult to perform; besides, it is necessary, so as to be sure the plug will keep *in situ*, to stuff the vagina with a portion of sponge, lint, or some such body, which of itself might be sufficient to prevent hæmorrhage. If this be omitted, it may be found that the tangle is expelled as soon as it begins to expand the os, from the uterine contractions thereby originated.

4. In Case 5 the action of the enema in stimulating uterine contractions was very marked and successful. This plan is well worthy of further trial in cases of retained secundines with hæmorrhage, in conjunction with other means usually employed.

5. Vaginal injections of hydrochloric acid, where the lochia seemed at all fetid, were often used. The mineral acids, being reliable disinfectants in small quantity, as distinguished from mere deodorants, should be used in all such cases.

6. In six of the cases it was attempted, without success, to save the ovum. The twice-recurring threatened abortion in the pregnancy succeeding abortion, in Case 6, shows, however, that even where miscarriage is imminent (provided there is reason to believe the ovum or fœtus is living) the means to avert it should be employed.

7. I am not aware of any recorded instance of the injection of iron alum into the uterus. The astringency of this salt is very great; and in Case 6, where it was frequently used, the effect was highly satisfactory. I find the uterus is more tolerant of internal medication than is generally believed; and in cases of chronic endometritis I have frequently injected solutions of iodine and chromic acid, and also have often introduced pure carbolic acid with the probe invented by Professor Playfair, and as recommended by him in The Lancet about two years ago.

8. The bracing effects of the atmosphere of certain places on the west coast of Scotland are well known. I have several times been struck with its curative influence on functional diseases of the female sexual organs, and have had at least four cases where some weeks' residence at the coast, along with other appropriate treatment, was soon followed by pregnancy after prolonged sterility. Whatever favourable effect the compound syrup of phosphate of iron may have had in Case 8, the woman herself is convinced that she owes, in great part, her improved health and living child to a lengthened stay at one of the Clyde watering-places.

9. Case 14 is typical of a class not uncommon, where nature, in a cachectic habit, with its usual malign concomitants, makes frequent abortive attempts at reproduction. In such cases utero-gestation is often, in the same patient, brought to the verge of completion, when, from some cause, fœtal or maternal, not easily eliminated and difficult to avert, the vital process is suddenly blighted, and a premature still-birth results. The phlegmasia dolens which followed in this case could not arise from the usual cause, great hæmorrhage, as that was only considerable.

10. Whether the continued administration of iron during pregnancy in Case 15 helped to cause the abortion is questionable, but I have thought proper to record the circumstance. At a meeting of the London Obstetrical Society† Dr. Barnes alluded to an instance where a pupil of his had given iron to a pregnant woman, and was in consequence accused of intending to produce abortion. Dr. Barnes said he had given it in dozens of cases, and never witnessed any ill consequences, or instances in which abortion could be traced to its administration. He thought iron might safely be given where anæmia was present during pregnancy, to improve the patient's condition and lessen the risk of hæmorrhage during parturition.

11. The quantity of blood women lose in abortion and parturition is often very great, yet it is astonishing how quickly they generally recover. Cases 7, 12, 13, and 16 are marked examples. In view of this, probably bleeding might be had recourse to with benefit more frequently in acute diseases. The admirable address of Sir James Paget, chiefly on bleeding, at the Norwich meeting of the British Medical Association confirms the above. Amongst other things, he said: "At the present day we undoubtedly overvalue the blood, and estimate too cautiously the loss of it. The loss of blood to fainting is absolutely harmless." These remarks applied to healthy persons.

Glasgow.

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* Ramsbotham: Obstet. Med. and Surg., p. 653.

† The Lancet, 1874: May 30th, p. 768, and August 1st, p. 158.

ON A CASE OF

ANEURISMAL TUMOUR OF THE PHARYNX.

By JOHN J. BARNES, M.R.C.S.

I beg to call attention to the following interesting case.

B. N——, aged seventy-three, a female patient of mine, had complained of slight difficulty in swallowing. On looking into the throat I found it natural, with the exception of a small pulsating tumour, situated at the back of the pharynx, between the median line and the right posterior pillar of the fauces, but nearer the latter. It is about an inch in length and half an inch in width, the upper end being opposite the lower edge of the soft palate. The pulsation of this tumour is entirely arrested by very moderate pressure over the external carotid. Partly, no doubt, from the difficulty of getting a good *point d'appui*, it cannot be arrested completely by such pressure as my patient can bear over the common carotid.

Cases have been recorded by Porter and Syme of aneurism of the internal carotid "pointing" in the above situation. I think, however, from the extreme ease with which the pulsation is arrested in this case by pressure over the external carotid, that it is more likely to be an aneurism of the ascending pharyngeal branch of that artery. It is of course open to anybody to maintain that the pressure with which one arrests the pulsation is conveyed through intervening structures to the internal carotid. I can only reply that the pressure required is so moderate that it seems doubtful whether it would be sufficient to stop the flow through the internal carotid, considering its depth from the surface. There are no pressure signs; the pupils are equal; there is no alteration of voice; no dyspnœa. The only complaint is of occasional slight discomfort in swallowing, which amounts to very little. There is no evidence of aneurism elsewhere.

Considering the age of my patient, and that the tumour has not materially increased during the last three months, I do not feel justified at present in tying the common carotid. If the aneurism should increase, I think it would be right to give digital pressure a trial. In the event of any bleeding coming on, the patient's friends have been instructed how to compress the external carotid, which they can do perfectly. Tying the common carotid would then, I presume, be the only resource.

Bolton.

Doncaster Infirmary.—At the annual meeting of the governors and friends of this institution, held last week, a report was read which was satisfactory as testifying to the prosperity of the infirmary. Whereas last year there was a balance of £121 due to the treasurer, this year there is a balance of £54 in favour of the institution, whilst its supporters are becoming more numerous and influential. Its usefulness also had been shown in the aid it had afforded to an increased number of patients. A legacy of £3000 by the late Mr. Barker had been paid, and the combined results of Hospital Saturday and Sunday had enriched the funds of the infirmary to the extent of nearly £300.

Bequests, &c., to Medical Charities. — The Newcastle-on-Tyne Infirmary has received £2425 under the will of Mr. James Pigg. TheConvalescent Society, Whitley, has received £1000 under the will of Mrs. Blackwell. Mr. William Crook, of York-street, Portman-square, bequeathed £200 each to the Hertford Infirmary and the Worcester Infirmary, and £50 each to the Royal United Hospital, Bath, and the Harrowgate Hospital. Miss Sarah Goodin, of Maida-vale, bequeathed £200 each to the Surrey Dispensary, the London Hospital, and St. Mary's Hospital.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

GUY'S HOSPITAL.

CASE OF EMPYEMA TREATED BY FREE EVACUATION OF THE FLUID.

(Under the care of Dr. Wilks.)

In the Mirror of the 14th December, 1872, we referred to some cases of empyema treated by Dr. Wilks by means of free evacuation of the collected fluids and by subsequent drainage. At a recent visit to Guy's Hospital we saw a case which illustrated in a marked manner the great benefit that is often derived from freely opening the chest in these cases. A thin delicate woman, aged twenty-one, but looking much older, was admitted on the 13th inst., apparently moribund. It was ascertained that the patient was quite well until eleven months ago, never having had any illness, except small-pox when a child. The father died of hæmoptysis at the age of forty-five, but the mother and the brothers and sisters are living and healthy. Eleven months ago the patient caught cold, and suffered from cough accompanied by pain down the sternum. This pain was always much increased by coughing. There were never any rigors, but there was some delirium at the commencement of the illness. For a month she attended the Southport Infirmary as an out-patient, but, becoming worse, she was taken into the infirmary, where she remained for six months, under the care of Dr. Seager. During that time she suffered great pain in the right side of the chest, together with cough and shortness of breath; and she stated that on one occasion she spat up about two quarts of blood. She was, however, better when she left the infirmary, but was unable to do any work. She remained at home four months, but, becoming much worse, was admitted into Guy's Hospital.

On admission she was thin and delicate-looking, and had very flushed cheeks, the expression of the face being pinched and almost peevish. The skin was hot and dry. The voice was feeble and husky, and there was a constant hacking cough. The nails were filbert-shaped, and the ends of the fingers clubbed. The ocular conjunctivæ had a pearly appearance. The tongue was white and moist; the gums were pale, and presented a red line at the base of the teeth. Just below the right mamma was a red, hot, tender swelling, and there was extreme tenderness over the whole of the lower part of the thorax from the spine forwards, and also over the liver, and, on deep pressure, throughout the whole of the abdominal region. There was dulness of the whole of the right side of the chest in front; below the third rib the dulness was absolute, and in this part there was entire absence of vesicular murmur. Above the third rib there was increased vocal resonance and tubular breathing. The left front was resonant throughout, the vocal resonance increased, and the breath-sound tubular. At the back on the right side there was absolute dulness, and absence of breath-sounds below the spine of the scapula. About this there were tubular breathing and increased vocal resonance. The left back was resonant, and the respiration sounds were exaggerated. The apex beat of the heart was diffused, and one inch below and half an inch outside the nipple. There was a cardiac bruit of a churning sound most audible at the apex. The patient suffered greatly from thirst. The temperature on the morning of admission was 103·5° F., in the evening 100°, respiration 36; bowels regular; urine sp. gr. 1012, no albumen or sugar. The patient had not menstruated for eleven months.

On the evening of the 14th an incision was made into the front of the chest, where the pus was pointing. A catheter was then introduced into the pleural cavity and made to point behind, where another incision was made. About sixteen ounces of fluid escaped. A drainage-tube was then put in, and the cavity washed out with a solution of carbolic acid (1 to 40). Next day the patient was decidedly better and looked brighter, and the temperature was normal. On the 16th both sides of the chest expanded fairly well below the clavicles. The right side was hyper-resonant in front but rather dull behind, with marked ægophony and very slight vesicular breathing. There was good resonance on the left side of the chest, both in front and behind. The breath-sounds were harsh, but vesicular just below the right clavicle; in the left front they were puerile. At the back the breath-sounds were bad on both sides. On the 19th the patient was still better, felt stronger, slept well, and the appetite was good. The cough also had ceased. On the 20th all signs of the inflammation had subsided from the surface of the thorax, and the tenderness was much less. The right chest was tympanitic on percussion, but very little air entered the lung. On the 21st the drainage-tube was withdrawn from the opening in front of the chest, and the washings, which had hitherto been performed daily, were now ordered to be done every other day. On the 25th (the day of our visit) the patient, although evidently still weak, was sitting up in bed unsupported, and stated that she felt stronger. The right subclavian region was resonant, and below this the chest was hyper-resonant. There was, however, no tactile vibration, although vesicular murmur could be heard at the inner half of the right subclavian region. At the back the right supra-scapular region was normal, but below this there was dulness with distant and feeble breath-sounds. There was fairly good tactile vibration. The temperature was normal, as indeed it had been since the tapping, but the respirations were still very frequent, being, at the time we saw the case, 38 per minute.

Remarks.—This case (for many of the notes of which we are indebted to Mr. Thomas Duke) is an example, by no means rare, of what may be done by means of tapping in even some of the worst cases of empyema. It is scarcely too much to say that in this instance life was actually saved by the procedure; at all events, it has been prolonged, and the patient put in a fair way for recovery. Nor is the case by any means exceptional. Free opening has been so uniformly successful in these cases that Dr. Wilks alleged that he would always recommend it in empyema, and experience has shown that this advice is in the main thoroughly sound. For, notwithstanding the adverse opinion of many of the older teachers, and even of many of the present day, it must be confessed that the lives of patients have been sometimes unmistakably sacrificed to the efforts made to save the lung. The practice of tapping has been again and again denounced as likely to damage the lung. In former times, even when the operation was sanctioned it was done with a sparing hand. A few ounces of fluid were allowed to escape, and then the puncture was firmly closed. But as the patient did not improve, the operation was repeated in the same niggardly manner several times, at longer or shorter intervals. After all, the patient too commonly died with a chest full of fluid, a large share of which was, not without reason, often attributed to the evil effects of tapping; whereas, if free evacuation had been ensured, the result would in all probability have been vastly different. When there is pus in the pleural cavity Dr. Wilks maintains that the lung is destroyed, and then it is useless to attempt to restore it to its natural state. There is, however, one exception to the universal adoption of tapping in empyema. Often in children large quantities of pus collect in the pleural cavity, but afterwards become entirely absorbed, leaving the lung practically unimpaired. In such instances to establish a communication between the outer air and the pleural cavity would not only be unnecessary, but might be attended with evil results, and lead to irreparable collapse of the lung.

ROYAL HANTS COUNTY HOSPITAL.

CASE OF SEVERE NEURALGIA IN THE TRACT OF THE RIGHT DENTAL NERVE; OPERATION; RECOVERY.

(Under the care of Mr. Langdon.)

For the following notes we are indebted to Mr. William Robert Smith, house-surgeon.

The patient was a nurse, who had for the last three years suffered from intense neuralgic pains in the face, occurring at irregular intervals, but generally caused by eating, drinking, or exposure to cold. The fits of pain were always preceded by a stinging sensation at the side of the mouth, then a feeling as if a number of hot irons were being thrust into the tongue, followed by the most severe pain, from the symphysis to the ramus of the jaw on the right side, and thence to the temple, spreading both backwards and forwards. During the two years that the patient had been a nurse to the hospital every medicine which was likely to give relief had been tried; but as the pain increased in severity, at the patient's entreaties that something more should be done, it was decided to divide the dental nerve. This was done on Sept. 1st An incision was made along the anterior margin of the masseter muscle, another at right angles to this along the body of the jaw, and the triangular flap of skin raised; the bone was then trephined with an instrument three-quarters of an inch in diameter, and the dental nerve and artery were thus exposed in their canal. About half an inch of the nerve was then removed. Troublesome hæmorrhage took place from the dental artery, but was arrested by the application of a red-hot wire. The edges of the wound were then accurately brought together by means of silver wire, a small opening being left at the apex of the angular incision for the escape of pus. Carbolic oil (1 in 30) was then applied.—8 P.M.: Feels very comfortable. Has had no return of the pain; been slightly sick once. Pulse 120; temperature 102 3°.

Sept. 2nd.—Slept fairly. No pain, but occasional headache. Complains of thirst. Pulse good; no sickness. The wound not dressed.

3rd.—Progressing favourably. No return of pain, but she complains of slight aching in the face. Bowels moved slightly. The wound was dressed with carbolic oil, and looks well, there being only a little watery discharge from the opening, whilst the ends of the incision are quite healed.

4th.—Slept well; complains of pain and stiffness just below the ear, this part being also red and hard; in other respects she is much improved, takes nourishment well, and feels in every way better. A bread poultice was ordered to be applied to the inflamed surface.

5th.—Last evening had severe twitching and stinging sensations, with pain just beneath the tongue and by the side of the jaw; this, however, did not spread over the face, as it had originally done, nor was the pain so intense.

6th.—Had rather a restless night, the twitching still continuing, but with less severity; wound discharging more; the redness and hardness beneath the ear decreased; general condition still in every way good.

7th.—Is much better; has had but a slight return of the twitching sensation; bowels rather confined; wound doing well.

From this time patient went on uninterruptedly getting well, until Sept. 14th, when she had a slight return of the pain. On Sept. 18th she left the hospital for change of air, the wound having nearly healed.

25th.—Patient feels quite well, much better than she has done for some time; has had no return of pain.

27th.—Patient discharged to duty.

The only treatment found necessary in this case was an occasional dose of castor oil; no anodyne was required. The wound was dressed with carbolic oil, with the addition, after a time, of a bread-and-water poultice; the nourishment consisted of milk, soup, beef-tea, pudding, and minced meat.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

SACCULAR DILATATION OF THE URETHRA; REMOVAL; CURE.

(Under the care of Mr. LAWSON TAIT.)

MRS. B——, mother of a large family, had suffered for many years from a protrusion about the size of an egg from the vulva, which was excessively painful. She passed large quantities of fetid pus from the bladder. The protrusion looked like an ordinary cystocele, save that it was quite irreducible, was very hard, and when firmly pressed a large quantity of fetid ammoniacal pus escaped from the orifice of the urethra. If this pus got on the fingers it made them smart. The sound readily passed into the cavity of the protrusion from the urethra. It was clearly, therefore, not an ordinary cystocele, but probably a sacculation of the urethra, and the only benefit likely to be obtained was by its removal. She was placed under ether, and the lower half of the protrusion was removed by a cut of the scissors, and this opened into a large cavity lined with thickened corrugated mucous membrane. It had an opening into the urethra large enough to admit a No. 9 or 10 catheter, the opening being situated in the lower wall of the urethra, and about half way between its orifice and the entrance to the bladder. The whole of the mucous lining of the sac was removed, and the vaginal mucous membrane was closed over the cavity by deep sutures. The wound healed rapidly and the cure is now complete.

Mr. Tait remarked that he had never met with a case like this, and he supposed that the sac must have been of congenital origin.

REMOVAL OF A LARGE SOFT FIBRO-MYOMA BY ABDOMINAL SECTION; DEATH.

(Under the care of Mr. LAWSON TAIT.)

Mrs. W——, aged forty-five (sent by Dr. Eshelby, of Stroud), had been aware of an increase in size for about four years, but chiefly within the last few months. Mr. Tait saw her first at the end of July, and found a large semi-fluctuating tumour reaching up to the xyphoid cartilage, lying chiefly to the left side, but with a well-defined secondary mass lying under the liver. There was a good deal of ascites. The tumour moved very freely. The uterus was high, and moved with the tumour, but not closely enough to make it certain that it was not ovarian. Mr. Tait expressed a doubtful opinion about the nature of the tumour, but advised an exploratory incision, and the removal of the tumour if it were possible. The incision was accordingly made on Sept. 11th, and, even when the tumour was bared, it was not till a needle had been passed into it that its non-cystic nature could be definitely ascertained. The tumour was free from adhesions, and had a fair pedicle. Mr. Tait therefore removed it and placed a clamp on the pedicle. The tumour was found to be a collection of extremely soft fibroids growing in the fundus uteri, which was of course removed with them. The patient went on well for thirty-six hours, but died of general peritonitis on the fourth day.

This is the second case of the kind that Mr. Tait has operated on, the first having recovered.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 26th inst., Sir James Paget, F.R.S., in the chair. A paper by Dr. Greenhalgh, advocating the use of the actual cautery for the enucleation and removal of certain uterine fibroids was read. The difficulties in the selection of suitable cases, and the subsequent risks arising out of the disintegration of the growths were the points chiefly dwelt upon by Drs. Meadows and Barnes, who spoke on the subject. This paper was followed by one by Mr. Spitta, late Demonstrator of Anatomy at St. George's Hospital, explanatory of a new working model of the larynx, and containing a confutation of current opinions as to the actions of the respective laryngeal muscles.

Dr. GREENHALGH, at the commencement of his paper "On the Use of the Actual Cautery in the Enucleation of Fibroid Tumours of the Uterus," alluded to the infrequent use of the actual cautery as compared with its application on the Continent, and passed on to enumerate the cases in which, for the last twelve years, he had used it with more or less success. These cases include chronic enlargements, with induration of the cervix uteri, due to inflammatory or fibroid diseases; epithelioma and cancer of the neck of the uterus where the organ is movable; some cases of vascular tumour of the meatus urinarius; slight cases of recto- and vesico-vaginal fistula; in incontinence of urine due to dilated urethral canal, and in certain cases of interstitial and intra-uterine fibroid growths. It was to its use in the two latter classes of cases that he limited his present observations. Full notes of a series of five cases in which this operation was performed were then given. The following is a brief outline of this part of the paper.—Case 1. Forty-three years of age, married thirteen years, with six children; came under treatment for retention of urine in 1866. For three years there had been much vaginal discharge, and, latterly, menorrhagia. Examination showed a large elastic growth from the posterior wall and fundus of the uterus, reaching to within an inch of the umbilicus, and in the pelvis compressing the rectum. A trocar was introduced into the mass in the vagina, which was followed by jetting of arterial blood, only checked by means of the actual cautery. A profuse serous discharge followed, and four days later the cautery was again applied, and by degrees the tumour shelled out from its capsule through the aperture thus made. The tumour was of the size of the fœtal head at term.—Case 2. Forty-seven years of age, married twelve years, never pregnant. Came under treatment for difficulty in micturition and defecation. A large tumour, flattening the rectum, filled up the pelvis. It was opened in the most dependent part by the actual cautery. Death occurred from peritonitis, due to perforation of the intestine, and the tumour was found to have contracted adhesions with the cæcum and rectum, and to be ulcerating into these cavities.—Case 3. Thirty-eight years of age, married thirteen years, four miscarriages; a large tumour from the posterior lip of the os uteri obstructed labour. The growth was treated by the actual cautery. The tumour gradually enucleated, and the patient made a good recovery. [With reference to this case, Dr. Greenhalgh read a letter received from Mr. Marriott, of Leicester, stating that last month the patient was delivered safely of a full-grown child at term. Before the operation was undertaken, the posterior lip of the uterus used to enlarge during pregnancy, and on the last occasion premature labour had to be induced.]—Case 4. Aged forty-seven, married, never pregnant; suffered much from hæmorrhage, constipation, and difficult micturition. A large tumour occupied the hypogastric region; the os uteri was stretched over the growth. The cautery was used in all four times, and the tumour removed piecemeal, gradually disintegrating. The patient recovered.—Case 5. Aged thirty; came under treatment in August, 1874; had suffered from floodings since January. An enormous fibroid tumour occupied a large part of the abdomen, and below it projected into the vagina from the posterior lip of the uterus. The case was under treatment for several months. The cautery was frequently applied, and the mass gradually disintegrated. There was much putrid discharge, and constitutional disturbance. The patient died in February, 1875, from embolism, after the growth had been apparently in great part, if not wholly removed. The tumour weighed in all 7 lb. 1 oz. Thus of these five cases three were intra-mural, one intra-uterine, and one extra-mural. The author expressed an opinion that diffused fibroid deposits of the uterus in the early stage were more amenable to treatment than was generally supposed. Further, there were cases in which through the large losses of blood to which they gave rise, or the mechanical effects they produced, surgical interference was demanded. Dilatation or enucleation by the knife was sometimes employed, but this had been followed by ill effects, while the advantages of the actual cautery might be summed up as affording facility of application, causing but little pain, being rapid in its action, giving rise to no bleeding, and therefore obviating plugging; in the charred opening being unfavourable to absorption; in there being no offensive discharge from the charred surface; in the ready dilatation of the opening without bleeding; in permitting of manipulation through the opening immediately after its use. Lastly, by the use of the cautery, portions of the tumour may be rapidly destroyed, its size reduced and its lower segments rendered conical, thereby facilitating dilatation of the opening, and the subsequent detachment, expulsion, or removal of the morbid growth. Spontaneous expulsive efforts shortly followed its use, and the density of the tumour appeared to be more or less reduced. In conclusion the author drew especial attention to the three following points:—Firstly, the advisability of the gradual detachment of the growth from its surrounding capsule, especially in cases where the tumour is of large size or where the patient has been much reduced by previous hæmorrhage, by which further losses of blood are avoided and more perfect contraction of the investing tissues is secured, and the chance of pent-up offensive discharge is almost certainly prevented. Secondly, the removal of only so much of the tumour at each operation as is external to the opening, by which the opening is kept dilated, and all chance of its closure upon the remainder of the growth avoided. Thirdly, the speedy destruction by the cautery or removal by the écraseur or hand of the tumour, should sloughing ensue.—Dr. Meadows, while acknowledging that the method proposed was a valuable addition to the modes of treatment of fibroid tumours, pointed out the difficulties arising from its application owing to the variable amount of union between such tumours and the uterine wall, for whereas some were distinctly encapsuled, and could be enucleated with ease, others were intimately blended with the muscular fibres. It was difficult in practice to distinguish these cases. Then the cases in which the operation was applicable were those in which the tumour was strictly intra-mural, so that the uterine tissue might aid in the process of enucleation. This or any other operative measure was contra-indicated if the growth were close to the peritoneal or mucous surface. The difficulty in diagnosing the exact site of the growth was then a great hindrance to operative measures. The cautery was no doubt preferable to the knife, but as it frequently required the introduction of the finger to break down the attachments of the tumour, another element was introduced. The cautery *alone* would be almost free from danger.—Dr. Barnes concurred with Dr. Meadows in the difficulty of diagnosis of the exact nature and site of many fibroid tumours. Those springing from the cervix might fairly be treated by this method; but there was great risk in dealing with those arising from the fundus. One danger he especially insisted on was the tendency which these growths showed—after operations had been practised on them—to undergo a process of low necrotic inflammation, terminating in septicæmia; a course of events followed in one of Dr. Greenhalgh's cases. The actual cautery could not guard against this result, and he almost doubted if it were perfectly secure against the supervention of hæmorrhage. He was not then at all prepared to accept the use of the cautery, which much resembled the "gouging" process; and it could only be reserved for extreme cases.—Dr. Greenhalgh, in reply, pointed out that in his cases the cervix was involved in the growth. He would reserve the cautery for suitable cases, and would not employ it in subperitoneal tumours. He alluded to the soft semi-fluctuating character of some of the tumours, and the escape of serum that followed. If operative measures be undertaken, the cautery was the best means, for even dilatation was dangerous. Moreover, by the use of the cautery there was no interference with the cavity of the uterus, e.g., Case 3.

A paper was then read entitled "An original View of the Laryngeal Movements," accompanied by a new movable model, by Mr. E. J. Spitta. The model, which was designed as an aid to demonstration, was constructed of metal, the muscles being made of india-rubber. The following is a brief abstract of the paper:—"The model illustrates the present theory by exhibiting mechanically the two operations of the larynx under which all its movements may be included—namely, the *tensing* and *relaxing* the cords, and the *opening* and *closing* the glottis. The new view principally concerns the last-named operation. It shows, in the first place, from the construction of the crico-arytenoid joints, how neither forward nor rotatory movements of the arytenoids are possible, and that these cartilages can only move laterally, but that by this very movement the interval between the cords is horizontally increased and the glottis opened. It then describes the laryngeal muscles, and how they effect the two operations above-named, giving them fresh names in accordance with their actions: the arytenoideus, for example, is called the 'occludens,' and the crico-arytenoidei named the 'M. patulens.' Lastly, the new view adds a remarkable though totally unexpected corroboration of its truth, derived from the peculiarity in distribution of the laryngeal nerves."—Mr. Charles Brooke pointed out that in the model the membranous portion of the vocal cords was not represented, and referred to the experiments of Willis designed to show the part played by the membranous portion in vocalisation, sonorous vibrations only being produced when the upper portions of the membrane are placed parallel.—Mr. Nunn said that the real question at issue was as to the nature of the crico-arytenoid articulation. The action of the muscles must depend upon the peculiar arrangement of the facets of this articulation.—Dr. Whipham thought Mr. Spitta's views received confirmation from the appearances seen in the laryngeal mirror. He had never been able to perceive any rotation of the arytenoids, but had noticed their recession downwards and backwards when the glottis was opened. The upward movement of the arytenoid cartilage could be seen during life by its producing a pale patch by pressing the blood out of the mucous membrane, the recession of the cartilage being followed by restoration of normal appearance.—Mr. Spitta, in reply, stated that the omission of the membranous portion of the vocal cords from the model was intentional, being due to mechanical difficulties. The articular facets of the arytenoid cartilages had a direction backwards, outwards, and downwards, and therefore they must move in the same direction. Rotation could only take place if the facets were horizontal.

The meeting then adjourned.

CLINICAL SOCIETY OF LONDON.

This Society held its ordinary meeting on Friday, the 22nd inst., the principal business of the evening being the adjourned discussion on the cases of antiseptic surgery brought forward by Mr. Callender and Mr. Pick at the previous meeting. The attendance was, as usual, very good, a large number of surgeons being present in anticipation of an animated debate. The chair was occupied by Mr. Callender in the absence of Sir W. Jenner. Previous to the resumption of the discussion two very interesting cases were brought forward by Mr. Hutchinson, and the patients shown.

Mr. Jonathan Hutchinson showed a case of very curious Tumour or Malformation of the Head. The patient, a child four years of age, was first seen by Mr. Hutchinson at Moorfields, in October, 1871, when six months old, having been brought by its mother on account of a prominence of the eyeballs. The child is the younger of two, and the parents are healthy. When first seen, at the age of six months, there was a nearly hemispherical tumour on the vertex of the head, nearly in the middle line, which was said to have been noticed at birth, but to have been increasing since. The tumour was hard to the feel, and there was a hard ridge extending along the course of the sagittal suture as far as the root of the nose. The anterior fontanelle was not quite closed, but small; and there was considerable proptosis. At the present time the child is in good health, but though four years of age looks only two. She has only just learned to walk, is good-tempered, cheerful, and not passionate. There is no sign of rickets in any part of the body. There is no paralysis, but the right hand is rather weak, and colder than the other. The lower part of the face is natural, but the upper is greatly disfigured by the prominence of the eyeballs and by the tumour. There is a swelling extending from the root of the nose upwards, and out to the angles of the orbits, which are shallow. On the vertex of the head is a swelling about one inch and a half high, and two inches in width, irregularly hemispherical, with a sort of transverse depression across its middle part. The tumour is soft, pseudo-fluctuating; two small plates of bone can be felt in it; and it receives impulse both from the circulation and respiration, but the pulsation communicated is only weak. The skin is not tender over the tumour. Mr. Hutchinson said that he believed the proptosis, which was very considerable (so that at one examination the globe of the eye was completely dislocated), was due to the extreme shallowness of the orbits. In all probability it was not an ordinary case of encephalocele, or of hydrocephalus, but one of defective development of the bones of the skull, the sutures of which had given way with the growth of the brain, and led to its protrusion. At the same time he thought there was possibly also excess of fluid in the ventricles, and that this formed a part of the tumour. In other cases of similar nature a ridge in the line of the sagittal suture had been observed. The pathology of the case was at any rate obscure, and he sought light upon it.

A rather long discussion followed the exhibition of the case, the point considered being the probable nature of the tumour. — Mr. Callender thought from the description that it was probably some form of meningocele with malformation of the bone. He mentioned a case which he had seen under the care of Mr. Stanley, in which the patient lived till the age of twelve. After death the tumour was found to be a soft malignant growth, which had taken nine or ten years in the development externally. Finally, the growth had extended inwards, and had involved the two cerebral hemispheres, reaching the floor of the lateral ventricles. The present case, however, seemed less likely to be of malignant nature, and more probably consisted of the membranes of the brain distended with fluid, owing to defective development of the skull.—Mr. Henry Morris thought that the explanation offered—viz., that the tumour was due to the extrusion of the contents through the opening of the brain-case—was improbable, from the fact that there was such marked protrusion of the eyes; because, if the pressure were only outwards, there was no reason for such protrusion. He mentioned a case of similar character which he saw in an out-patient at Middlesex Hospital eighteen months ago. In this case the patient was a woman, forty-five years old, unmarried, who had received a blow on her head some months before. A soft tumour had subsequently formed, and increased rapidly. When admitted into the hospital she had a soft fluctuating tumour over the parietal region, measuring 5½ in. in diameter, elastic, with slight general pulsation, and some localised pulsation where larger vessels crossed it. Another feature of similarity was the presence of a hard bony ridge at the circumference of the tumour, and the presence also of small bony masses in it. On puncture, only bloody fluid was obtained from the tumour, and no operation was considered advisable. The tumour is now rapidly increasing, but there is no pain. Mr. Couling, of Brighton, thought the case to be one of soft medullary cancer of the diploe, from the similarity to another case in which there was also a tumour of the same kind involving the clavicle. The absence of fungation and the uniform growth might be ascribed to the mechanical conditions which facilitated uniform extension.—Mr. Holmes did not think it clearly proved that the cases mentioned by Mr. Morris were really cases of medullary cancer at all. He referred to a case which was in St. George's Hospital some years ago, under the care of Mr. Cæsar Hawkins, in which, in a man aged sixty, a tumour, occupying a similar situation but further back, had existed for fifteen years. There were no symptoms except occasional epileptiform seizures and attacks of mild delirium. His general health was good. There was a pulsating growth on the top of the head, with here and there more marked pulsation. The patient died of pneumonia, and the growth was found at the post-mortem to be of fibrous nature, pressing on the membranes of the brain and the pericranium. The history of the present case showed that the growth was not really malignant, but came under the head of fungous tumour of the brain, as described by Louis.—Mr. Morris said that the cases were described as of medullary cancer by their authors.

Mr. Hutchinson showed also a case of Ulcer of the Tongue, probably of a cancerous nature; and, if so, of remarkably quiet and slight character. A year and a half ago the patient, who is a man sixty years of age, came with a hard ulcer, the size of a sixpence, on the middle of the tongue; it had hard edges, but was free from warty growth. It was cauterised with nitrate of silver and nitrate of mercury, and the ulcer was greatly improved and nearly healed. This spring another small ulcer broke out at the side of the former, and was again cauterised with temporary good result. There is now a small, slightly indurated, circumscribed ulcer on the middle of the tongue. But the glands under the jaw are now enlarged, and one has softened, with the discharge of much serous fluid, and another beneath the sterno-mastoid is also enlarged. If, as seems probable, the disease is cancerous, Mr. Hutchinson thought it was very quiet and innocent in its appearance, and the case showed the difficulty of diagnosis in some of these cases. Mr.

Hutchinson added, in answer to inquiries, that the family history was good, that the patient's health was good, and that the disease was ascribed to injury with a pipe. No microscopical examination had been possible, and there was no suspicion of syphilis.—Mr. **Henry Lee** thought that the condition and history of the glandular swellings were opposed to the view that the disease was either cancerous or syphilitic.—Mr. **Maunder**, on the other hand, thought that these were in favour of the diagnosis of cancer.—Mr. **Callender** also agreed that it was probably malignant, from the age, characters of the ulcer, and condition of the glands.

The adjourned Discussion on Antiseptic Dressing was then resumed.

Mr. **Pick** briefly narrated the main facts of the case brought forward by himself at the last meeting, and the results obtained; and also mentioned Mr. Callender's cases of treatment with salicylic acid, and the conclusion he drew from his experience with that agent,—all of which we have already fully reported. Mr. Pick said that his great object in bringing forward this case was merely to elicit opinion with regard to antiseptic treatment in general. He himself had great faith in it, but did not consider that it prevented suppuration nor that it hastened union, but that it prevented the *decomposition* of pus, which was what we had to dread. It was especially in cases of excision of joints that its value was discovered; and in his experience as surgeon to the Belgrave Hospital for Children, where, before the introduction of Lister's method, traumatic fever and a foul condition of the pus were of constant occurrence, since its use he had had little or no fever and the pus was always healthy. Moreover he had not had a single case of erysipelas or pyæmia under his care since its employment. He had now a case in St. George's Hospital in which the wound had only been dressed three times since the operation, and this was especially beneficial, as it obviated frequent movement of the wound. He made it a rule never to dress the wound again until the discharge oozed through the dressing. Then, although the pus might be very fetid and offensive in the more superficial layers of the dressing—i.e., where it was in contact with the air,—on reaching the deeper layers it was good and sweet, and the wound healthy-looking. He had treated all his cases of operation with carbolic acid except one, a case of enchondroma in the parotid region; and that patient died of pyæmia.

Mr. **Maunder** had not had the opportunity of hearing Mr. Pick's case read at the last meeting, but he gathered from the reports in the papers that in that case there was traumatic fever, suppuration of the thigh in various directions, and serious general symptoms, ending, in *five months*, with the result of a useful limb. Now, on reflecting on the cases which he had had in his own practice, he thought he had seen like cases treated in the ordinary way with equally good results; and he had collected three such cases, which occurred some years ago, of suppuration in the knee-joint—one a case of ordinary character, which was treated by a free incision, and was soon well; another treated by incision and drainage-tube, which also speedily recovered; in the third case there was very severe injury, and the joint was completely disorganised, suppuration occurring in all directions in the thigh; but the patient was treated with plenty of food and stimulants, and after a stay in the hospital for six months, he left with as good a result as in Mr. Pick's case. (Two of these patients were shown.) He did not say, however, that carbolic acid was of no use; he had used it frequently, and should still continue to do so. But Mr. Lister expects more than Mr. Pick, and would be sorry to stand godfather to Mr. Pick's case; Mr. Lister expects to prevent traumatic fever and the occurrence of suppuration, &c. Mr. Maunder recalled another case of severe injury to the knee-joint, in which another method of treatment was adopted for the reduction of traumatic fever—viz., ligature of the femoral artery. In a case where this was done by Mr. Little, at his suggestion, nine years ago, the arrest of the fever was immediate, and he would be inclined to regard it as equal to Lister's method for the purpose. He guarded himself, however, from the supposition that he was opposed to the antiseptic treatment; for example, he believed that Mr. Pick's care was the cause of the good result, and this was no doubt often the real benefit of the system. He would add that in the case he himself showed the question of amputating the limb was discussed on two occasions.—In reply to Mr. Callender, Mr. Maunder stated that there was an open wound, with laceration and severe traumatic fever, when the ligature was applied.

Dr. **Moxon** inquired whether Mr. Pick made any observation on the presence of bacteria in the pus in the wound?

Mr. **Holmes** remarked that it was evident that the value of antiseptic surgery would never be settled by single cases. It is true that Lister hopes to prevent suppuration, traumatic fever, &c.; but even Lister would not expect it when the patella was cut across and the femur injured, and the patient not seen until some time after the accident. Such cases were not relevant or comparable for the purpose. Cases of open wounds of joints vary greatly in their results under all methods of treatment, so that a comparison of such cases was of no value. What was really wanted was that surgeons who have employed antiseptics of various kinds should give the results of their experience, and of the impressions which they have formed on their value; such impressions would be of far higher value than any individual cases. He himself had used Lister's method for some years, and the more he used it the higher did his opinion of it become. Its chief effect was no doubt the prevention of traumatic fever, and this was especially well seen in the case of the opening of large abscesses, where, if treated by Lister's method, there was in most cases an absence of traumatic fever. But to obtain success it is needful that the wound should be under our control from the first, and not after its exposure to all sorts of external influences of an infectious or irritating nature. He did not believe in Lister's *theory*—i.e., with regard to germs,—as it did not seem to be sufficiently proved by the evidence, but he had no doubt that carbolic acid prevented suppuration. The general principles of his treatment are valuable; probably, however, not the details. The great principle which is of value is the withdrawal of the wound from the influences of the irritation of foreign bodies and of disturbance, and also that the surgeon is obliged to dress it himself. To these facts he attributed the great value of antiseptic surgery, and he was satisfied with the results obtained. He believed that pyæmia occurred in cases so treated, but as to the general prevalence of pyæmia in hospitals he thought a good deal of misconception existed. To show this he had taken the post-mortem records of St. George's Hospital for three years, 1864, 1870, and 1874 respectively, and examined the number of cases of pyæmia. He found that in 1864, out of a total of 360 deaths, there were 11 cases of pyæmia; 8 occurred after various diseases, 1 after childbirth, 1 from diffuse periostitis, and others after accidents, whilst only 3 occurred after operations, 1 of which was for fistula, 1 for hernia, and 1 for excision of the hip-joint. In 1870, 19 cases occurred out of a total of 359 deaths; of these 11 were after accident or disease, and 8 after surgical operations. In 1874, with a total of 241 deaths, only 11 cases occurred, and only 1 of these was after an operation. These details should correct the error as to the undue prevalence of pyæmia in hospitals, showing as they did the relatively small number of cases in a long period of time. A long experience with different methods could alone show the effects of the treatment on pyæmia, as when there were many cases in a ward treated by antiseptics the air became carbolised and to some extent antiseptic. So that, whilst not binding himself to Lister's theory, he had no doubt of the real value of his practice.

Mr. **De Morgan** expressed his belief that a great part of the success of the antiseptic system was due to the extreme care on the part of the surgeon both in the dressing of wounds and the general hygienic measures. This was well illustrated by an inspection of Mr. Callender's cases in St. Bartholomew's Hospital. He considered the antiseptic system of great use—not, however, on account of its purifying the air or excluding air from wounds. With respect to the latter, we know that the free admission of air is not injurious: e. g., in empyema, if there is only a small opening, the accumulation of pus becomes extremely fetid; whereas, if a counter-opening be made and air freely admitted, the discharge becomes sweeter, the air itself not being the cause of the suppuration, but the pent-up air being injurious. Professor Humphry's experience of the treatment of wounds by free exposure and the absence of all restraint had shown how very well wounds may do under this method. In certain cases, however, there was an undoubted gain from antiseptics, such as one published by himself in the first volume of the Society's Transactions, which was a case of caries of the bones entering into the knee-joint, with much suppuration. The joint was freely opened and washed out with chloride of zinc. Healing was rapid and without a bad symptom, and the result good, the patient being able to walk well. This successful result would doubtless not have occurred unless means had been taken to prevent the decomposition of the tissues. He recalled also another case of similar nature, where no fever occurred. In such cases as these the good from antiseptics was undoubted. But in general, if great care be taken to prevent the entry of extraneous bodies and infectious matters, and the general hygienic conditions be attended to, we shall be successful in avoiding all the evils which used to haunt hospital wards. Lister's general rules of treatment might be followed with benefit. Mr. De Morgan expressed his preference for boracic acid over carbolic acid as a dressing. In one case of amputation the use of sulphurous acid was followed by a good result; but the constant care and attention, and the great anxiety on the part of the sister that the case should succeed, were possibly the real causes of success, and not the sulphurous acid.

Mr. Barwell thought that, in speaking of Lister's method and of antiseptics, they were discussing two different things. In Mr. Pick's case, which was really one of compound fracture, all that could be done was to avoid putrefaction, and it did not matter which antiseptic was employed. He thought Mr. Maunder's cases pertinent, as showing that such cases may do well without antiseptics. But in the case of operation wounds, when we make the wound and can control it from the first, Lister's method is very valuable, as we can insure an antiseptic atmosphere around the wound. The lotion employed as a dressing might be varied at will; chloride of zinc being very valuable in some cases, or dressing with carbolised collodion; in one of the latter no trace of suppuration had occurred. Results were obtained by Lister's method which could not be otherwise got, but in his opinion Mr. Lister had mixed up with his method many details which were very repulsive to surgeons, and had thus done himself and his method an injury.

Mr. Christopher Heath narrated his experience of a visit to Professor Lister's wards in Edinburgh before the meeting of the British Medical Association. He did not, he said, go to see the show cases, but beforehand, and was surprised with the results which he saw. For example, he had seen a case of excision of the femur, where there was a slit for ten inches in length along the thigh, and when uncovered under the spray, he saw the clot undergoing organisation, and, still later, the same case was shown at the meeting of the Association with the wound healed. Many other cases of equally surprising character were shown to him. Mr. Lister himself showed him the details of his method, and insisted on all the minutiæ, regarding them as of great importance. If any case went wrong, there was always some slight mishap or omission in these details, to which the failure was ascribed. This being the case, he was surprised that Mr. Holmes should say that he had taken up the method and yet did not follow the minutiæ. If so, which of them is it that he omits? Mr. Heath said that the method was repellent to him, especially the operating with a cloud of spray on one's hands, and often in one's eyes, and he had almost resolved each time he employed it not to do it again. In cases of ordinary compound fracture, he did not find that the method always gave better results than the ordinary treatment; in two cases now under his care, the one treated in the usual way was going on quite as well as the other. He had seen elevation of temperature after operation under the antiseptic treatment. Lastly, he inquired why, if Mr. Maunder approved of ligature of the femoral to check traumatic fever, he did not employ it in either of the cases he had narrated.

Mr. Maunder explained that the reason why he had not ligatured the femoral was that in one case, where he had advised it shortly before, the result was merely ephemeral.

Mr. Thomas Smith protested against the idea of discussing Lister's method whilst omitting the details on which he insisted so strongly. We should accept his method *in toto* or reject it altogether. Lister objects to carrying out his method in such a way, as he says, as to court failure. He instanced a thing often done in the middle of an operation: the operator takes up a pair of forceps, and dips them in carbolised lotion, and then uses them in the wound; whereas they should be soaked for half an hour. This, Prof. Lister says, is to court failure. This may seem absurd to us, but we ought to follow all his details, or not to say that his method is a failure. At present Mr. Smith did not see that any evidence had been brought forward to justify the statements for or against it.

Mr. Barwell, in reply to Mr. Smith's strictures, explained that all he wished was to simplify Lister's method.

Mr. Croft said that he had visited Lister's wards in Glasgow some years ago, and was so impressed with the improvement in the wards that he had begun the treatment at St. Thomas's on his return. He could say much in favour of Lister's method from his own experience, but at present would only suggest the hope that hospital surgeons would not look at it only from the point of view of the patient operated on, but would also consider the other patients in the same ward. The condition of the atmosphere in the ward was of great importance to the other patients, and had much to do with the prevalence of pyæmia in the wards.

At this point, the time having expired, the discussion was adjourned to the next meeting, when it was understood that Mr. Holmes would bring forward a paper on the same subject.

MEDICAL SOCIETY OF LONDON.

Some interesting cases were brought forward at a clinical meeting held on the 25th inst., Dr. Routh, President, in the chair.

The proceedings opened by Dr. Thorowgood reading notes of a case of Acute Pneumonia in a man aged forty-five, who had been an inmate of the West London Hospital. The patient had all the signs of pneumonia in the right base, but about the seventh day the expectoration, from being rusty, became black and most offensive; between the tenth and fourteenth day the condition was critical, the skin being clammy, the cough violent and paroxysmal, the temperature 102·6°, and the breath so fetid that it could be smelt all over a ward fifty feet long. Ammonia and bark in very full doses, Dover's powder at night, and six ounces of brandy and four ounces of wine in the twenty-four hours, were administered, and under this treatment the patient recovered and returned to work as a labourer, though slight cough and expectoration, together with some dulness at the right base, still remained. Dr. Thorowgood, after alluding to the rarity of pulmonary gangrene as a termination of acute pneumonia, said he considered the case one of limited slough of a portion of lung-tissue, due probably to the plugging of some of the vessels by the pneumonic exudation. He remarked that a very small slough or gangrene may cause great fetor of the breath, and drew attention to the improvement of the patient under liberal stimulation. In conclusion, he stated that previous to the attack the man had been in good health, with the exception of a winter cough; there was no albuminuria, and the patient was of sound mind and temperate habits.—In the discussion which followed, Dr. Theodore Williams said he had seen patients die of gangrene of the lung, and in the cases which recovered, vomicæ remained, followed sometimes by well-marked phthisis. He thought the disease was always brought about by some great trial of the strength and constitution, and with regard to the sputa he drew attention to its peculiar smell when kept, called the "cowslip odour" by Dr. C. J. B. Williams. The speaker suggested carbolic acid to check the fetor and sedatives for the excessive cough, and concluded by remarking that the disease is not so uncommon in England as it is said to be on the Continent.—Dr. Rogers related a very severe case of this kind in which very beneficial results had followed free stimulation, the patient having previously been kept too low.—Dr. Farquharson suggested the name of "bronchorrhœa" for these cases, as applied by Professor Laycock and Dr. Gamgee, of Edinburgh.—Mr. Myers related the case of a soldier who had come under his care presenting the same features as Dr. Thorowgood's, though the patient had a very phthisical history, and in which a stimulating treatment had produced great improvement.—The President divided this class of cases into four sections:—1st. Those of phthisical character.

2nd. Those of simple pneumonia, in which the fetor was intense. 3rd. Bronchorrhœa, with dilatation of the bronchi. 4th. Those where the patient had been exposed to bad drainage.—After Dr. Thorowgood had said a few words in reply,

Mr. Hutchinson related the case of a patient aged sixty, suffering from dyspepsia and indigestion, together with the expectoration of arterial and frothy blood to the amount of five or six ounces daily, there being no pulmonary symptoms whatever beyond a slight cough at the time of expectoration. The medical men were puzzled till it was discovered that the blood welled up through a small ulcer by the canine tooth. The patient had worn a plate with artificial teeth some time without changing, which had become in an intense state of fetor; rapid recovery followed treatment of the ulcer and removal of the plate.

Mr. Richard Davy then exhibited a man with enormous Hypertrophy of the Buttock Tissues, which had existed for thirteen years. The patient, who was in excellent health, measured 32½ inches round the waist, and 54 inches round the buttocks. Mr. Davy thought the flabby tumour was probably an exaggeration of connective tissue and fat, and disapproved of any operative interference, merely suggesting a shoulder-belt as a support to obviate the great inconvenience.—Mr. Maunder did not consider the tumour fatty, and drew attention to a similar case in the Transactions of the Pathological Society brought forward by Mr. George Pollock, and called Fibroid Molluscum.—Dr. Brunton had seen like appearances in the whole of the body of a Scotch giant, there being no increase of fat, but enlargement of the fibrous tissue.

Dr. Dowse next recounted the case of a man who had died from Syncope after Violent Hæmorrhage. The patient, a costermonger, with no history of syphilis, was emaciated when first seen, the heart-sounds being healthy, though the dyspnœa was urgent, and no aneurism could be detected. After death the arch of the aorta was found to be in a sacculated condition, with acute inflammatory changes in the inner coats, the vessel being adherent to the trachea, into which a small ulcer opened. The preparation was shown.—Dr. Symes Thompson thought it strange no tracheal breathing was audible between the scapulæ.—Dr. Theodore Williams asked if there existed any difficulty in swallowing, or any signs of pressure on the recurrent laryngeals.—Dr. Dowse, in reply, said there was nothing but pain between the shoulders.

Mr. Maunder read an extract from a letter written by a gentleman from New Zealand whose elbow-joint of the right arm he had excised six years ago, in which the patient says he has won the champion billiard cue, and taken second honours in quoits, proving the efficacy of Mr. Maunder's method of incision, by which active extension of the triceps muscle is secured, and examples of which had been exhibited to the Society five years ago.—Mr. Davy and Mr. Adams made some congratulatory remarks.

Dr. Henry Smith showed a Testicle which he had removed for strumous disease, both as a good example of the disease and to illustrate his plan of performing castration without tying the cord, but by seizing it with the ordinary hæmorrhoidal clamp, and applying the actual cautery; this method he had carried out in three or four cases, and all with perfect success with regard to the stopping of the hæmorrhage. He supported this practice, though it was going back to old surgery, and thought it lessened the liability to blood-poisoning.—Mr. Royes Bell corroborated Mr. Smith's statements.—Dr. Drysdale wished to know the condition of the epididymis in this case, and drew attention to the difference between a syphilitic and a strumous testicle.—Mr. Myers thought the cautery advantageous in hospital practice, but in the country he suggested it involved a risk of secondary hæmorrhage with no one at hand to control it. He advocated the use of the catgut ligature, and considered the temperature of the cautery when used as a most important point.—Mr. Davy had used the catgut ligature to the spermatic artery in a case of castration, and drew attention to the castration of dogs in which the testicle is merely wrenched out.—Dr. Cook related an operation by the late Mr. Partridge, in which a testicle was removed from the perineum and nothing used.—Dr. Farquharson mentioned the castration of lambs as being performed merely with the teeth of the operator.—Mr. Smith briefly replied, and the meeting adjourned.

Reviews and Notices of Books.

A Practical Treatise on Diseases of the Eye. By Robert Brudenell Carter, F.R.C.S.; Ophthalmic Surgeon to St. George's Hospital; Surgeon to the Royal South London Ophthalmic Hospital; Consulting Surgeon to the Gloucestershire Eye Institution; Hunterian Professor of Surgery and Pathology to the Royal College of Surgeons of England. London: Macmillan and Co.

It would be difficult for Mr. Carter to write an uninstructive book, and impossible for him to write an uninteresting one. Even on subjects with which he is not bound to be familiar he can discourse with a rare degree of clearness and effect. Our readers therefore will not be surprised to learn that a work by him on Diseases of the Eye makes a very valuable addition to ophthalmic literature. A specialist like Mr. Carter may have two objects in view in writing a book on his own specialty. He may propose to himself to write for the benefit of general practitioners, discovering to them the secrets and the principal points of his own branch of practice; or he may write as a specialist for specialists, subjecting his own views and practice to their criticism. Our perusal of this book leads us to the conclusion that Mr. Carter had both these objects in view, but especially the former. He is characteristically original in suggestion. His book abounds in lively and smart criticism of the work and views of other specialists of eminence. It is also full of details of personal practice which, in turn, will afford ample material for criticism. But it is to be gathered from the preface, and from the book generally, that Mr. Carter has written it for the use of the profession at large. "My aim," he says, "in the composition of the following pages has been to place before the profession, in a concise and readable form, a general view of the present state of knowledge with regard to the nature and treatment of the more important diseases of the eye." Mr. Carter is no narrow specialist. He would like to see general practitioners skilful in detecting and treating the gravest forms of eye disease. Some of the happiest operations for cataract which we have seen have been performed, in the old style, by general practitioners. Mr. Carter would have them equal to every emergency, including that which requires the prompt performance of iridectomy. Such a feeling is not more liberal on the part of a specialist than it is just and encouraging to general practitioners. The author remarks:

> "The operative surgery of the eye is an art which demands, from any who would either understand or practise it, a careful and twofold study: first, a study of the mechanical arts that are to be accomplished; next, the training of the hands to the uses to which they are to be put. Such study, moreover, should not be considered superfluous by any surgical practitioner, however little he may design to be an ophthalmic specialist; for as there are conditions in which the prompt performance of iridectomy is at least as essential to the preservation of vision as the prompt performance of herniotomy, or the prompt deligation of an artery, can ever be to the preservation of life, so no one should think himself entirely fitted to enter upon the responsibilities of surgical practice until he has prepared himself for the discharge of either duty in an efficient and creditable manner."

We have long held that far more good specialism is realisable in general practice than has yet been attained. If specialists would take a little more pains to elucidate the principles and details of their practice, and so to facilitate the learning of them by general practitioners, we should have that best of all results, the multiplication of the special aptitudes of general practitioners. Whatever may be thought of specialism, there can be but one opinion that the more special knowledge every practitioner has the better practitioner will he be. No one will read Mr. Carter's book without having both his special and general knowledge increased, and without feeling more intelligently convinced of the need of more specialism in general practice, and more general knowledge in special practice.

The ophthalmic specialty has been wonderfully developed of late years. Practitioners who know no more of eye diseases than was to be learned in the course even of their special study twenty years ago will be amazed at the changes which have taken place in knowledge, in doctrine, and in practice. The new applications of iridectomy in cataract operations, in glaucoma, in keratitis, &c., the use of the ophthalmoscope, the transplantation of conjunctiva, the elucidation of diseases of refraction, the study of the remote or constitutional significance of certain morbid conditions of either the deeper or more superficial parts of the eye, are a few of the points which mark the recent strides of this specialty, which has commanded the respect alike of the public and the profession, both for the scientific spirit in which it has been studied and the brilliant results which it has achieved.

It is no light task to undertake to present to the profession the state of knowledge and practice in this department. But Mr. Carter has undertaken it; and we think the profession will consider that he has acquitted himself well. The book is not a mere text-book describing in a routine way the recognised views; it is throughout practical and personal, containing but slight reference to modes of practice beyond the experience of the author.

The general plan of the book is as follows:—The first chapter treats of the Anatomy and Physiology of the Eye; the second of the Examination of the Eye; the third of the Ophthalmoscope and its application; the fourth of the Principles of Ophthalmic Therapeutics; the fifth of the Principles of Ophthalmic Surgery; the sixth of Diseases of the Lids and Lachrymal Apparatus; the seventh of Diseases of the Conjunctiva; the eighth of Diseases of the Cornea; the ninth of Diseases of the Iris, including Irido-choroiditis and Sympathetic Ophthalmia; the tenth of Cataract; the eleventh of Glaucoma; the twelfth of Diseases of the Fundus Oculi; the thirteenth of Injuries of the Eye; the fourteenth of Squint and Affections of the Ocular Muscles; and the fifteenth of the Uses and Selection of Spectacles. Under one or other of these heads, Mr. Carter manages to express an opinion and give advice on almost every practical point in ophthalmic pathology and in ophthalmic therapeutics, whether medical or surgical. Some of these opinions are new and independent, but they are always supported by arguments based on physiological and clinical facts. It would be difficult to analyse the various chapters and appraise their exact value, the more so as they are all full of suggestions which can only be tested clinically. But we must notice some of them.

One of the best chapters in the book is the fourth, which treats of the Principles of Ophthalmic Therapeutics. The importance which is attached by the author to nerve lesions in the production of grave diseases of the eye, and, correspondingly, to the action of bromide of potassium; the suggestion that iodide of potassium and mercury have applications in other than syphilitic cases; that mercury has some special influence over inflammatory lesions in the region of the fifth pair; that pain must have special and considerate treatment; that atropine is much too inadequately used—are opinions of the highest practical importance. The chapter which treats of Conjunctivitis includes an excellent account of purulent ophthalmia as it affects schools and other institutions where numbers congregate under insanitary conditions. Admirable, too, is the chapter on Diseases of the Cornea, with this practical keynote, "all forms of inflammation of the cornea, or, as it is conveniently called, keratitis, are broadly distinguishable from inflammation of the conjunctiva by this marked character, that they will not bear astringent or irritating applications." A noticeable feature of this chapter is the frequency with which the author commends iridectomy in urgent or intractable or recurrent forms of corneitis. In it mention is made of a new way of performing iridectomy with M. de Wecker's scissors, concerning which Mr. Carter has given a still later account at the Clinical Society, and which there is reason to believe will turn out to be a very satisfactory operation. He claims for it the advantage that the operator is more able to control the size of the gap in the iris, and less likely to injure the lens, than in other methods. We will only quote one remark in the chapter on Iritis. Mr. Carter says—and he is a most orthodox receiver of Ricord's views of the use of mercury in syphilis,—"The influence exerted upon iritis by mercury, and the necessity for administering it in certain cases, seem to me to be essentially independent of the syphilitic or non-syphilitic character of the affection." Resistance to atropine is with him the one sufficient proof that mercury is needed.

Possibly the chapter that will be read with most interest by specialists is that on Cataract. Mr. Carter estimates that 20 per cent. of the old cataract operations went wrong. The introduction of iridectomy and the careful pathological observations which led up to it are well stated. The chapter is full of valuable criticism and discrimination, not unmixed with a dash of satire on some recent operations, which makes the chapter more pleasant reading to everybody, except, perhaps, the authors of the operations condemned. Passing over the important chapters on Iritis, Irido-choroiditis, and Sympathetic Ophthalmia, and a most lucid one on the Use of Spectacles, we have only space left to notice the chapter on Diseases of the Fundus, and we do this principally to mention Mr. Carter's dissent from the views held by Dr. Hughlings Jackson and others on the significance of "choked discs." In this matter, as in so many others, the eye is an object of interest to the general physician, and Mr. Carter's knowledge of general medicine, combined with his special knowledge of the eye, makes his words on the value of choked discs as evidence of coarse intra-cranial disease interesting.

Here we must leave Mr. Carter's book. We will not claim for it faultlessness. Some of the opinions expressed in it may be discredited by the "test of time," and may be shown to have been formed too easily; but the book will remain one useful alike to the general and the special practitioner. Not the least valuable result which we expect from it is that it will to some considerable extent despecialise this brilliant department of medicine.

CORONERS' FEES.—At a meeting of the Middlesex magistrates last week the report of the Committee of Accounts and General Purposes was presented, which recommended that the following coroners' accounts, after having been verified on oath in open court, be paid:—Mr. Humphreys, 262 inquests, £415 8*s.*; Dr. Hardwicke, 185 inquests, £379 1*s.* 10*d.*; Dr. Diplock, 95 inquests, £176 7*s.*; Mr. Payne, 11 inquests, £18 18*s.*; Mr. Bedford, £99 15*s.* 6*d.* Captain Morley, in moving that the coroners' accounts be paid, said it was most gratifying to him to find that, as compared with the corresponding six weeks of last year, although there had been 42 more inquests held, the cost had been £103 less, being a saving of nearly £1000 per annum. After the remarks which he had felt it to be his duty to make in reference to the coroners' accounts, it must be pleasing to the Court to learn that more satisfactory results had been arrived at. We hope the gallant captain is now satisfied.

THE LANCET.

LONDON: SATURDAY, OCTOBER 30, 1875.

It was not difficult to forecast the future sanitary policy of the Local Government Board from the 286th section of the Public Health Act, 1872. The section was, indeed, at the same time, a confession of failure and the promulgation of a policy. In coming so early to Parliament for powers to enforce such an arrangement of districts and their medical officers as would admit of some reasonable relationship between areas and the duties to be performed therein, the Board proved how completely it had failed to secure the confidence of the new sanitary authorities. The straits must indeed have been desperate which, after so brief an experience, could have compelled the Board to stultify its vaunted "educational policy" and policy of "local health self-government" by asking means to regulate both the "education" and the "self-government" compulsorily. We apprehend that Mr. Sclater-Booth had no choice in the matter if he indulged in any hope of struggling successfully against the legacy of muddle left by his predecessor, and Mr. Stansfeld's support of the compulsory clause proved how urgent its need must be. The clause foreshadowed a defined policy of the Board as to appointments of medical officers of health. It indicated an approval of districts large enough to remunerate competent men for giving up their whole time to the duties of medical officers of health, the Poor-law medical officers, when necessary, acting as assistant medical officers. The initiation of a policy of this kind would show that the Board had profited somewhat by experience; and, backed by the power conferred upon him by the Public Health Act of 1875, it would go hard if Mr. Sclater-Booth did not rectify to a greater or less extent the perverse blunders of his predecessor in this matter. To this end, it would clearly not be enough, after the manner of Mr. Stansfeld, to seek the union of districts solely with reference to incidence of expense, the fitness of the area for the particular purpose for which they were united being disregarded. Some sort of reasonable relation between areas and duties it might now be expected would be insisted upon, the area of the united district being regulated by the possibility of due performance of the duties for which it was designed, as well as by considerations of incidence of cost. Nothing of the kind, however, we regret to state, seems to be contemplated. The conception of Clause 286 of the Act would appear to be empirical, and it is to be carried out empirically. That is to say, the general inspectors of the Board are to be entrusted with the interpretation of the policy of the clause to sanitary authorities, each, as heretofore, advising according to his own peculiar notion; and thus another phase of the Board's educational policy of the blind leading the blind is to be exhibited. Mr. Stansfeld blundered in endeavouring to initiate novel arrangements, demanding skilled knowledge for their successful completion by agents entirely unversed in their nature, failing to distinguish what could be compassed by common intelligence, and what could alone be carried out by means of technical information. Mr. Sclater-Booth, although he has had to ask for a legislative knife to cut the tangled knot tied by his predecessor, is about to perpetrate the same blunder in a hardly less mischievous fashion. Although the Board has been compelled unwillingly to adopt a policy urged upon it ever since its establishment, it has determined to make the ultimate object of that policy — namely, the establishment of efficient medical officers of health—subsidiary to other considerations. In the initiation of the new policy as of the old, all competent knowledge of the duties and functions of a medical officer of health and their practicability of performance is being studiously excluded, and the general inspectors are being left to talk at large utter nonsense regarding them to sanitary authorities. A policy therefore, capable of being worked to infinitely good purpose, is to be rendered largely a sham in order to maintain the traditional Poor-law routine of Gwydyr House. Mr. Stansfeld reproached the medical profession for contending that, in this matter, the means should be designed with direct reference to the end they were intended to promote. Mr. Sclater-Booth, it is to be feared—and we regret to say it,—has drifted into the same tone of thought.

Indeed, so far as the projects of the several inspectors of the Board have as yet become known, it would appear (as we have before had occasion to point out) that it contemplates the appointment for large districts, not of medical officers of health in any sense of the term yet known, but of district medical inspectors, the intimate duties of a medical officer of health being done by the Poor-law medical officers. While the whole tendency of experience has been to show that the duties of a medical officer of health will be augmented in value in proportion as they can be carried out in detail, by this proposition the converse is assumed, and the efficiency of the office weakened at the very point where it needs strengthening. It cannot be urged that it would have been impossible to reconcile the question of cost with the view of a medical officer of health's duties supported by experience, for the question has clearly never been entertained. It was one which might well have brought into play the highest qualities of a Minister to solve, but it has been treated as the merest matter of circumlocutional routine peculiar to a particular Government department. In other words, the sanitary administration of the country is treated as a branch of Poor-law administration.

Assuming that the Local Government Board is successful in carrying out its new policy, it is not difficult to understand the anomalous position in which the newly appointed medical officers will be placed. They will have the same relationship to their Sanitary Authorities, on the one hand, and to the Local Government Board, on the other, which is held by the Poor-law officers with relation to the Board of Guardians and to the Central Board. The position of the Poor-law medical officer in these respects has probably given rise to more heart-burnings in the profession than any other cause. How a like position is to be maintained under the grave responsibilities of a medical officer of health, except by the Central Board setting on his shoulders, after the simple but effective fashion of the Old Man of the Sea, is to us incomprehensible. To the kind of relationship maintained by the Poor-law Board between itself and the Poor-law medical staff, through its ordinary inspectors, was due the greater portion of the scandals which have disgraced the sanitary history of workhouses in recent years in this country. The same kind of relationship is to be maintained between the Local Government Board and the medical officers of health. Already the anomalous nature of this relationship is being experienced. The time is rapidly approaching when the temporary periods of appointment of the medical officers of health for united districts will terminate; and much uneasiness is felt by the holders as to the course which may be pursued by the Local Government Board in the future with regard to these districts. A meeting of medical officers of united districts took place in London last week, and from it a deputation was sent to Gwydyr House, and had there an interview with Mr. SCLATER-BOOTH. The members were received with much courtesy, and made the important discovery that they were balls in a very pretty three-cornered game, in which the bats were held by the Local Government Board, the general inspectors of the Board, and the Local Authority. We need not point the moral of the discovery, and we shall wait with interest to see what further course the medical officers of united districts will take.

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A SECOND very valuable and important series of researches on the Lymphatics, undertaken for the Medical Department of the Privy Council, has just been published by Dr. KLEIN, the assistant-professor at the laboratory of the Brown Institution. The present volume deals with the Lymphatics of the Lung, both in their normal and in their pathological conditions; and Dr. KLEIN informs us in the preface that the research was originally intended to ascertain the relation of the lymphatic system of the lung to the process of tuberculosis. It was soon ascertained, however, that the incomplete state of our knowledge of the lymphatics of the lung rendered it imperative to subject them to a careful scrutiny with a view of discovering their minute distribution. The result of the investigation has proved of extreme value in elucidating the process of artificial tuberculosis in guinea-pigs, and the process of acute miliary tuberculosis in man, which are fully discussed in the second section of the volume.

Dr. KLEIN commences his account of the normal condition of the pulmonary lymphatics by a minute description of the cells investing both the costal and the pulmonary pleura; in the course of which he shows that, whilst those of the costal pleura are ordinary pavement epithelium, those of the pulmonary pleura present considerable differences, according to whether they are examined when the lung is in a contracted or in an expanded state. In the expanded condition of the lungs the cells forming the endothelium covering it are flattened, rather thicker at their centres than at the periphery, with pale and transparent cell-substance, and discoid excentric nucleus. When stained with nitrate of silver the lines of junction of the cells are marked by fine, dark striæ, enclosing polyhedric areas. In the contracted condition, on the other hand, the cells are no longer flattened plates, but are polyhedral or even columnar, with rounded apices; their contents are distinctly granular, and the nucleus has assumed the form of a slightly flattened spheroid. The change in the form of the cells causes a different appearance to be presented when the superficial and the deeper parts are respectively brought into focus. In the former case the cells appear as spherical bodies, separated from each other by broad furrows; in the latter case they appear like a continuous mosaic of cells, separated by thin intercellular lines. Dr. KLEIN points out that the differences between the endothelial cells of the collapsed lung and those of the costal pleura are very similar to the differences observed by WALDEYER between the cells covering the upper part of the ovary and those lining the peritoneum generally.

He next considers the matrix of the pulmonary pleura, which he describes as composed of very delicate bundles of connective-tissue fibres, with a few fine elastic fibres crossing each other in various directions, and leaving spaces between them, each of which contains a flattened nucleated connective-tissue corpuscle. These spaces, with the contained corpuscles, intercommunicate freely, and constitute the so-called lymph canalicular system. In guinea-pigs there are in addition slender bundles of unstriped muscle-fibres, arranged so as to form a network with long rhombic meshes. The position and arrangement of these fibres are minutely described, and it is shown that the lymphatics are in close relation with them; and that since the meshes enlarge and contract with the movements of the lung in inspiration and expiration, they must exert a pumping action, exercising an important influence in promoting absorption from the pleural cavity. But the question naturally arises, Is there any direct communication between the cavity of the pleura and the lymph canalicular system? And Dr. KLEIN answers this in his third chapter by showing that there are stomata surrounded by germinating epithelium on the surface of the pulmonary pleura, which are connected by short vertical tubes communicating with the lymphatic lacunæ of the muscular coat, which again communicate with the subpleural lymphatics, the distribution of which he carefully describes. In the mucous membrane of the bronchi the lymphatics open on the surface in a different way. Here there are indeed no stomata nor vertical tubes, but Dr. KLEIN has discovered what he terms a pseudo-stomatous tissue, consisting of isolated connective-tissue cells, differing in their shape, their refractive power, the character of their nucleus, and their mode of staining—in short, in all their morphological characters—from the adjoining epithelial cells. These cells occupy spaces which, like the true stomata, form communications between the free surface and the submucous lymphatics, but, being filled with the cells, are impervious, unless the tissue is expanded or distended. Further investigation showed that there is a system of perivascular lymphatics around the bloodvessels of the alveoli.

It thus appears that the radicles of the lymphatics of the lung are distributed over three different parts—the walls of the alveoli, the walls of the bronchi, and the pulmonary pleura. The first system is represented by irregular lacunæ and anastomosing vessels, being the spaces for the branched connective-tissue corpuscles. Some of the vessels of this system, appearing on the surface, form the *subpleural lymphatics;* whilst others accompany the branches of the pulmonary artery and vein, and constitute the *perivascular lymphatics;* the larger vessels running towards the root of the lung. The second system is represented by irregular lacunæ and anastomosing canals in the mucosa, both of which are lined by connective-tissue corpuscles; the lymphatic vessels originating in these have a special endothelial wall, and form a network of *peribronchial lymphatics,* in connexion with which are some lymphatic follicles, and discharge themselves into the same efferent vessels as the perivascular lymphatics of the alveoli. The third system is that of the pulmonary pleura, which, as already stated, is supplemented in the guinea-pig by a system of *intermuscular lymph spaces.* The subpleural lymphatic vessels stand in a direct open communication with the pleural cavity by means of *stomata;* whilst the radicles of the perivascular and peribronchial lymphatics stand in an indirect communication with the alveolar cavities or the surface of the bronchial mucous membrane, respectively, by means of *pseudo-stomata.*

We shall proceed on another occasion to show the bearings of these anatomical facts upon the pathology of the lung, a subject of the utmost interest in relation to the most important disease of this country—tuberculosis.

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A few weeks ago, in a short article, we ventured to question the propriety of medical men selling their services on terms calculated to give a very poor idea of their own sense of the value of those services. We instanced the case of a gentleman in the provinces who issued a handbill to the effect that the poor might have his advice and medicine for threepence, and might be visited at home and supplied with medicine for sixpence. These terms seemed to us not to represent the value of medicines, much less of medical services or the dignity of the profession. Our remarks have called forth several letters in defence of what we have called, in no offensive spirit, cheap doctors. In our original remarks we said that the system we criticised was not unknown in London. Our correspondence shows that it is extensively practised. One of the gentlemen who practises it, signing himself "S.," in a very temperate and well-written letter, puts its advantages very well indeed. He describes a kind of practice which seems to have fascinated several other correspondents. He is not troubled as other practitioners are. He lies all night in his bed. He attends no midwifery. He keeps no books. He makes no bad debts. He has no bills to make out. Before he began what he euphemistically calls the dispensary system applied to private practice, his receipts were £5 a week. Since he opened a dispensary his receipts have become £16 a week. His health is better. His circumstances are better. He has more leisure; and he maintains that he does not neglect his patients or fail in giving them the most expensive medicines which their case requires, including quinine and opium and iodide of potassium. He knows several gentlemen with dispensaries who use quinine largely. These statements are too circumstantial, too impressive, and altogether too important to be lightly dismissed.

In answer to the request of several correspondents, "S." gave in last week's Lancet details of the way in which he works his private dispensary. He charges one shilling for seven days' attendance, and three shillings when the patient requires to be visited at home. Prepayment is insisted on, and dates are accurately kept on a card. Such is the system out of which our correspondent receives £16 a week, or £832 a year, with no other expenses than those for drugs and an assistant. If report may be trusted, it is possible to make three times this sum out of the system.

We have great respect for all honest and honourable attempts to solve the problem of attending the poor as private patients. It is one of the most difficult of practical problems. They must be attended. The need for medical attendance is an urgency. It is one which must be supplied either gratuitously or at a moderate charge. Such is the peculiar pitiableness of the case of the sick poor that medical men instinctively attend to their calls. Nobody expects a baker to supply loaves for nothing even to starving people. But somehow or other doctors are expected to supply attendance and medicines to sick people, leaving the question of payment for settlement at a future time, when neither the sentiment of gratitude nor of justice may be strong enough to secure him being recompensed. It is one of the most discreditable things that can be noted in the morals of society to see how people who have been helped in trouble by a doctor—had a peritonitis cured, or a typhoid conducted to a safe issue, or an arm presentation rectified—will sneakingly evade their benefactor and live out the life he has saved for them without an attempt to pay him. As regards the working classes, we see no hope at present of getting them to pay adequately for medical attendance on them and their families. They will have to be much further advanced in education, including morals, before this is possible. The choice at present lies between the provident system and some ready cheap system such as that which "S." practises. But the question which we have to discuss at present is, Is the system of "S." satisfactory?—or rather, without pretending that it is satisfactory,—is it to be excused and borne with as a stepping-stone to a better system? We may fairly content ourselves with having published "S.'s" statement of the arguments for, and the advantages of, the system. Let us see what objections can be brought against it.

First, with all respect to "S.," we must question the possibility of supplying proper medicines on such terms. Supposing the patient to come only three times for his shilling and require a bottle of medicine each time, we cannot see how it is to be supplied and well dispensed for such a sum. Respectable druggists, at any rate, do not dispense medicines to medical men on such terms. They charge medical men sixpence to eightpence for a mixture. Some highly methodical and conscientious man, with an assistant to match, may supply something worthy of the name of medicine for this sum, but in the hands of men who are not methodical and not conscientious such a system must supply the patient with inferior medicines. People cannot get decent beer on such terms, and they will not have their respect for medicine raised by them. What shall we say of the possibility of examining cases properly under such a system? Let us suppose that the sixteen pounds a week represent over two hundred shilling cases and thirty-five three-shilling cases. The most of the latter will have to be seen and ought to be prescribed for from day to day—some twice a day. Let us suppose them seen, on an average, six times in the week. The shilling cases we will suppose to be seen three times for a shilling. This will give a daily round of thirty visits a day at patients' houses, and a hundred patients to be seen at the doctor's house. We submit that that amount of work cannot be properly done by one man, that it is not possible to do justice to the cases, and that the remuneration is altogether inadequate. Next, let it be observed that this system does not profess to deal with the obstetric necessities of families. Midwifery is not attended, and obviously could not be.

But we shall be met with the argument that it pays. But does it pay? We have pretty well shown that, if proper medicines are supplied and proper attention given to cases, the system cannot pay the particular medical man who works it; but what of the neighbouring medical men whose better patients are lured by this cheap system? "S." tells us nothing of the demoralising effect on the patients. It will not do to reply that the medical charities are abused. They are, at any rate, open to public inspection. Not so with the private dispensaries. We are not told of any attempt to discriminate patients. And we cannot doubt that the hundreds who go to swell this system and make it pay comprise scores of people who could pay sums to their own medical men more proportionate to the value of medicine and medical services. It may pay one medical man, but it tends to rob and lower the profession. Before the system can be countenanced by those who wish to uphold the dignity of the profession, three points should be attended to: the sums charged should be doubled; care should be taken to exclude improper persons; and the system should include an arrangement by which persons might be enticed to ensure medical attendance in sickness by a "provident" arrangement.

Annotations.

"Ne quid nimis."

THE METROPOLITAN SCARLET FEVER EPIDEMIC.

October is almost invariably the most fatal month for epidemic scarlet fever. During the thirty-two years 1840–71 the average weekly number of deaths from scarlet fever in London was 49, whereas the weekly average was 76 during October—more than double the average during March, April, and May, when the disease is least fatal. The present October forms an exception to the general rule, as the fatal cases of scarlet faver in London have been steadily increasing during recent weeks. Scarlet fever caused 359 deaths in London during the first three weeks of October, against 330 in the same period of last year. In the corresponding three weeks of 1869 and 1870 the recorded deaths from scarlet fever were 673 and 582 respectively. The present epidemic therefore, which may be said to have commenced in July, 1874, has hitherto been far less severe in London than was the epidemic of 1868–9–70, and judging by the experience of past epidemics there is every reason to anticipate that after this month the number of fatal cases will begin to decline. Although small consolation is to be derived from the fact, it is not without interest to learn from the Registrar-General's weekly returns that, although scarlet fever is so fatally prevalent in London, the death-rate from the disease last week exceeded that in the metropolis in Bristol, Nottingham, Leicester, Salford, and Bradford, due allowance being made for the difference of population.

The Metropolitan Asylums Board, at their last meeting, took into consideration the excessive demand for hospital accommodation caused by the increasing prevalence of scarlet fever among the poorer classes of the metropolis. It was reported that the Homerton Fever Hospital contained 168, and the Stockwell Fever Hospital 85, scarlet fever patients. In consequence of the Homerton Hospital being overcrowded, it was decided to reopen the Small-pox Hospital at Homerton (which had been closed for months, as there was no demand for accommodation for small-pox), and to use it as a scarlet fever hospital. Since the beginning of July last the weekly number of scarlet fever patients in the two Asylums Board fever hospitals has steadily increased from 151 to 253 on the 23rd inst., and has averaged 184 in the sixteen weeks, of which 113 were accommodated at Homerton and 71 at Stockwell. The value of the Asylums Board Fever Hospital in the repression of typhus and enteric fever appears to be beyond question, and there is every reason to believe that this increase of hospital accommodation for scarlet fever will be infinitely useful in securing the isolation of the sufferers, and, in the absence of evidence to the contrary, it may be hoped that the hospital treatment reduces the proportion of mortality in the cases. On this point statistics would, however, be valuable, for the advisability of treating scarlet fever in large hospitals is not admitted on all hands.

THE ADMINISTRATIVE AMENITIES OF THE LOCAL GOVERNMENT BOARD.

We received, some few days ago, certain copies of provincial journals, which told at great length and with painful perspicuity of the sayings and doings of the Local Government Board relative to a new workhouse about to be erected at Sheffield. It appears that, as usual, the local authorities have been playing at how not to do it in the matter for some months, but were at last persuaded or compelled to take the sense of the Gwydyr House authorities on the subject. Certain representatives came to town for the purpose, and a conference was held at Whitehall, the Board being represented by Dr. Mouat, Mr. Basil Cane, and Mr. Smith, architect to the department. The main question for decision appears to have been whether the block system should be adopted, or a building erected after plans made by the local architect. Dr. Mouat of course advocated the block system, and Mr. Smith followed suit; Mr. Cane commended the plans of the local architect, but at this meeting seems to have done nothing and advised nothing. A week afterwards the local authorities held their usual meeting at Sheffield, Mr. Basil Cane and Mr. Davy attending from the Local Government Board. It is not necessary, nor would it be interesting, to reproduce the discussion in detail; it suffices to record that the energies of Mr. Cane were exclusively directed to the support of the local architect and the condemnation of the block system in principle and in detail. The block system would, according to Mr. Cane, "render the working of the establishment very inconvenient," "its internal contrivances would be bad," and, moreover, "it would be a thing to laugh at with two storeys at one end and three storeys at the other"! It is difficult to read with gravity these profound official lucubrations. They appear, however, to have had great weight with the local authorities, Dr. Mouat and the architect of the Board being absent, for the advice of the former gentleman was (except as to the hospital) entirely disregarded: the lay inspector won the day against his colleague of the Medical Department, and the designs of the local architect are to be adopted. We do not care to canvass here the merits of the block or any other system, though they have long since been ably summed up by many competent sanitarians, but we desire to call attention to the lamentable want of organisation in a public department, the officers of one branch of which are permitted to stultify the skilled opinion and advice of those of another branch, and that in the absence of the latter. As long as matters are thus administered at Gwydyr House, the less local authorities have to do with the central office the better.

THE "QUARTERLY REVIEW" ON DRUNKENNESS.

An article in the current number of the *Quarterly Review* on "Drink: the Vice and the Disease," deserves something more than a passing notice at our hands. In consists of a forcible and striking account of the ravages of drunkenness in England, and of the moral and physical devastation, individual and social, which results from the English custom. An interesting review of the habits of the upper and middle classes shows how strikingly an average moderation has increased among them, and that in spite of the enormous increase in the importation of wine since Mr. Gladstone removed the barrier of high duty. The increased consumption is mainly of light wine, and society has not been tempted by its cheapness beyond resisting power. But it has been far otherwise with the poor. "Drunk as a lord" was the intelligible, however disgraceful, saying of the olden time; now it is "drunk as a beggar." The increased temptation to which the lower classes have been exposed has been accompanied by no increased power of resistance, rather by an immeasurable decrease. Fatal mistakes have been made in the legislative enactments for the benefit of the poor. The Beerhouse Bill of 1830 added fuel to the flame of inebriety, and "may justly be credited with the boundless increase of that which it was intended to modify." The evidence of the fearful extent and effects of intemperance in this country is traced by the writer through the reports of the various Commissions which have collected facts and opinions on the subject, and their terrible details need no adventitious colouring; they are, indeed, incapable of exaggeration.

To what measures can we look for relief, for any remedy for this "topsy-turvy rottenness of the State"? The hopelessness of expecting self-reformation on the part of the drunken working classes is becoming increasingly evident, so long as the circumstances of their life and temptations remain unchanged. Mental education is powerless to reform the moral fault. "If the drunkenness of the day be not sufficient to raise a public opinion against itself, neither School Board nor Church will ever do it. If the facilities for excess are confessedly so superabundant as to entice a poor fallible child of man beyond his powers of endurance, why are they not curtailed? Here we touch the root of the matter, and know well the outcry the mere suggestion will raise. Is not the poor man to be allowed to drink as much as the rich man? Is the liberty of the subject to be curtailed? But why *tempt* the one more than the other?" It is to the *number* of these places, the writer urges, and with justice, that public attention must be directed, and he believes that if we could close all the beershops, and limit the number of public-houses, the mischief would be to a great extent stayed. He cites the example of the self-reform of Gothenburg as an example worthy of study, if impracticable for complete imitation.

The main features of dipsomania are sketched with equal vigour and fidelity, and the need for legislative interference for its restraint is not only concurred in, but urged with great force. "The man who *cannot* refrain from that which renders him periodically mad is as irresponsible as the chronically insane, and must be treated accordingly. His own will being in abeyance, it is only by the act of another's will, and that supported by the law of the land, that he can be rescued and his family relieved." The relation of the vice to the disease is clearly shown. "The unprincipled man lapses into the helpless man. The vice entails the disease, and yet the vice cannot be met by the medical profession, and the disease is not met by the law. The vice can never be cured by the law alone, and the disease never cured by the doctor alone."

Finally, the writer reviews the objections which have been urged against the legal detention of the dipsomaniac, and shows how conclusively they may be answered. He points out especially how effective legal provision is, even when not employed, the knowledge of its existence having been found sufficient, in America, to induce the voluntary retirement of the sufferers. It is urged that neither with this question nor with the larger one of intemperance, can delay be productive of anything but harm. "It is simply a question of which the country can best afford: to let the evil gather strength with every year, or to grapple with it earnestly and at once."

THE MEDICAL WOMEN QUESTION.

Alderman Chamberlain, the Mayor of Birmingham, is so deservedly popular amongst his fellow-townsmen, and his civic reign has attracted so much notice and won such high praise throughout the country, that any measure advocated by him is certain to receive very careful consideration. The medical education of women has never met with a more able and influential supporter than Mr. Chamberlain, who appears to have set his heart on opening to his fair clients the doors of the Birmingham Queen's College. We recently announced the decision of the College against the Mayor's proposal, and it was at one time believed that the ladies' friends would accept that decision as final; but the recent general meeting of the Queen's College governors has dispelled the illusion. In the absence of Lord Lichfield, the president, the Mayor was voted to the chair, and after an able speech, he concluded by moving a resolution requesting the Council to reconsider its recent decision. The proposition was supported, amongst others, by Mr. George Dixon, M.P., but eventually it was withdrawn. The discretion of the retreat had been made very obvious by the disparity of numbers on the two sides, and the wisdom of the women's advocates would have been still more conspicuous if their leader had not for a moment lost his equanimity and indulged in taunts of trade-unionism and threats to establish a rival institution.

The Council of Queen's College had no other course open to them than to decline the Mayor's overtures for the admission of women to Queen's College; for the whole body of teachers in the Birmingham Medical School had declared themselves unable, by a very decided majority, to conduct the proposed experiment. The Birmingham Medical School has an exceptional constitution. The systematic teaching is conducted by a body of professors and tutors at Queen's College; while the General Hospital and the Queen's Hospital are amalgamated for purposes of clinical instruction, their staffs forming one clinical board, and the pupils attending alternate sessions at the two hospitals — an arrangement which widens the basis of the school, increases the number of teachers, and furnishes immense scope for clinical observation. In the presence of the formidable party headed by Alderman Chamberlain, the members of the Birmingham

Medical School have taken counsel together. They do not oppose the medical education of women, but they have declared that, as a school, they are not prepared to undertake it. The women's advocates plead in the name of freedom, and the Birmingham medical teachers simply resent coercion. Medical education, which has never been easy, is in the present state of knowledge so intricate, and demands, on the part of teachers and pupils, so much continued and persevering attention, that it admits of no exciting diversions or questionable experiments within the precincts of a school. The women's advocates are a wealthy body, and they may found their own school, as others have done. If the Council of Queen's College and its consolidated body of medical teachers persevere in their endeavours to promote the interests of the medical profession, they will not lack support. They have wisely declined a very tempting offer from a great political party, and are to be congratulated on the moderation and perfect temper in which they have conducted the delicate negotiation.

THE SANITARY CONDITION OF HULL.

OUR remarks on the high death-rate lately reached in one of the districts of the town of Hull has brought us considerable correspondence, and a formidable collection of newspaper cuttings and reports of recent meetings of the Sanitary Committee of that town. We have patiently examined the large amount of evidence thus afforded, with a view of arriving at some definite conclusion as to the real state of the sanitary affairs at Hull and the amount of responsibility resting with the sanitary committee. To render our remarks more impartial, we have limited our criticism entirely to the statements of members of the Sanitary Committee. At a meeting of the Hull Board of Health, Sept. 30th, Mr. Chapman alluded to letters that had appeared in the newspapers with respect to the outbreak of fever in Blyth-street; he denied that the houses were fever beds, and stated fever raged in more places in the town than in Blyth-street, and that Blyth-street was not so bad as had been represented. Mr. Waller remarked "that all the nonsense which had ever been written or spoken, as to drainage being a source of fever, there had never been so much as in the case of Blyth-street." He had visited the house in question. "In the front room, which was about ten feet by six feet, there was a bed, and on it three or four children. In the back room, which was about the same size, there was a bed the clothes of which nearly touched the fireplace, and on this bed there had been people ill of fever. In the back yard there were all sorts of dirt. In the house there had been living a man, his wife, six children, a lodger, and very often the man's mother. The odium fairly belonged to the people who were living in the house." Dr. King described the condition of Blyth-street, and said that if Mr. Chapman had been in the house, he (Dr. King) had; where there were eight persons ill of fever he would have felt that it was a serious matter, and attention ought to be given to it. The drain in Blyth-street was stopped with a brick. The surveyor explained that "the Board had as yet exercised no control over Blyth-street; some few years ago the private streets were taken in hand, and eleven out of seventeen miles had been constructed." The medical officer (Mr. Holden) "believed the fever was due to the bad drainage. His idea was, that bad drains brought about a bad condition of property and bad tenants; until the drainage of Blyth-street was remedied they could not well expect a better state of health in the district." The statements of Dr. King, the surveyor, and the medical officer of health thus attribute the outbreak to the bad condition of the drains; whilst Mr. Waller throws the blame on the dirty and crowded condition of the tenements. Whichever view is right, the sanitary authority stand equally charged with neglect. Surely the sanitary authority ought to have all the drains in the streets constantly examined, so as to ascertain if they are blocked or not. Nor is it any excuse to say that houses have become overcrowded, and their back-yards are filled with dirt. What can their inspector of nuisances be doing? Under these circumstances Mr. Chapman's statement that fever raged in more places in the town than in Blyth-street is probably not exaggerated. For it appears that an excess of mortality has arisen in the town during the present year, the excess in scarlet fever alone being 200. The general tone of the Hull sanitary authority, as gathered from the published reports of their meetings, is apathetic; there are a few members, however, who seem disposed to be energetic and liberal. And we are pleased to see that Mr. Blackburn proposed to appoint a medical officer of health for the borough at an adequate salary, who should devote the whole of his time to the duties of the office. (The present officer receives, besides a few small fees, the munificent sum of £20.) The proposal was referred to a committee! From the correspondence and leading articles in the local papers, it would appear that the inhabitants are taking more interest in the sanitary matters of the town than the authorities; and we are surprised that the graphic descriptions of the numerous sanitary evils stated to exist in Hull have not excited the attention of the authorities of Gwydyr House. A visit from one of the Local Government Board medical inspectors is urgently required, and a thorough and impartial investigation of the causes producing the present high rate of mortality in the town should be carried out without delay.

THE NEW ENTRIES.

ON the 24th of March, 1710-11, Addison published a letter in the *Spectator*, which commenced as follows:—"I am sometimes very much troubled when I reflect upon the three great professions of divinity, law, and physic; how they are each of them overburdened with practitioners, and filled with multitudes of ingenious gentlemen that starve one another." If such was the state of things one hundred and sixty years ago, how great would be the distress of the "prince of essayists" if he were among us now! The number of medical students that have entered annually at the metropolitan schools has gradually increased in ten years from one thousand to more than seventeen hundred. How appalling would these numbers be to Addison, who affirmed that it might be laid down as a maxim that when a nation abounds in physicians it grows thin in people, and who even went so far as to suggest that the solution of the difficulty which presented itself to the mind of Sir William Temple why the northern hive does not send out such prodigious swarms as it did formerly might be found in the comparatively modern institution of medical practitioners. These insinuations were, of course, never intended to bear literal interpretation or close examination. Some of the increase in the number of entries into the profession is, of course, due to the larger demand. There are many departments of the State and the public service in which large numbers of medical men are now constantly employed. The Vaccination Act, the Factory Act, the Public Health Act, and many other legislative enactments for the preservation and maintenance of the public health, require for their proper and efficient administration the unremitting services of many trained medical men. But this will not account for all the increase. There is no avoiding the fact that the medical profession is gradually becoming overcrowded, and a similar state obtains, we believe, in the professions of law and divinity. The reason of this is not clear in a commercial community like ours, where it has been stated there are few so dull and heavy who may not be placed in stations of life which may give them an opportunity of making their fortunes. The clamour for professional life is not unfrequently the result of a miscalculation of a boy's aptitude and abilities, and, to satisfy the whim of a friend or parent, many a young man is placed in the medical profession against his natural inclination. It is not, therefore, a matter of surprise that there are some failures; but, on the other hand, it must not be forgotten that honest industry is sure of its reward. A man may not rise to eminence or to wealth, but with good health and a willing heart one who is really determined to act uprightly will not fail.

ANTISEPTIC SURGERY AT THE CLINICAL SOCIETY.

Although the discussion at the last meeting of the Clinical Society on antiseptic surgery was, on the whole, extremely weak, it showed two things—first, that the opinions of those who took part in the discussion were very unsettled; and, secondly, that notwithstanding this, there is on the part of most surgeons a general desire to give the system a full and fair trial. Hitherto the statements have been for the most part plain, a little vague perhaps, but calmly made. We have not yet heard the extravagant praises of the rabid partisan, nor the wholesale condemnation of the obstinate conservative. It is to be hoped, however, that at the next meeting statements more definite than any yet advanced will be forthcoming, for Mr. Pick says that he does not think that antiseptic dressings prevent suppuration, whereas Mr. Holmes, his senior colleague at St. George's, has no doubt that carbolic acid does prevent it. Mr. Lister's own opinion accords, we believe, with that of Mr. Pick. The most weighty remarks were those of Mr. De Morgan, of Middlesex Hospital, who alleged his belief that a great part of the success of the antiseptic system was due to the extreme care on the part of the surgeon, both in the dressing of wounds and in the general hygienic measures. Mr. Maunder entertained a similar opinion. Mr. Heath and Mr. Thomas Smith, who were made partial converts to the faith in the antiseptic system by Mr. Lister's brilliant demonstrations at Edinburgh, urged that it was useless to draw any conclusions from the particular mode of dressing, unless all the minute details of the plan were fully carried out.

Such was the result of the last discussion. Let us hope that the next, at which Mr. Holmes has promised to read a paper on Antiseptic Surgery, may be more profitable.

THE ROYAL MILITARY ACADEMY, WOOLWICH.

As everyone knows, this is the training college for the scientific branches of the army—the Royal Engineers and Artillery Corps,—just as Sandhurst is for the remainder of the army. The Board of Visitors appointed to inspect the former establishment have just issued their report for 1875. On turning to this document, we expect to encounter certain recommendations which have by this time become stereotyped expressions. The present Board, for example, refer to the representations of their predecessors in regard to defective accommodation. It appears that as many as three or four cadets are crowded into one room, and that, for want of quarters near the barracks, the servants have to reside in some of the most unhealthy parts of the town. As regards the first, setting aside the matter of health and propriety, we do not believe it possible for much reading or mental work to be done under such circumstances, and, as the cadets' parents have to contribute to the funds of the institution, it might fairly be expected that every cadet would get, what he is surely entitled to, a separate room. And, as regards the second point, the Board of Visitors concur with the medical officer in thinking that the cadets are more exposed to the risk of contracting infectious diseases than they need be, by the frequent passage of the servants daily from their lodgings in the town to the Royal Military Academy. The Visitors were unable to ascertain that any evil had arisen from the exposure to which the cadets are subjected in winter time, by having to pass through the open air to the bath-rooms attached to the old building, and, pending the execution of their proposal for accommodating each cadet with a room, where bath-rooms under the same roof would be provided, they think the adoption of any temporary expedient unnecessary. No case of disease from immoral causes has come to the knowledge of the medical officer during the year under report. The Visitors are satisfied, after careful inquiry, that a good tone generally prevails amongst the cadets, "but there are still one or two silly distinctions kept up between the older and younger cadets, which, as they do not assist in maintaining discipline, and one of them is likely to injure health, ought to be done away with." The Visitors, while indicating a remedy for certain trifling defects, are satisfied that the system of cadets' messing, and the quantity and quality of the food supplied, are quite satisfactory.

SPREAD OF FEVER BY TAILORS.

The vivid and realistic autobiography of "Alton Locke, Tailor and Poet," first brought into view the fearful risk which attends the practice pursued by most tailors of putting out the whole or some portion of their work. It is next to impossible for an employer to exercise any active control over the homes of his workpeople. These homes are often in the worst neighbourhoods, crowded and filthy, and liable to become at any time centres of disease; and the customer of even a fashionable West-end tailor has no security that the coat he receives has not a few hours before been impregnated with the atmosphere of scarlet fever, or even in actual contact with the victims of the disease. Similar conditions prevail in the dressmaking and shoemaking trades, and it is impossible to doubt that many epidemics of fever for which the physician is now unable to account, would become intelligible if we could trace the previous history of the clothes the patients had worn.

These considerations, which we have often urged, were forcibly recalled to us the other day by a conversation with a respectable tradesman in Soho, who for some time past has had the misfortune to have as lodgers a party of journeymen tailors. The house is of the better class, and the journeymen were in the employ of a well-known West-end tailor, who paid good wages, and was particular about the place in which his workpeople lived. His superintendence clearly could extend no farther. The workpeople in question were, however, extremely dirty in their habits, and a close and disgusting smell was generally perceived in passing their door. Some months ago a case of disease, the nature of which we have been unable to trace, occurred among them, and quite recently a death has taken place. In the latter case no medical man was called in, and the death was registered as from bronchitis. The people of the house, however, believe that the real disease was scarlet fever, and say that one of the women confessed as much, and admitted that they had concealed the fact from fear of losing their employment. Proof in a case of this kind is very hard to obtain, and perhaps the story may be founded in error. But its possibility cannot be denied, and is sufficient to inspire us with very unpleasant ideas.

Surely some remedy could be found for this very obvious public danger. The Act which regulates workshops does nothing to meet it, and there would seem to be only two alternatives open—namely, to forbid employers from putting their work out, which would be difficult, if not impossible; or to provide for the registration and sanitary inspection of all houses or lodgings in which the making up of wearing apparel for sale is carried on. The latter remedy seems to us to be the true one.

OUTBREAK OF ENTERIC FEVER AT UPPINGHAM SCHOOL.

We regret to announce the occurrence of a serious outbreak of enteric fever at Uppingham School. The first case occurred on September 21st, and from that time to the present thirty boys have been affected, four of whom have died. The outbreak commenced in the house of one of the masters of the lower school, occupied by sixty persons; the previous health of the house had been good, though it is stated that a boy had died of enteric fever last June. The total number affected in this house, so far as we have been able to ascertain, is eleven. In another house containing forty-four inmates, there are nine cases. The first of these sickened on 1st of October. In a third house a boy sickened on 2nd of October; this case terminated fatally; no other case occurred in this house. In a fourth house one boy, two daughters of the master, and the matron fell ill. All these cases occurred about the 2nd of October. The medical attendant of the school from the first pronounced the disease to be "enteric fever," and, indeed, the cases seem to have been well-marked. In all the houses the cesspit system has been adopted, and the water-supply is in dangerous proximity. In some of the houses the dormitories are supplied with water from the cisterns which supply the waterclosets. The town of Uppingham, with the exception of two or three cases, is free from enteric fever. The medical officer of the school dealt promptly with the outbreak, and the cases were removed to the sanatorium. It is satisfactory to be able to state, that since the 13th inst. no fresh cases have occurred.

Two points suggest themselves to us. First, the suddenness of the outbreak and the short period intervening between the infection of the different houses, pointing, we think, to one common source of mischief. Secondly, the proximity of the cesspits to the water-supply, and the cisterns for the drinking-water being over the closets. These facts afford, we think, strong evidence that the water-supply of the various houses affected has been contaminated by the introduction of some specifically infected material, and that the inmates of these houses received the poison nearly about the same time. It will be interesting to ascertain if there is any connexion between the case of enteric fever last June, at the end of the half, and the present outbreak this term—how were the infected stools in that case disposed of? A strict inquiry has been demanded by many of the parents, and we shall await with interest the official report of Mr. Haviland, the medical officer of health for the Northamptonshire combined districts, which we suppose will, in due course, be made to the sanitary authority of the district.

THE ARTISANS' DWELLINGS ACT IN BIRMINGHAM.

The adoption of the Artisans' Dwellings Act in Birmingham is a fact of no small significance. It indicates that the attention of the authorities of a great manufacturing centre are alive to the necessity of acting up to the old Roman dictum, "Salus populi suprema lex," and that they are prepared to carry out, even at a cost of half a million of money, a sanitary measure which has for its main object the pulling down of a number of houses which are unfit for human habitation, and the opening up of a district which now is nothing but a hotbed of dirt, fever, and foulnes with good roads and good drainage.

It is creditable to the public spirit of the corporation that this measure was agreed to unanimously, and it is to be hoped that no adverse criticisms on the part of the falsely called "economical" party will prevent the scheme presented by the sanitary committee being carried out in its entirety. Although all praise is due to those who have thus succeeded in passing this wise measure of sanitary reform, it must not be forgotten that no small share of the credit of it must be awarded to the medical officer of health, through whose report on the condition of the affected district the sanitary committee proceeded to act, and to him should be accorded the warmest thanks of the community. It is not a long time ago that Birmingham was without a medical officer of health altogether, the people dwelling in a state of happy ignorance of the risk they were incurring by the neglect of proper sanitary laws. However, they were aroused from their lethargy by the outbreak of a formidable epidemic of small-pox, and in a panic they appointed Dr. Hill as medical officer of health. Since his appointment a thorough sanitary inspection of the various wards of the town has been made, many nuisances have been removed or abated, cesspools have been condemned, the water-supply has been placed in the hands of the corporation, hospital accommodation for those affected with infectious diseases has been provided, and now, to crown the whole, a part of the centre of the town, where property is most valuable, is going to be swept away because the medical officer of health declares it to be "an unhealthy area," the rate of mortality in that quarter of the town being more than double what it is in some of the better built and sewered wards. The very fact that, of the three thousand preventable deaths which occur annually in Birmingham, an unusually large proportion are afforded by this very district, must convince anyone of the wisdom the corporation have shown in listening to the recommendations of the health officer of the borough.

SIMLA, THE INSANITARY.

By all accounts, Simla can no longer be reckoned the chiefest among the health-resorts of India. Notwithstanding its great natural advantages of position and climate, it is, to borrow an expression from our contemporary, the *Indian Medical Gazette*, fast becoming used up, and is a place to be avoided rather than sought by invalids or healthy people. After repeated warnings from medical officers and others as to what must accrue from a long-continued disregard of cleanliness and neglect of all sanitary precautions, and the frequent prevalence of the so-called "hill-diarrhœa," Simla has been quite recently visited by a severe outbreak of cholera. The fact is, the place has become filthy with the accumulated filth of years, and Indian officials are naturally alarmed at finding the cholera betaking itself, like themselves, from the plains to the hills for a change. By the latest accounts received in this country it would, moreover, appear that cases of cholera were still of frequent occurrence in various parts of India. It was very prevalent in different districts of the Madras Presidency, its attacks being almost entirely confined, however, to the native races.

KNIGHTSBRIDGE BARRACKS.

In reporting on the sanitary condition of the Knightsbridge Barracks last summer, we suggested that probably they would themselves solve the question of removal by falling to pieces. We learn from the *Pall Mall Gazette* of Tuesday that our prophecy is in part fulfilled, a portion of the barracks having given way last week. We have pointed out on several occasions the ineligible nature of the present site, not merely as a question of public convenience, but of sanitary principle. We hope, therefore, when the barracks are rebuilt another site will be chosen. If it is absolutely necessary to have barracks in the park, we would suggest that on the north side of the Serpentine a site much better adapted for the erection of spacious and commodious buildings is available. We consider it would be impossible to build barracks with anything like adequate accommodation on the narrow strip of land available at Knightsbridge.

WHERE IS THE WARRANT?

Our contemporary, the *Broad Arrow*, has this question as the heading of a long article on the Army Medical Service, but it is apparently unable to cast any light into the particular pigeon-hole into which that document has been presumably officially laid aside during the Parliamentary recess. However much the Minister for War may find the policy "to rest and be thankful" an agreeable one, the members of the department concerned do not, and they will certainly expect that the intentions of the Government in regard to them will be declared at the earliest practicable date after the meeting of Parliament. Meanwhile, we must suppose that Mr. Gathorne Hardy has kept his own counsel, for no one seems to know what to expect. In his replies to various deputations and in his answers to members of Parliament, he has tied himself down to nothing beyond declaring, in a general sort of way, that he is giving the subject full consideration, with the object of doing something. He can, when he chooses, not only answer the question, "Where is the Warrant?" but "What is it?" also. He has, if we remember rightly, intimated that this subject forms but a portion of the changes affecting the army generally, about which he has now been so long deliberating.

DESICCATED BLOOD.

Some observations on desiccated blood were recently communicated to the Academy of Sciences of Paris by M. Le Bon. If blood is reduced, by simple evaporation, to a solid, the resulting powder is absolutely insoluble and indigestible; it may be macerated for twenty-four hours with a solution of pepsine and acid without being altered. But by evaporation at a low pressure and at a temperature which does not exceed that of the body, M. Le Bon has succeeded in obtaining a powder which, even after being kept for eighteen months, is readily soluble in water, and yields a red solution which has exactly the properties of defibrinated blood, is precipitated in the same manner by heat, and shows under the spectroscope the absorption bands of hæmoglobin. The powder is as soluble in an acidified solution of pepsine or in simple water, a fact which sufficiently proves its digestibility. The therapeutical application of this preparation are important enough if its characters are uniform.

ENTERIC FEVER IN CHESTERFIELD.

A sudden outbreak of enteric fever has occurred in Chesterfield and the immediate neighbourhood. No less than seventy cases are already under treatment from this disease, and a few deaths have taken place. The heavy rains have rendered houses very damp and unhealthy, wells that were insufficiently protected from surface pollution have become impregnated with vegetable *débris* and other refuse, and uncovered ashpits converted into obnoxious cesspools. The general water-supply is also of a doubtful character. The Chesterfield Water Company have no filtering medium, and the catchment basin is very steep; consequently, all animal and vegetable refuse is carried along with the stream to the reservoir, and from thence to the various outlets. This is the real explanation of the outbreak.

Every infected house, yard, drain, and ashpit has been thoroughly disinfected under the superintendence of the inspectors of the medical officer of health; and the stools of the sick, on the recommendation of the medical officer, have been almost in every case disinfected before they were removed from the sick-rooms, and then buried in the gardens. Isolation cannot be completely adopted, as the sanitary authorities are not disposed to provide mortuaries or hospitals. Bills have been freely distributed throughout the district, and posted in every street and corner.

DEAD BODIES CONCEALED.

There cannot be two opinions as to the misconduct of undertakers who, instead of burying the bodies of infants committed to them for that purpose, pocket the fees and conceal the corpses. The severest punishment which can be visited upon offenders of this class will scarcely satisfy justice or appease public indignation. The putrid remains are a nuisance and source of peril to the living. Perhaps the only measure sufficient to meet the case is to give inspectors of nuisances power, and instruct them, to enter and search the premises of every undertaker at uncertain periods. The practice of delay is probably very common, and this leads to the concealment. Meanwhile something would be gained, and many malpractices restrained, if not prevented, by simply adding another column to the form required to be filled up by the local registrar of deaths, attesting the fact, place, and date of interment. Let every certificate given by a registrar to the friends of a deceased person be returnable to the *same* registrar within a specified number of days, signed by the sexton or other official in charge of the burial ground; and enforce registration in all instances of death and burial, and in all cases of *burial* without "death," so as to cover the case of still-born children.

The Keighley Board of Guardians cannot be said to have as yet elicited much sympathy or encouragement from the treatment given to the manifesto against the Vaccination Acts which they continue to forward to other boards throughout the country. The answers received include varieties of the forcible, of the humorous, and of the bantering style. Thus the Merthyr Tydvil Guardians thought the Keighley Board had gone mad, and expressed a hope that the law would bring the members to their senses. The Salford Board had resolved that the Keighley Guardians were fit subjects for a lunatic asylum, and ought to be confined in one at their own cost; they considered even a halfpenny for postage too much to expend on lunatics. The York and Doncaster Guardians had ordered the circular to be thrown under the table. The Canterbury and Halifax Guardians said it was unworthy of consideration. We much fear, however, that these gentle rebuffs will have no effect on the representatives of the Keighley ratepayers.

We announced a few weeks ago that the Strand District Board had memorialised the Metropolitan Board of Works on the subject of public mortuaries. The memorial asked the Board to seek Parliamentary authority to erect such buildings in the metropolis, together with compulsory power for the purchase of sites. We are sorry to find that the Metropolitan Board have declined to accede to the wishes of the memorialists. It must be admitted that the difficulties of forwarding such a scheme are great, but still they are not insuperable. The question will doubtless be ventilated in Parliament next session.

WITHIN the last few days Colonel Cox, on behalf of the Local Government Board, held an inquiry into the sanitary condition of Dewsbury. The central authority took action in the matter in compliance with a formal complaint under the provisions of the Public Health Act of this year made by certain of the inhabitants. The complainants allege that the Town Council are in default in not providing the town with proper sewers, and that the public health had suffered in consequence. A good deal of evidence on both sides of the question was given. The official report of the investigation ought to prove an interesting one. We shall probably refer to it when it makes its appearance. It should be generally known that ratepayers, dissatisfied with the conduct of their representative sanitary authority, can obtain an inquiry into any specified default on making the necessary application.

IN London last week 1563 deaths were registered, including 34 from measles, 127 from scarlet fever, 11 from diphtheria, 47 from whooping-cough, 26 from different forms of fever, and 41 from diarrhœa. No death from small-pox was recorded. It will be observed that there is a considerable increase in the mortality from scarlet fever. The disease has been extending in the metropolis for some weeks past, and we have in another column commented upon the extension. Different forms of violence caused 60 deaths in the period. In the large institutions 255 deaths occurred. The Asylum District Fever Hospitals contained on the 23rd inst. 330 patients, 253 of whom were under treatment for scarlet fever.

FROM the *Western Morning News* we learn that a small place called Buckfastleigh has been visited by an epidemic of scarlet fever of great severity. We are not surprised at the visitation if what our contemporary says of the village is true. It does not, we are told, possess a common sewer. The majority of the inhabitants reside in courts and alleys; they have no privies, but keep their daily refuse of every kind in a pail, and at night deposit it either in the garden or in the river. Into the stream, too, the refuse of a most offensive manufacture finds its way.

THE epidemic of fever on board the *Cornwall* still continues. Six cases have been sent to St. Bartholomew's Hospital, and eight fresh cases have been admitted at the Seamen's Hospital during the past week. Most of the patients at Purfleet have been sent to the hospital-ship *Rhin*, which has been placed at the disposal of the *Cornwall* authorities by the Port Sanitary Committee of the Corporation. Thus it appears that up to the present time 80 out of a total of 245 boys have been attacked.

IT is asserted by M. Vidal that the addition of chloral to a solution of morphia renders it much less liable to spontaneous change. This fact, if it be true, is important. The alteration which concentrated solutions of morphia undergo renders their strength variable and uncertain if they are laid by for a time. M. Vidal adds to the solution a quantity of chloral equivalent to twice the weight of the morphia it contains. He affirms that the injection of this mixture is not painful.

WE gather from the *North British Mail* that a virulent epidemic of scarlet fever prevails in the villages of Busby and Cathcart. Our contemporary states that in some houses almost every member has been seized in turn, while in and around Busby the mortality up to the present time has amounted to about 20 per cent. of the cases. The epidemic is also making itself felt in adjacent districts.

DR. STORRAR has recently been re-elected a member of the General Medical Council. Dr. Storrar was first appointed by the Senate of the University in November, 1858, for the period of five years. Since the expiration of that term of office the appointment has been annual.

REPORT
OF
The Lancet Sanitary Commission
ON THE
DWELLINGS OF THE POOR.

No. V.—THE CITY OF GLASGOW.

THE municipal authorities of Glasgow have greatly distinguished themselves by the efforts which they have made to improve the sanitary condition of the city under their charge. Their water-supply is the best in the country, and the aqueduct from Loch Katrine to the city is a work in every way worthy of one of the richest cities of the kingdom. Good as it is, however, we understand that arrangements are being made to supplement it; and that Loch Lubnaig, to the north of Callender, is to be tapped for the purpose of additional supply. Notwithstanding the unlimited supply of absolutely pure water, the death-rate of the city has continued to be above thirty per thousand. This high death-rate is attributable in some degree to the character and occupation of the inhabitants, and to the fouling of the atmosphere by the innumerable factory chimneys. Mainly, however, it is due to the density and overcrowding of the population—a fact which is forcibly illustrated in the following paragraph from a speech by Sir James Watson, made in 1860, taken from a pamphlet published last year by Baillie James Morrison, one of the most enthusiastic of Glasgow's sanitary reformers.

> "From each side of the streets in the districts referred to (i.e., Gallowgate, High-street, Saltmarket, Trongate, &c.) there are narrow lanes or closes, running, like so many rents or fissures, backwards to the extent of sometimes 200 or 300 feet, in which houses of three or four storeys stand behind each other, generally built so close on each side that the women can either shake hands or scold each other, as they often do, from the opposite windows. ...... Throughout the whole of these districts the population is densely crowded: in many of the lanes there are residing in each not fewer than 500, 600, and even 700 souls; and in one case we observed 38 families, or nearly 300 persons, occupying one common stair."

> Mr. Morrison continues: "This, then, was the condition in 1865 of what may be designated 'Ancient Glasgow,' covering an area of about 88 acres in the centre of the city, where a population of 51,304 was packed together at the average rate of 583 persons to the acre, in upwards of 10,000 houses, the walls of which were permeated with disease. The population of the whole city in 1865 was 423,723, so that fully 12 per cent. occupied houses in every sense of the word unfit for human habitation, rapidly spreading moral and physical deterioration. The death-rate over the whole city was, as might be expected, 32·8 to the 1000, which increased in 1869 to 34 to the 1000; and the average death-rate of the 88 acres alluded to was 38·64 to the 1000. These figures still, however, fail to convey an adequate idea of the rapidly increasing over-density. The improvement scheme comprises 40 areas, in the worst of which, and in portions of the others, the population was housed at the rate of 1000 to the acre, or 640,000 to the square mile. In these plague-spots and fever-dens the death-rate was as high as 52·21 to the 1000 in 1865. In 1870, before demolition commenced, it rose to 70 in the 1000."

It will be seen, therefore, that the overcrowding in the old parts of Glasgow in 1865 exceeded anything which we have in London, where the density of the population nowhere exceeds 430 persons per acre. The number of houses per acre in Glasgow appears to a London reader extraordinarily great, but it must be borne in mind that in the Scotch towns a house corresponds to what we should call a tenement. Every apartment or set of apartments abutting on a common stair is spoken of as a house.

In consequence of the activity with which the improvement schemes have been pushed forward much of the overcrowding has disappeared, but that which remains is amply sufficient to give one an idea of the state of things with which the authorities have had to grapple. We visited the *Saltmarket,* one of the oldest parts of the city, and a part which a century and a half ago was occupied by decent and respectable inhabitants. Readers of "Rob Roy" will remember that Baillie Nicol Jarvey had his house in this quarter of the city. These old houses are solidly built of stone, and the attentive observer will not fail to recognise here and there the evidences of departed respectability. They are, on an average, about three storeys high; the houses of ten and eleven storeys, which are common enough in Edinburgh, not being found in Glasgow. The rows of houses almost touch each other, and every house seemed to us to be literally overflowing with inhabitants. Every house under a certain size in Glasgow is subject to police supervision, and we were enabled to accompany the police officers in their round of inspection. It was evident that the visits of the police were of common occurrence, since our presence seemed to pass almost unnoticed by the inhabitants. The door of every house is decorated with a police ticket, ordinary houses having a square, and lodging-houses a circular, ticket. Upon this ticket is written the cubic space of the house and the number of persons which it is licensed to contain. The authorities allow one adult inhabitant to every 300 cubic feet of space, a child (under eight years and a half of age) counting as half an adult, and being allowed 150 cubic feet of space. The inhabitants of the houses are, for the most part, the lowest class of Irish, and it is needless to say that they live in almost inconceivable squalor and wretchedness. The windows of the houses are, as a rule, small, and the amount of light, owing to the thick atmosphere and the close proximity of the dwellings, extremely little. In the matter of light Glasgow is probably worse off than London. The first house we visited had a cubic space of 2743 feet, and was licensed for nine adults. In the second, of 2295 cubic feet, seven persons were living; and in a third, a lodging-house of one room, containing 2106 cubic feet, there were five beds, touching, or almost touching, each other, licensed to hold nine people. This state of overcrowding, with the dirt and other evils which are its necessary consequences, were everywhere observable; but, although the density of population was far greater than is to be found even in Soho and St. Giles's, we could not but think that the inhabitants were in many respects better off. In the first place, the authorities seem to have shown themselves very capable of dealing with and making the best of matters as they existed—a very important thing, since improvement schemes, involving legal formalities, demolition and reconstruction, necessarily take years to accomplish. The method of ticketing the houses and subjecting them to police supervision seemed to us, though a small matter, to be a most admirable system, and one which we would recommend to the notice of Mr. Cross, since without it the amount of overcrowding would undoubtedly be much greater even than it actually is. Then, again, these old dwellings are immeasurably superior to the London lodging-houses in the matter of water-supply. On every landing, at least, there is a water-tap, from which any amount of pure water may be obtained with a minimum amount of trouble. Close to every tap there is a sink for waste and slops, and the waste pipes run with the rain-water pipes into open drains. These old houses are, happily, for the most part, without subterranean sewers. As to waterclosets, they are practically non-existent in these dwellings, and one very curious result of the displacement and removal of the inhabitants to new quarters has been to make the use of waterclosets more general, and so to increase the pollution of the Clyde. In the "Information" relating to the Glasgow improvements, laid before Parliament at the beginning of this year, the history is given of 263 families whose movements, consequent on the demolition of their old dwellings, had been traced. Among other facts, it is stated that "only 12 of these had watercloset accommodation originally, but 35 had such accommodation in their new houses—that is, whereas only 4½ per cent. of the families whose houses were demolished sent their excreta into the sewers before the demolitions, nearly 13½ per cent. did so afterwards....... As to the immediate effect of the change from privies and ashpits as the method of excrement disposal upon the families themselves, two things must be taken into consideration: (1) that, from the close occupation of the ground in the old localities, for the most part no site was to be had where a privy or midden could be placed, so as not to be a nuisance and a source of injury to the health of the inhabitants; (2) that, of the 35 families who found themselves supplied with waterclosets after these operations, only 13 found them in their houses; the remaining 22 found them on the stairs."

What becomes of the excreta of the remaining 228 families we are not informed in the parliamentary paper. Much of it, no doubt, finds its way into the public privies which the authorities have erected wherever a suitable situation could be found. We inspected one of these privies standing in a court in "Old Vennell." It resembled in external appearance the ordinary cast-iron London urinal, without door, but having a circuitous entrance at either end to screen the occupants. There was accommodation for five persons, and a partition down the centre divided the part used by males from that devoted to the necessities of females and children. The excreta are received into a simple iron pan beneath the seat, and the pans are emptied and cleaned daily by the public scavengers. The number of these privies is probably quite inadequate for the number of inhabitants in these old quarters. The gutters and kennels are probably largely used, and possibly the cry of "*Gardez l'eau!*" may still, as it did in Smollett's time, warn the passer-by of the accident which may befall him from the upper windows. In these old dwellings the one evil seemed to be "overcrowding," and in those parts of the town where the authorities have removed portions of the buildings in the old closes and have opened up small air-spaces, the sanitary condition of the inhabitants is by no means bad.

We next visited a block of new artisans' dwellings in Drygate. These so closely resembled the dwellings of a similar kind in London, which have been described in these columns, that it would be useless to detain our readers with what would be little more than a repetition of previous descriptions. We visited one house, consisting of two rooms and a scullery, the rent of which was £9 19*s.* 8*d.* per annum. By keeping the rent below £10, the occupier is saved a tax of 14*s.* 6*d.* Waterclosets, water-supply, and gas on the stairs are included in this rental. The rent paid is considerably lower than what would be paid for similar accommodation in London. Even in Peabody's buildings, which rest on a charitable basis, the rent for such accommodation would hardly be less than 4*s.* 6*d.* per week, or nearly £12 per annum; while in the dwellings of the Improved Industrial Dwellings Company probably a rental of £17 would be demanded. For one apartment and a scullery the rental in the Glasgow dwellings was £6 per annum. With these low rentals it is hardly to be wondered at that the dwellings have not been a financial success; for, while the returns are lower, the value of the areas upon which they are built is probably as high as in London.

Our next visit was to a model lodging-house which was built some years since by the municipal authorities, and which has paid the very handsome average dividend of 6 per cent. since its establishment. We were very pleased with the arrangements of this house, which seemed to us to approach very nearly to perfection. It affords accommodation for 228 male lodgers, who pay sums of 3*d.*, 4½*d.*, and 6*d.* per night. Sunday is counted as a *dies non,* and no rent is charged, so that the weekly payments are 1*s.* 6*d.*, 2*s.* 3*d.*, and 3*s.* All rent is paid in advance, and if a lodger persistently misconducts himself he is dismissed. The house is divided into day-rooms and sleeping apartments. The day-rooms consist of a common room for dining, reading, writing, and smoking, and a kitchen in which is a capital hot-plate, always heated, cooking utensils, and salt, the use of which is free to the lodgers. They are, of course, their own cooks, and at the time of our visit some of the inmates were boiling coffee, or cooking their evening meal. In the common room there are a series of lockers, keys for which may be obtained by paying a small deposit. In addition there is a lavatory and bath-room where, on payment of a penny, a hot bath may be obtained. The superintendent keeps a small shop, and is allowed to sell bread, butter, sugar, condiments, and other little things, for the benefit of the lodgers and himself. Those who pay the higher prices of 4½*d.* and 6*d.* a night, are provided with separate day-room, kitchen, and reading-room. The sleeping apartments are quite separate, and are kept locked except between the hours of 8 P.M. and 8 A.M. The sleeping-bunks are exactly like those on board a ship, only that the arrangement is much better, inasmuch as every lodger has a separate cabin. The beds are placed one above the other, in a double tier, but so arranged that the occupant of one has his cabin to the right, while the other has his cabin to the left. This arrangement, which permits of privacy without sacrifice of space, struck us as being in the highest degree ingenious. The divisions between the cabins are about six feet high, not running to the roof, and the general arrangement resembles that found in the public baths of London. The ventilation of the sleeping-berths is excellent, and the linen is changed once a fortnight. In short, the accommodation is fully equal in all essentials to that provided for second-class passengers in mail steamers, and much better than that of the officers and gentlemen who constitute the gun-room mess in Her Majesty's navy. These cabins contain a seat and clothes-pegs, and in some of them there is room for a clothes-box. Chamber utensils are, very wisely, not provided, but on every floor there is ample accommodation in the way of waterclosets and urinals. The division between the cabins and the framework of the beds is made in many cases of corrugated iron, and in this way the annoyance from vermin is minimised. The lodgers were stated to be a very tidy class of people, and many of them had lived in the house almost continuously from its erection. We should be glad to see the establishment of such houses in London, and we commend this Glasgow lodging-house to the attention of those who are interested in the welfare of the working classes. We much regretted that the time at our disposal did not permit of our visiting the cheap dining-rooms which are to be found in Glasgow, and by the establishment of which the original promulgator is said to have amassed a handsome fortune, although he provided ample dinners of meat and pudding, at once savoury, wholesome, and nutritious, for the modest sum of 4½*d.* Thus it will be seen that a single man living in a lodging-house and taking advantage of the cheap dining-rooms, might, if he chose, live in considerable comfort for a shilling a day, while those who lodged and boarded him would each get their profit. This seems startling, but is nevertheless a fact, and one is led to reflect how many of the hardships of the poor are due not so much to want as to mismanagement.

Having given samples of the condition of the poor of Glasgow under the old and new conditions, it remains for us to state briefly what has been done. The Glasgow Improvement Act was obtained in 1866, and the powers which it gave are very similar to the powers conferred by the Artisans' Dwelling Act of the past session. The trustees, who are members of the Town Council, have already purchased property to the amount of £1,400,000, which is being gradually demolished. In the matter of reconstruction the trustees limit themselves almost entirely to the formation of new streets (of which forty are projected) and open spaces. They then sell the surplus land and leave the building of houses almost entirely to private enterprise. The new houses, however, have to be built on a plan strictly in accordance with the police regulations. According to Baillie Morrison, the number of persons who have been displaced by the Glasgow improvements is 20,745, while house accommodation has been sanctioned or erected within the municipal boundaries for 162,625. No single case of hardship resulting from displacement has come under the notice of the authorities. The expense of these improvements to the ratepayers is estimated as less than the value of the ground thrown into new streets, including the expense of formation and causewaying the same.

There is good reason to believe, and indeed there are figures to show, that in the areas which have already been "improved" the death-rate from fever has greatly decreased, although perhaps it is too soon to draw conclusions from the health statistics. The effect upon crime, however, seems undoubted. Thus, in 1867, 10,899 crimes were reported to the police of Glasgow, while only 2975 persons were actually convicted. In 1873 there were only 7869 crimes reported to the police and 3526 convictions, notwithstanding that the city population had increased by nearly 58,000. Thus it appears that the demolition of the old "closes" and hiding-places has made the commission of crime more difficult and its detection more easy. It would perhaps be rash to draw any other conclusions from these figures.

The city of St. Mungo has chosen for its motto "Let Glasgow flourish"; and there can be little doubt that while its authorities show such enterprise and wisdom in providing water, air, lodging, and food for its inhabitants, it will continue to flourish in the future as it has deservedly done in the past.

Our thanks are due to Mr. A. B. M'Donald, C.E., for much attention shown to us during our visit to Glasgow.

THE WORK OF THE LOCAL GOVERNMENT BOARD.

THE Fourth Annual Report of the Local Government Board, which has just been issued, forms a bulky volume of 532 pages, and is devoted for the most part to the general duties performed by the Board during the year 1874, comprising the administration of the laws relating to Poor-law relief, of the Local Government and Sanitary Acts, and of the laws relating to Public Health. The second section of the Report, which more particularly concerns our readers, contains a record of the appointments made under the terms of the Public Health Act of 1872. From this, it appears that up to the close of last year a total of 727 medical officers of health had been appointed—360 by rural, 287 by urban, and 80 by combined authorities. These figures do not, however, show the whole number of appointments which have been made, those being excluded who have not yet availed themselves of the Parliamentary grant. There are now, however, very few instances in which either urban or rural authorities have failed to appoint a medical officer of health and an inspector of nuisances. The moiety of salaries of medical officers granted by the State amounted to £26,870, and that of the inspectors of nuisances to £23,187. The total amount of loans to sanitary authorities sanctioned since the passing of the Public Health Act, 1848, is more than three and a half millions. Twenty new urban districts have been formed during the past year, and the temporary orders constituting the 46 port sanitary authorities have been continued for a further period, it not being considered desirable at present to confirm them, "as the arrangements made have not been tested by any serious outbreak of disease." The order as to the port of Liverpool, where the circumstances were exceptional, was confirmed by Parliament during the last session. A total of forty-seven provincial orders issued by the Board were confirmed by Parliament, thirty-three private Bills conferring powers upon sanitary authorities have been deposited with the Board during the year, comprising, among other matters, the construction or extension of waterworks, gasworks, works of sewerage, and street improvements, the establishment of joint sewerage boards, &c. A detailed account is given of the provisions of the Sanitary Law Amendment Act, 1874, which need not be recapitulated here, as it is already superseded by the Consolidation Act of last session. A brief reference is also made to the operation of the Alkali Acts. The passing of the Sale of Food and Drugs Act likewise renders any remarks as to the Adulteration of Food Acts superfluous. The report itself concludes with a brief reference to the Metropolis Water Act, 1871, and to the special Reports of Mr. Simon, three of which have been already noticed in THE LANCET, and the fourth, on Cholera, has not yet been published.

The appendices include a very long Report by Mr. Nettleship on Ophthalmia in Metropolitan Pauper Schools, on the Boarding-out of Pauper Children, on the results of Workhouse School Education in Country Unions, and on Vaccination, all of which require a separate notice. From a return relating to paid officers it appears that during the past year there were in provincial unions ten forced resignations, and one dismissal in the case of medical officers of workhouses, and two forced resignations among those connected with the metropolitan establishments.

SCIENTIFIC GRANTS OF THE BRITISH MEDICAL ASSOCIATION.

The Scientific Grants Committee of the British Medical Association have this year received £300 for allotment amongst those who desire assistance in original researches in medical and the allied sciences. The following grants have already been made, and the Committee are prepared to allot the balance of £170. Applications, which must not be made later than the 29th December next, should be sent in at as early a date as possible to the General Secretary of the Association, 36, Great Queen-street, W.C.:—Drs. Braidswood and Vacher, on the Life History of Contagion, £25; Professor Rutherford, Researches on Biliary Secretion, £20; Dr. Crichton Browne, on the Antagonism of Medicines, £10; Dr. M'Kendrick and Professor Dewar, on the Physiological Action of Chinoline and Pyridine Compounds, £25; Dr. Mahomed, the Pathology of Albuminuria, £15; Dr. Munro, Cupar, Fife, an Antidote for Chloroform, £3; Dr. Caton, on the Electric Currents of the Brain, £15; Dr. Fothergill, the Effect of certain Agents on the Circulation, £10; Dr. Spencer Clifton, the Action of Uranium Salts on Diabetes, £10.

In addition to the scientific grants, Mr. Samuel Wood, of Shrewsbury, has generously presented £25, to be given for the best essay on Pyæmia, and there is also the Hastings prize medal of 20 guineas offered for the best paper on Diphtheria, its Pathology, Diagnosis, and Treatment.

Correspondence.

"Audi alteram partem."

EPSOM COLLEGE.

To the Editor of The Lancet.

Sir,—On Thursday last we visited for the first time Epsom College, and, as our presence there was wholly unexpected, our testimony on the general as well as special aspects of that establishment, seeing that we possess no connexion with it, may be relied on. We are, however, anxious that the public, as well as the Governor who writes to you in your last number, should know the truth respecting "the badness of the water and the food."

As staff officers in H.M. Indian army, we have had considerable experience in sanitary matters, as well as in questions of food. We can therefore unhesitatingly assure the Governor that these complaints from the Epsom boys are wholly groundless; purer water and more wholesome food cannot be obtained than we partook of in the College. All the drinking-water is filtered through a large Lipscombe.

As our visit was more than an ordinary one, we will, with your sanction, do more than reply to the letter of the Governor.

We arrived at the College during school hours, and, being accompanied by one of the officials, we entered the school and class-rooms, and were very much gratified at finding the atmosphere in all perfectly free from odour, due to the free ventilation and open windows. School work was not interrupted. We were very much impressed with the healthy aspect of the boys, numbering in all upwards of 200. Somewhat later in the day we saw football and other games in full force; these enjoyed in such an open district in part explained the healthful appearance of the boys.

The baths and gymnasium, too, we found in excellent order, as well also the racket-court; and a more charming cricket-ground we have never seen. Whilst inspecting these the dinner-bell sounded—the first, which is served at 1 p.m., to which we were invited. At the upper table several of the masters partake of luncheon, whilst at each table a master presides. The dinner consisted of beef (ribs and loins) and legs of mutton and plum pudding. The potatoes were small and rather waxy, and the beer somewhat sour. With these exceptions everything was of first-rate quality, and there was no stint to quantity. Our impression is that more animal food was eaten by most of the boys than is good for them.

After dinner we inspected the kitchens, and found everything clean and well ordered. Benham's stove was in full operation, the second dinner being cooked. The potatoes which were being steamed were of a better description than those of which we had partaken at the early dinner; indeed we were told that the stock was from a fresh contract.

Passing up-stairs we were shown the bedrooms, and more commodious and cleaner we had never seen.

In the infirmary—suites of rooms adjoining the pensioners', and as far as possible from the school,—we found five boys, four eating mutton-chops, and one enjoying a bason of beef-tea. These youths we were told had scarlet fever. Up a distant flight of stairs two other boys, who looked very well, were said to have had chicken-pox.

In conclusion, we cannot withhold our highest admiration and approval of this well-conducted and well-ordered public school.

Your obedient servants,
St. James's-square, W., Oct. 1875. Two Staff Officers.

To the Editor of The Lancet.

Sir,—I was glad to see the letter in The Lancet, signed "A Governor of the Medical Benevolent College," directing attention to the fact that several boys are now suffering from scarlet fever. It is quite true that this disease made its appearance at the College during last term, and as two or three boys were taken ill less than a fortnight after the vacation, I think we can come to no other conclusion than that necessary means were neglected to stamp out infection. My son is one of the victims, and has been seriously ill. An attack of scarlet fever must at all times be a source of great anxiety; in this case it is something more, to both parents and pupils. The pupil suffers the loss of the term, for which the parent has to pay. And as soon as the invalid is well enough, of course his parent must take him away. The question arises, Where to? I have other sons attending schools, one at Merchant Taylors'. A convalescent from scarlet fever must not come to my house. I shall have the additional expense and trouble of finding a home for my boy till Christmas.

I think two alterations are required at Epsom College. I am under the impression that the diet allowed is not equal to that of private establishments, and I think the boys should have more exercise out of the College grounds.

I am, Sir, your obedient servant,
James Collyer, L.R.C.P. Lond., &c.
Oak House, Enfield, Oct. 26th, 1875.

FATAL OUTBREAK OF TYPHOID FEVER IN UPPINGHAM SCHOOL.

To the Editor of The Lancet.

Sir,—Will you allow me to draw your attention to the fatal outbreak of typhoid fever in Uppingham School, and to certain facts connected therewith. A fortnight ago yesterday, a relative of mine showed me a letter he had just received from Uppingham, telling him that his eldest son was suffering from a mild form of low fever, which was epidemic there, and which had been said to be due to atmospheric influences, from the excessive wet succeeding the drought in the Midland Counties, and this was given on the authority of a London physician. The parents were told not to alarm themselves, but that if any bad symptoms did make their appearance, they would be informed. I, naturally, translated it as typhoid fever, in spite of the eminent authority, and was asked to go down at once. I left by the next train from Euston-square, and on my arrival at Uppingham called on the master of the lower school, where my little friend was. I found him very reticent, repeating the above opinion, and adding more explicitly that it was a malarious sort of fever. I was introduced to the head master, who gave me permission to visit the boy. He had been removed to the Sanatorium, a small house a little distance off. I found him in a small room with another boy. He was in the second week of typhoid fever, with a temperature of over 105° F. at 4 P.M. I had asked to have the ordinary medical attendant to accompany me, but heard he was out visiting; and I had to return to town that night. I did, however, see him before my return, and asked him why he allowed such rubbish to be written, but he disclaimed all responsibility in the matter. I came back to London, sent down the boy's mother, and I am glad to say he is going on favourably; but there have been several deaths, and it was not till case after case occurred, and perhaps owing to the ill-health of the master himself, that the lower school was at last dismissed. The upper school is still going on. I am told that at the outbreak of the fever the head master assembled the boys and told them that there was no cause for alarm, and that boys who wrote home and got themselves removed would be considered cowards and deserters.

I complain of the school authorities for not telling parents when the fever first broke out, for not telling them even when the children first showed signs of disease, for studiously shutting their eyes to the real nature of the disease, for doing nothing to improve their sanitary arrangements, and for keeping boys in places which were mere pesthouses, as I hear they have been condemned by the medical officer of health.

I enclose my card.

I am, Sir, yours obediently,

October 26th, 1875. MEDICUS.

Obituary.

DUCHENNE (DE BOULOGNE).

(From our Paris Correspondent.)

DUCHENNE (DE BOULOGNE), whose death you noticed in your last issue, was born in 1806, and consequently died at the age of about seventy. After having graduated he began practice in Boulogne-sur-Mer, his native place, but soon found this field too narrow for his restless and inventive mind, and for the experiments which he was already conducting, and so he left for Paris, where, during thirty-three years, he led a life of incessant scientific labour.

In 1847 he presented his first memoir to the Academy of Sciences, and up to within a month previous to his death he continued to publish, either in the Transactions of the two Academies or in the *Archives de Médecine*, the results of his experiments and observations. Amongst the most important of his researches are those on the muscular system; the isolated action and synergy of muscles. His studies on the muscles of the face, and on their office in the mechanism and expression of the human visage, are remarkable, and are familiar in France to artists as well as to medical men. But it was especially in his researches on the nervous centres, on the various forms of paralysis, on congenital or developed deformities, that his great qualities of observation manifested themselves. His name will ever be coupled with the history of progressive muscular atrophy, locomotor ataxy (to which Trousseau proposed that the name of "Duchenne's disease" should be given), glosso-labio-laryngeal paralysis, and, generally, the microscopical anatomy and pathology of the nervous system. His right of priority to the description of certain forms of nervous diseases has been disputed, and with justice; as, for instance, in the case of locomotor ataxy, where Romberg certainly had the precedence. But at the same time, it may be stated that all Duchenne's descriptions and discoveries were original, and the result of his own labours. The writings of Romberg and other foreign *savants* were at the time unknown in France, not only to Duchenne, but even to the best men having a knowledge of foreign languages.

A great many of his researches were carried on by means of electricity, and in turn they threw light on the uses of this powerful agent, and to Duchenne will redound the honour of having methodically applied electricity to physiological and pathological investigations, and of having scientifically used it for the treatment of disease.

His features were familiar to all who visited habitually the wards of the Paris hospitals. Every morning Duchenne was to be seen in one or other of the hospitals, studying cases, examining specimens, drawing his photographs of microscopical appearances, in which he was extraordinarily skilful. For a long time Duchenne's invariable presence in the wards, his incessant moving about, his ardent interrogation of patients, caused him to be looked upon with a somewhat suspicious and anxious eye by many of the hospital physicians. But his consummate experience of disease, his wonderful keenness and ability in making out a diagnosis in cases of paralysis, the sincerity and earnestness of his manner, the honesty of his proceedings, the authority which he gained by the publication of his original researches, the services which he rendered daily in the wards of the hospitals, brought him the esteem and appreciation of all, and made him a welcome guest everywhere.

He was no orator, and could never have given a lecture on any subject, but he was wonderful at the patient's bedside. Dexterous and nimble in handling his patient, sharp and sensible in his questioning, most striking in the way he got up his data, made out the disease, and gave practical demonstrations of the surety of his diagnosis. Amongst the various instances of this last quality which were related in the hospitals about Duchenne was the fact of his taking patients accounted to be paraplegic out of their beds, and of causing a man to get on their shoulders without their giving way in the slightest.

His patience was extraordinary. He would pursue the investigation of a case for years, never losing sight of it, and following the patient in his peregrinations from hospital to hospital and from house to house, often affording help and means of subsistence.

It may be said of Duchenne that under many adverse circumstances—the suspicions of *confrères*, the disputes as to priority, the difficulty of finding a field of study and experiment, as he had no hospital appointment—his reputation has come out clear and bright, as an honest, hard-working, acute, and ingenious observer, an original discoverer, a skilful professional man, and a kind-hearted, benevolent gentleman.

His various writings have been gathered, and are included in the following important works:—"Traité de l'Electrisation Localisée" (third edition); "Le Mécanisme de la Physionomie Humaine"; "La Physiologie des Mouvements Démontrée à l'aide de l'Expérimentation Electrique"; "Anatomie du Système Nerveux"; "Orthopédie Physiologique."

ROYAL COLLEGE OF PHYSICIANS.

AT a meeting of the College of Physicians, on Thursday afternoon, the Fellows were informed that the Gulstonian lectures for the year 1876 would be delivered by Dr. A. B. Shepherd, the Lumleian by Dr. Habershon, and the Croonian by Dr. Dickinson. After the formal admission of the new fellows recently made, the College elected as members after examination, Dr. D. T. Leech and Dr. G. C. Herman, and Dr. R. Hassall under a special bye-law applicable to extra-licentiates. A communication was read from the Foreign Office containing an account of the plague in Mesopotamia, from Surgeon-Major Colville. The epidemic followed the inundation of the country from the overflowing of the Euphrates, and the disease was probably of a dysenteric nature. A letter was read from Mr. Iliff, of Epsom, offering to present the College with a veritable pair of "Perkins' Patent Metallic Tractors," so much in vogue many years since, and used by "quacks." The thanks of the College were ordered to be offered to Mr. Iliff for his present, which was of course accepted. A second gift of certain seeds used in Borneo for the treatment of fevers was received from a gentleman in that place, with a view to their examination by the College. The donor expressed his wish to send supplies of other medicinal substances in use in Borneo. The Registrar was desired to ask for supplies of these substances. A letter was read from the President of the College of Surgeons, in which it was proposed to hold a conference of the several representatives of the bodies co-operating in the promotion of a Conjoint Scheme, and asking if the College would be willing to send two representatives. Probably, as we understand, among the questions to be discussed would be the admission of the Society of Apothecaries to participate in the Conjoint Scheme, and the advisability of modifying in some particular the scheme as at present constituted. The College accepted the invitation, and deputed the President and Registrar to represent the College in the matter.

Medical News.

Royal College of Surgeons of England. — At the last meeting of the Council the following Member was elected a Fellow of the College :—

Bennett, Robert Blacker, Cleckheaton, Yorks.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 21st :—

Blake, George Farncombe, Old-square, Birmingham.
Parker, Alfred Charles, Worthington, Leicestershire.
Thayer, L. Orton, Mildmay-park.
Tyrrell, Frederick, Harlington, Middlesex.

The following gentlemen passed the Primary Professional Examination on the same day :—

Cordley Bradford, Queen's College, Birmingham ; Arthur Randall Davis and John Wallis Barron Mason, Middlesex Hospital ; James Warner, London Hospital.

Dublin Hospital Sunday this year will take place on the 14th proximo.

Dr. Joseph Wickham, of Penrith, has been placed on the Commission of the Peace for the county of Cumberland.

At the last meeting of the Council of the Irish Medical Association, Dr. Nolan, of Gort, Fellow of the Royal College of Surgeons, was unanimously elected Vice-President of the Association for Connaught.

Dr. Frankland, F.R.S., reports that the proportion of organic impurity in all the river waters supplied to the Metropolis during the month of September was much less than that observed in August.

At the last meeting of the Guild of St. Luke, held at 68, Mortimer-street, on the 20th inst., Mr. Boyd B. Joll was elected Secretary, vice J. Thompson Hayne. For information respecting the Guild address to the present Secretary, at University College, London.

The Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes met at 13, Delahay-street, on Saturday. There were present—Viscount Cardwell, Lord Winmarleigh, Mr. W. E. Forster, Sir John B. Karslake, Mr. T. H. Huxley, Mr. J. Eric Erichsen, Mr. R. H. Hutton, and the Secretary, Mr. N. Baker.

Medical Appointments.

Anderson, J. W., M.D., F.F.P. & S. Glas., has been appointed an Examining Medical Officer to the Hospital for Incurables at Broomhill, Kirkintilloch.

Bailey, J. B., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the sixth District of the Bath Union; Officer of Health to the Sanitary Authority; Surgeon to the Bluecoat School, the Foresters' and Barrett's Clubs.

Barton, J. K., M.D., F.R.C.S.I., has been appointed Visiting Surgeon to the Convalescent Home, Stillorgan, vice Barker, appointed Assistant-Surgeon to University College Hospital, London.

Bellmont, J. T., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Dalkeith, Edinburghshire, vice Jefferiss, deceased.

Caldwell, S., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Crossbane Dispensary District of the Bailieborough Union, Co. Cavan, vice Atkin, resigned.

Clayton, R., L.R.C.P.L., M.R.C.S.E., Medical Officer for the Accrington District of the Haslingden Union, has been reappointed also Public Vaccinator.

Durrant, C. M., M.D., F.R.C.P.L., has been appointed Visiting Physician to Lunatic Asylums in the Borough of Ipswich.

Foster, B. W., M.D., F.R.C.P.L., has been appointed Consulting Physician to the Birmingham and Midland Counties Ear and Throat Infirmary, vice Fleming, deceased.

Fussell, E. F., M.B., M.R.C.P.L., has been appointed a Physician to the Sussex County Hospital, Brighton, vice Moon, resigned.

Greaves. E., L.R.C.P.Ed., M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for the Weldon District of the Oundle Union.

Harrison, J. A., M.D., has been appointed Medical Officer of Health for the Haslingden Rural Sanitary District for six months: £100 per ann.

Hollis, W. A., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to the Sussex County Hospital, Brighton, vice Fussell.

Hyatt, J. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the 1st Division of No. 4 District of the Shepton-Mallet Union, vice Macdonald, resigned : £18 per annum and fees.

Ireland, A. J., M.D., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ardrahan Dispensary District of the Gort Union, Co. Galway, vice Nally, appointed to the Kinvarra Dispensary District.

Jones, M., M.R.C.S.E., has been appointed Medical Officer to the Westmoreland Society's Schools, Norwood-lane, vice Mercer, deceased.

Kinsey, R. H., M.R.C.S.E., has been appointed Medical Officer to the County Prison, Bedford, vice Couchman, resigned : £130 per annum.

Morriss, S., L.R.C.S.I., L.M., has been appointed House-Surgeon to the Stanley Hospital, Liverpool, vice Bark, resigned.

Parkinson, C. H. W., M.R.C.S.E., has been appointed Medical Officer to the Wimborne Police, vice C. B. Parkinson, M.R.C.S.E., deceased.

Power, J., L.R.C.P.Ed., L.R.C.S.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Borrisoleigh Dispensary District of the Thurles Union, Co. Tipperary, vice Quinlan, resigned.

Pritchard, R. C., L.F.P. & S. Glas., L.M., has been appointed Medical Officer of Health for the Wigton Urban Sanitary District: £40 for one year.

Rossiter, D., M.R.C.S.E., Medical Officer for the Leverton District of the East Retford Union, has been reappointed also Public Vaccinator.

Smith, P. B., M.B., C.M., has been appointed Chloroformist to the Royal Infirmary, Aberdeen.

Somerville, T. A., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Wilmslow District of the Altrincham Union, Cheshire, vice Bower, deceased.

Stewart, D. P., M.R.C.S.E., has been appointed a Visiting Medical Officer to the Hospital for Incurables at Broomhill, Kirkintilloch.

Sutcliff, E., M.D., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Peters-Marland District of the Torrington Union, vice Pattinson, resigned.

Sykes, W., M.R.C.S.E., L.R.C.P.Ed., has been appointed House-Surgeon to the Doncaster General Infirmary and Dispensary, vice Wallis, resigned.

Wallace, A., M.B., C.M., has been appointed an Examining Medical Officer to the Hospital for Incurables at Broomhill, Kirkintilloch.

Warren, A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 8, or Wooburn District of the Wycombe Union, Bucks, vice Hayden, resigned.

Wells, E., M.D., F.R.C.P.L., has been appointed Visitor of Houses licensed for the reception of Lunatics in the County of Berks.

White, R., M.B., L.R.C.S.I., has been appointed a Medical Officer for the Carrignavar Dispensary District of the Cork Union.

Whitelaw, W., M.D., F.F.P. & S. Glas., has been appointed a Visiting Medical Officer to the Hospital for Incurables at Broomhill, Kirkintilloch.

Births, Marriages, and Deaths.

BIRTHS.

Brend.—On the 11th inst., at Argyll-road, Kensington, the wife of Wm. Brend, M.R.C.S.E., of a daughter.

Butler.—On the 13th inst., at Ormonde House, Guildford, the wife of T. M. Butler, M.R.C.S.E., of a son.

Clarke.—On the 17th inst., at Mansfield-street, Cavendish-square, the wife of Wm. Fairlie Clarke, F.R.C.S.E., of a son.

Cribb.—On the 21st inst., at Bishop-Stortford, the wife of Henry Cribb, L.R.C.P.L., of a daughter.

Hayward.—On the 23rd inst., at Hillside, Ealing, the wife of H. Howard Hayward, M.R.C.S.E., of a daughter.

Rickards.—On the 21st inst., at Cavendish-place, the wife of Walter Rickards, M.D., of a son.

Winkfield.—On the 15th inst., at Forest Lodge, Shirley, the wife of W. B. Winkfield, L.R.C.P.Ed., of a daughter.

MARRIAGES.

Hamilton—Staveley.—On the 20th inst., at the Reformed Presbyterian Church, Ballymoney, Alex. Macleod Staveley Hamilton, M.D., to Jane Adams, daughter of the Rev. A. M'L. Staveley.

King—Wickham.—On the 19th inst., at St. Mark's, Portobello, Thomas Radford King, M.D., to Agnes Jane, daughter of the late Benjamin Wickham, Esq.

Owen—Greenwell.—On the 20th inst., at St. George's Church, Poynton, Cheshire, S. Holgate Owen, M.D. (eldest son of Henry Owen, Esq., of Manchester), to Catharine Jane, eldest daughter of E. C. Greenwell, Esq., of Poynton.

DEATHS.

Atkins.—On the 19th inst., at Hadleigh, Suffolk, Alfred W. G. Atkins, L.R.C.P.Ed.

Baxter.—On the 16th inst., at Emsworth, Wm. R. Baxter, L.K.Q.C.P.I.

Crisp.—On the 3rd inst., Henry Crisp, M.B., Staff Surgeon-Major Army, of St. Martin's Chambers, Charing-cross, aged 50.

Dwyer.—On the 13th inst., at Tuam, James Dwyer, M.R.C.S.E., aged 58.

Miller.—On the 19th inst., at Denmark-hill, Benj. Miller, M.R.C.S.E., aged 51.

Plant.—On the 25th ult., at Plantation, Monkstown, Co. Dublin, Wm Plant, M.D., F.R.C.S.I., J.P., in his 85th year.

Wrangham.—On the 21st inst., at Wragby, Lincolnshire, J. D. Wrangham, M.D., aged 59.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Oct. 28th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Oct. 22	29·58	S.E.	52	53	...	57	48	0·30	Cloudy
„ 23	29·43	S.E.	49	50	...	53	47	0·10	Overcast
„ 24	30·19	S.E.	47	52	...	54	46	0·29	Overcast
„ 25	30·23	S.E.	41	43	...	55	40	...	Foggy
„ 26	30·13	S.E.	42	45	...	53	41	...	Overcast
„ 27	29·79	E.	41	43	...	47	41	0·16	Raining
„ 28	29·85	E.	45	47	...	...	42	0·05	Overcast

Notes, Short Comments, and Answers to Correspondents.

Sale of a Hospital under Protest.

At the recent sale of the Vernon Hill Estate, in Hampshire, the property of the late Sir Arthur Helps, the large farms and clay-works were bought in; but some of the other lots realised good prices. Among the lots sold was a building known as the Royal Albert Infirmary, which was bought by a resident at Botley for £1000. This hospital was erected at a cost of £3000, raised by public subscription, on a site given by Sir Arthur. When the building was put up for sale, a protest was handed to the auctioneer on behalf of the Infirmary Committee, and read; but, under the advice of the solicitor for the sale, the auctioneer proceeded to dispose of the building with the above-mentioned result. The first stone of this building, which was intended for an infirmary, although it was never used for that purpose, was laid by Prince Leopold in 1865, in the presence of other members of the Royal Family. The sale of this charitable institution has excited considerable local interest, as there was a strong wish that the building might be obtained for the purpose of providing an addition to the Grammar School of Bishops Waltham. If, as stated above, the site was presented by Sir Arthur Helps, and the building was erected by public subscription, it is not easy to comprehend how the ownership of the land and of the infirmary should have reverted to the representatives of Sir Arthur Helps. Whatever cause militated against the building being used as a hospital, the right of the original owner of the land to step in and reclaim it, together with the buildings erected thereon, appears to require further explanation.

Mr. C. Clapham.—It is hardly necessary to publish the letter.

Sea-sickness.

To the Editor of The Lancet.

Sir,—As the above subject is occupying attention, I venture to send you the result of an experiment I tried upon myself when I last crossed the Channel. The weather was boisterous and the sea very rough. Being a bad sailor I expected to have a miserable passage. Directly the steamer left the harbour we shipped a heavy sea, which completely deluged the deck, and the vessel pitched in such a manner that in a very short time I think I was the only passenger, or almost the only one on board, who was not dreadfully ill. It occurred to my mind that if I could succeed in fixing the diaphragm and muscles of respiration for regular periods, so as to prevent the sudden irregularities that take place in their action, more particularly as the vessel falls into the trough of the sea, I might modify, reduce, or prevent the discomforts of sea-sickness. How to accomplish this was at first a puzzle. I suddenly bethought me of *music*, and I commenced to hum a tune, more mentally than audibly, with regular and rather prolonged cadences. To my intense gratification the experiment answered admirably, and so long as I continued it no nausea occurred. If I ceased only for a few moments, the sensation (which can only be sufficiently appreciated by those who suffer) immediately presented itself. The result, however, was that for the first time in my life I was landed at Folkestone, after a very rough passage, feeling none the worse for my voyage. Now, I do not make this suggestion with the idea that passengers will be induced to form themselves into a temporary choral society, or that it could be carried out during a long voyage; but if the idea be a sound one, some relief might probably be obtained by a tight flannel bandage firmly bound round the waist, after the fashion of a rib-bandage in case of fractured ribs. If sea-sickness is the result of *irregular* pressure of blood on the brain, my plan will at least control it in a measure; for we know that the blood-supply to the brain is influenced by respiration. If it arises from a kindred cause to that which produces nausea when a person rides in a carriage with his back to the horses, I am at a loss for an explanation. In the latter case, however, it must not be forgotten that the retina is performing its function in *reversed order*, and that every object is receding instead of advancing. I do not know whether the same distress is felt in absolute darkness, or in a perfectly closed conveyance, or by people deprived of sight.

I remain, Sir, yours &c.,

Hampstead, Oct. 18th, 1875. H. Cooper Rose, M.D.

Quackery in Colorado.

We have received a letter from Denver, a thriving town at the base of the Rocky Mountains, enclosing a quack advertisement from the local paper, and asking our opinion of the same. There is no such person in London as Sir William Paget. The advertisement is an impudent lie, and the concoctor ought to be punished by the authorities of Denver.

Questions of Taste.

Probably no one who has not been personally concerned in submitting a question of taste to some corporate body or bench of magistrates can form any adequate idea of the difficulties to be encountered. The other day we were called upon to sympathise with the endeavours of a public analyst to convince a Common Councilman that a particular water-supply was poisonous, in face of the Councillor's own perception that the fluid was "clear, sparkling, cool, and refreshing." Our commiseration is now requested for a cheesemonger of Bilston, who has been convicted of exposing for sale cheese "unfit for human consumption," simply because the assembled justices did not happen to appreciate some fragments of the "ripe" delicacy, though handed to their worships in the most appropriate fashion on suitable pieces of bread. We cannot help thinking there was some mismanagement in the conduct of this case. The presentation of the cheese was all very well; but it does not appear to have been explained that, instead of being simply "decomposed"—which seems to have been curiously admitted,—the cheese in question had been submitted by nature to what may be described as a sort of "antiseptic treatment," and that, in point of fact, the mould was that pretty fungus, *Aspergillus glaucus*, or some cryptogamic growth, perfectly innocuous, and, to some palates, nice. This was a great omission; and seeing that the magistrates of Bilston were not properly instructed by the scientific witnesses, it is difficult to condemn them for acting on their own judgments. The taste which prefers fungous cheese, like that which affects a state of tolerably advanced decomposition as the condition of game, is wholly acquired. Except under compulsion, a simple and natural perception would probably choose food in its original purity. The taste that appreciates clear and apparently fresh water, oblivious of the causes from which these qualities may sometimes chance to spring, is simply ignorant, and may be excused—except for its stupidity.

MacGregor.—Parkes; Wilson. Letts's Diaries contain such information.

"Noblesse Oblige."

To the Editor of The Lancet.

Sir,—I desire to draw your attention to a statement of the treatment I met with recently from the authorities of the North Cambs Hospital.

On the 2nd inst. I was summoned by telegram to my father, about twenty miles from here, and who had practised for half a century a few miles from Wisbeach. I found him suffering acutely with fractured humerus and injury to the elbow. I endeavoured to procure an ordinary angular splint from the surgeon who had visited him. He, however, had not one, but suggested that I might obtain the loan of one from the North Cambs Hospital. I introduced myself to the house-surgeon (an elderly person, who had previously been in private practice), and preferred my request, which, to my surprise, he refused, alleging as an excuse "that no instrument or appliance was allowed to be taken out of the hospital." I did the best I could for the patient, extemporising a millboard splint, and, having to return to my own practice the same day, I was compelled to undertake the journey some days later, provided with the necessary appliance.

I wrote to the Chairman of the Hospital Committee, suggesting that if such a rule were in existence, I thought it would be desirable to modify it to meet future cases, and at the same time expressing my surprise at the unprofessional treatment I had met with. The rev. chairman replied in a most uncourteous spirit, that he "had laid the matter before the Committee," that they considered the house-surgeon had "acted perfectly in accordance with the rule," and that they "did not think it advisable to alter the rule."

To refuse aid to a medical *confrère* on an emergency like the above, and particularly to alleviate the sufferings of another medical brother, seems to me to call for severe animadversion. At no other institution in the kingdom, I believe, would similar behaviour be manifested. In this neighbourhood, from the Norfolk and Norwich Hospital aid in the shape either of instruments or surgical appliances is always most readily granted, and I doubt not from every other like institution. I trust that by your publicly drawing attention to the case, the authorities of the North Cambs Hospital may be induced to act in a similar spirit.

I remain, Sir, yours truly,

Beccles, October, 1875. R. I. Metcalfe.

P.S.—Since writing the above, a friend writes me:—"At football at Richmond the other day, B., one of the players, had his leg broken. N. sent off his dog-cart to the infirmary for splints &c., when *everything that could by any possibility be required was sent at once without demur.*"

*** We quite agree with our correspondent.—Ed. L.

The "Boarding-out" System.

The farmers of Cheshire appear to be wise in their generation. They have induced the Board of Guardians of Nantwich to hand over to them the pauper lads of the union, with a subsidy of 3*s.* 10*d.* a week per head. This method of recruiting the agricultural labour market, impoverished somewhat by the exertions of Mr. Arch and his colleagues, will, it is to be hoped, if perpetuated, be carried out with a view to the future interests of the lads as well as the pecuniary profit of the farmers. The "farming" of boys is rather a novel enterprise in England; but it need not, so far as we can see, be attended with anything but good to all concerned.

Medical Registration.

To the Editor of The Lancet.

Sir,—In 1869 a practitioner registers two legal qualifications; in 1872 he registers an additional qualification, on each occasion paying the usual fee. In 1875 he sends notice to the Office of change of residence, and then is informed that his additional qualification has never been entered in the printed Register. Can he sue the Registrar or the Council for breach of contract? What does the Council do with the fees? What practical benefit has resulted, or is likely to result, to the profession or the public from the scheme?

Yours &c.,

October, 1875. R. Rendle.

THE EUCALYPTUS GLOBULUS.

IT will be remembered that the cultivation of this tree was very strongly urged a short time since as a simple and safe way of robbing malarious soils of their injurious properties, and some practical illustrations were also adduced, in order to show what this tree was capable of effecting in this respect. Allowing for exaggeration, it is still, we think, very probable that the growth of these trees in damp and malarious localities would greatly tend to increase the salubrity of the soil. In suitable places the Eucalyptus globulus grows vigorously enough. It was introduced into the Cape by Sir Lowry Cole in 1828, and since that time it has been extensively cultivated and spread throughout the colony. The young plant is said to be tender and incapable of resisting a lower temperature than 27° F., and it is alleged that most of the trees planted by the Roman municipality perished from this cause. The tree does not branch out so much in a lateral as in a vertical direction, and the growth of the leaves is also similar, the edge, instead of the broad of the leaf, being presented. It is of very quick growth, and the roots are long and horizontal in direction. It will be obvious that these characters are very favourable to rapid absorption of water from the soil, and to the ventilation of the ground by the free admission of air through the leaves and branches.

W. W. F. is thanked for his courteous communication.

TYPHOID FEVER FROM AN UNEXPECTED SOURCE.

To the Editor of THE LANCET.

SIR,—All evidence bearing upon the possible origin of the poison of typhoid fever, or of any fresh source through which it might be disseminated, should, I think, be made public, so that it may receive confirmation, or be rejected by further evidence. The possible source to which I wish to draw attention was impressed recently upon my mind by the singular coincidence of two persons being attacked at the same time, who, living apart, yet attributed the cause to the same source. It will be seen also that both were affected at the same time, were attacked in about a week afterwards, and that they were the only cases which occurred in a considerable population, and within a radius of several miles.

A., a groom, called to see B., a coachman, at a stable (detached), half a mile distant from his own home. While they were sitting in the coachman's room above the stable, both became suddenly aware of a fearful stench in the room, sufficiently bad to compel them to get up, to rush to and to open the windows. The stench, it was afterwards seen, proceeded from an evacuation by a large Newfoundland dog, who was then ill with what was called by the veterinary surgeon "ordinary distemper." In about a week from this occurrence the men in their respective homes, and without having again seen each other, were simultaneously attacked with symptoms of typhoid fever, and in due course the rose spots appeared, and both passed through a severe form of the disease, the coachman at last succumbing to it. The dog also died, after having suffered from dysenteric diarrhœa, congestion of the lungs, liver, &c.

The post-mortem examination which was made of the dog revealed, according to the evidence of the veterinary surgeon, disease of the bowels and congestion of the lungs and liver, and these, he says, are the usual appearances in dogs who die of "distemper," and which almost every dog is supposed to have in some form or other before he is a year old.

It has been impossible to trace any other source than that mentioned for the attacks, and as no other cases have occurred since (several weeks having now intervened), and none previously for several years in the immediate neighbourhood, it seems reasonable to look upon the cause cited as that which produced the disease. Moreover, the men seemed continually impressed with the idea that the stench experienced had to do with their illness. Living also at least half a mile apart, and under different conditions, they had nothing in common. The coachman slept when attacked in his employer's house (not in the stable), as the members of the family were from home, and the groom at his own place.

If the disease known by the vague name "distemper" in the dog is capable at any time of so affecting a human being that he suffers afterwards from typhoid fever, it seems only reasonable to suppose that it must be a disease very nearly allied to, if not identical with, typhoid fever. The symptoms are alike, and both are diseases which chiefly affect the young. This much granted, and we have almost always ready at hand a most abundant source for the production and dissemination of typhoid poison, and a means whereby the homes of rich and poor, particularly of the former, may be invaded at any time. Again, in rural districts, where the water for drinking purposes is obtained from open wells, how easy it would be for one affected animal to contaminate the whole, and hence to cause a local epidemic of the fever.

I am, Sir, yours faithfully,

October, 1875. H. H.

Mr. E. D. Harmar, (Aboyne, Aberdeenshire.)—Moore's Manual of Family Medicine for India, with Medical Cabinet (Churchill, New Burlington-street) will meet our correspondent's requirements.

THE letter of *Dr. Dowse* shall not be forgotten.

Inquirer had better communicate with the gentleman who delivered the address.

Dr. Geo. Buchanan's address at Glasgow shall be published next week.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—Some years ago I read in the library of the Athenæum Club, in a book or periodical, an account of some experiments conducted for the purpose of ascertaining whether it were possible to produce hydrophobia in dogs by artificial means. I have since made repeated and wearisome attempts to find the passage, which I remember related to experiments upon *three* dogs, who were treated in some respects variously. Can you or any of your readers help me? I should feel greatly obliged if any gentleman would send the information direct to the address of "J. C., Athenæum Club, Pall-mall."

Your obedient servant,

Oct. 22nd, 1875. J. C.

INGUINAL HERNIA: NOVEL MODE OF REDUCTION.

THE *Lyon Médical* of October 17th, 1875, quotes an article of the *New York Medical Record* (July 24th, 1875) of Dr. Hadden. To reduce an inguinal hernia in a woman of forty-five, who refused kelotomy, the author narcotised the patient with chloroform, introduced his finger into the rectum, and gradually passed his hand as far as the colon. The hand was somewhat obstructed when it reached the promontory of the sacrum; but this obstacle being overcome, it travelled higher up. Dr. Hadden states that he then succeeded in feeling the congested intestine, and used gentle traction with the hand within the abdomen, whilst with the other he performed gentle taxis externally. The reduction was thus effected, and though the patient complained of severe pain in the anal orifice and the colon, she made a good recovery.

Mr. J. T. Wright, (Liverpool.)—It shall appear in due time.

JEREMY BENTHAM.

To the Editor of THE LANCET.

SIR,—The following letter concerning the body of Jeremy Bentham which I received from the late Dr. Southwood Smith in 1857, may possibly be worthy of a place in THE LANCET. It supplements the information supplied to you by my friend Dr. Lloyd, of St. Leonard's, in your issue of Oct. 16th, and in one respect corrects that of your correspondent, "J. T.," in the previous number.

"The Pines, Weybridge, June 14th, 1857.

"MY DEAR SIR,—Jeremy Bentham left by will his body to me for dissection. I was also to deliver a public lecture over his body to medical students and the public generally. The latter was done at the Webb-street School, Brougham, James Mill, Grote, and many other disciples of Bentham being present. After the usual anatomical demonstrations on the body, a skeleton was made of the bones. I endeavoured to preserve the head untouched, merely drawing away the fluids by placing it under an air-pump over sulphuric acid. By this means the head was rendered as hard as the skulls of the New Zealanders, but all expression was gone of course. Seeing this would not do for exhibition, I had a model made in wax by a distinguished French artist, taken from David's bust, Pickersgill's picture, and my own ring. The artist succeeded in producing one of the most admirable likenesses ever seen. I then had the skeleton stuffed out to fit Bentham's own clothes, and this wax likeness fitted to the trunk. This figure was placed seated on the chair in which he usually sat, and one hand holding the walking-stick which was his constant companion when he went out, called by him 'Dapple.' The whole was enclosed in a mahogany case, with folding glass doors. When I removed from Finsbury-square I had no room large enough to hold the case. I therefore gave it to University College, where it now is. Anyone may see it who inquires for it; but no publicity is given to the fact that Bentham reposes there in some back room. The authorities seem to be afraid or ashamed to own their possession.

"I am very faithfully yours,

"Dr. Munk." "SOUTHWOOD SMITH.

The history of the wax model and Dr. Southwood Smith's emphatic testimony to its likeness to the original are interesting points in the above letter.

I am, Sir, yours faithfully,

Finsbury-square, Oct. 23rd, 1875. WILLIAM MUNK, M.D., F.S.A.

A SMALL MOTIVE.

To what base uses may we come after death, and by what small motives are we influenced during life. The last mentioned circumstance is occasionally advantageous. Not even sprinkling the roads with salt in winter will induce ladies to wear shorter dresses. They only complain of the injury done to their skirts by the saline, wholly forgetful of the mischief wrought to apparel by habitually sweeping the streets of all description of dirt and abomination. Now, however, it is thought there will be a reform, and for this most wonderful of reasons. A boot has, it is said, been devised, curiously fashioned of velvet, and altogether so delectable that it must needs be displayed. Anything that will induce women to abstain from trailling their robes in the streets, and incommoding the other part of creation, if not themselves, must be welcomed. Meanwhile, it would be more satisfactory if reason swayed where all but fashion fails.

Mr. Charles Hunter is thanked. We regret, however, that want of space will not permit us to publish the communication.

Dr. James Adams.—Thanks.

Mr. W. Berry, (Wigan.)—The paper came safely to hand, and shall receive consideration.

DEAD BODIES.

AT a recent meeting of the Marylebone Board of Guardians the Workhouse Visiting Committee reported as follows:—

"We find, from a return presented by the master, that during the year ended August last 432 dead bodies were removed from various parts of the parish to the infirmary deadhouse, the removal in most cases being effected by inmates of the workhouse sent out for that purpose; that the Committee consider it very undesirable for inmates to be so employed, and think it is most dangerous for so large a number of bodies, in various stages of decomposition, to be brought through the yards and buildings of the workhouse, and deposited in a deadhouse situate in immediate contiguity to the infirmary wards. That of the 432 bodies above named, the Committee find that 169 were removed at the request of the coroner's officers for the purpose of inquests being held thereon (in most cases necessitating the performance, also in the deadhouse, of post-mortem examinations), and the Committee recommended that the coroner be informed that such practice must be discontinued. That 23 of the bodies were brought by the police and 240 by order of the relieving officers for the purpose of burial, and the Committee recommended that a communication be made to the vestry, asking that the mortuary, situate in Paddington-street, may be used for the reception of these bodies. The Committee further recommend that the attention of the Out-Relief Committee be called to the apparently large number of burial orders given by the relieving officers."

PHYSICAL EDUCATION.

THE *Local Government Chronicle* states that the Croydon guardians, who have just made their annual inspection of the North Surrey District School at Anerley, report very favourably of the arrangements of the school. A swimming bath is one of the new features of the establishment, and, on the occasion of the visit of the guardians, a group of boys were made to illustrate a boat accident, and were suddenly and simultaneously swept into the water, accoutred in their ordinary clothing and heavy boots. Despite these drawbacks, they showed that they could quickly recover themselves, and that if they had to contend with a real instead of a simulated accident there would have been no fatality. Next a "dummy" of about half a hundred weight was brought in, and was thrown to the bottom of the bath to represent a drowning person. A group of boys dived after it in succession, and each managed to bring it out of the water with considerable dexterity. Although the swimming bath has not long been an institution of the place, about 150 boys have been taught to swim, and it is also contemplated to teach the girls.

Mr. Thos. Moore.—It shall be published.

"CHEAP DOCTORS."

To the Editor of THE LANCET.

SIR,—I am sure that you would not willingly asperse the character of any medical man, nor wilfully misrepresent his actions, and it is this feeling that prompts me to seek at your hands redress for an injury you have unintentionally committed. I refer to a paragraph amongst the annotations of THE LANCET of Sept. 25th, which, owing to my not being a subscriber to your paper, I only became acquainted with a few days back by a medical friend writing and telling me of it.

Your informant must have either wilfully misrepresented the facts or withheld part of them from you, and it is the opinion of several medical men in the neighbourhood that whoever prompted the article in question must have done so maliciously. A brief summary of the facts as they are will, I feel sure, lead you to alter your opinion.

To begin with. I quite agree with you that the man who professes to attend the poor *for profit* for such a sum as I do is deserving of the stricture your paper has passed upon me; but, before I go further, let it be distinctly understood that I had the hope that the majority of my old club patients would avail themselves of the clubs of my medical brethren around me. I only started my present system for the benefit of those who would prefer remaining with me to being attended by other medical men, as I felt that I was bound, living in a country district, to do some sort of charity towards those of the poor who placed confidence in me. The cheap rate of attendance was fixed by me from the knowledge of the scanty means my club patients possessed, and the knowledge also of the fact that a ready money payment, however small, would act as a deterring influence on the greater number of them, and prevent them sending for me to call at their houses for trivial complaints which ought to have been brought to the surgery. The experience of the past quarter has amply proved me to be correct in my judgment, for I have only had to pay six visits to poor people at the rate of sixpence a visit; and if my clubs had been in existence I should have had to pay at least five visits a day to club patients, which would have been a total of *four hundred and fifty-five* in the quarter, the distance ranging from one to five miles. My surgery experience is as correct as that applying to the visiting; for instead of having from ten to fifteen bottles of club medicine at least to put up in a morning, I now have rarely more than three or four. Incredible as it may appear to you, the small rate charged by me is considered by the poor to be oftentimes beyond their means. The larger number of my old club patients have gone to other medical men, and I have not attended a single patient, to my knowledge, on my new terms during the past quarter who did not before belong to my clubs.

So far from wishing to court poor practice, in addition to throwing over a very large club practice, I have resigned a union appointment which brought me in over £100 a year. The main reason for this course was that, owing to my large and scattered private practice, I was unable to attend to the poor without an assistant, and after having the misfortune to lose a good one I had a run of bad luck in those that followed. I was obliged to make eight different changes in the short space of a year and a half. This you may imagine was most annoying to me and perplexing to the poor, and I determined to throw the clubs up at the end of the Midsummer quarter, their payments having been made in advance.

At the wish of some of the clergy in the neighbourhood, who had been always kind enough to collect the quarterly payments in their respective parishes, I had printed some handbills for them to give to the people when they came to pay their Midsummer quarter's money, to make sure that no mistake should be made in the number of verbal explanations they would otherwise have had to enter into. The rest of them I had given away at my surgery to those who paid there, as it was impossible for me to go round to all, or even to write to them, to notify the change.

So far from not wishing to support the medical club system, I only wish all my poor patients would avail themselves of those around them. I had thought of giving gratuitous advice to that class of people, but thought I should damage the clubs of other medical men by so doing.

So long as the poor think my terms too high, there is no fear of my bringing "medical services" into contempt in this neighbourhood; and I can assure you that if I found my charge insufficient to keep off the crowds of poor patients that used to hamper and keep me at work night and day, I should double it at once.

You will be conferring a great favour on me if you will allow the facts I have stated to you to appear in your next issue, that the profession at large may at least see both sides of the question.

I remain yours faithfully,

Nayland, Colchester, Oct. 22nd, 1875. H. D. PALMER.

⁂ We gladly insert Mr. Palmer's letter; but it does not alter our opinion. To circulate handbills intimating that advice and medicine may be had for threepence is a very indirect way of helping the club system. It is curious to note the different experience of Mr. Palmer and our correspondent "S." in regard to the effect of low charges. Mr. Palmer uses them to deter, and "S." to attract the poor.—ED. L.

"HUMAN REMAINS."

IT is to be regretted that medical men and students having need of "subjects" or parts of bodies are not more careful in disposing of them. The Anatomy Act, rigorously applied, provides amply for the burial of all bodies dissected at schools of medicine; but every now and again we hear of bones and parts of subjects buried in back gardens and otherwise irregularly distributed. Not only does the "discovery of human remains" create a most undesirable impression, it misleads the police, and is turned to a mischievous purpose. No obstacle would be thrown in the way of legitimate study, and it would be more in accord with the public sense of decency if the supply of such natural objects as are necessary were placed under judicious control, and the irregular possession or disposal of "remains" were treated as a misdemeanour. These irregularities are certainly an offence against prudence and common sense.

M.D., (Dublin.)—It was Hufeland, we believe, who noticed the comparative longevity of schoolmasters, and attributed it to their being so much in the society of young persons.

HOW INFANTS DIE.

To the Editor of THE LANCET.

SIR,—As a small contribution to the causes of infant mortality, perhaps the following may not be uninteresting. The practice of sending for a medical man at the eleventh hour is, I believe, almost everywhere prevalent.

Whilst *locum tenens* in a manufacturing town in Yorkshire this summer, I was sent for in the evening to see a child (an infant), which on my arrival I found almost moribund and insensible, evidently proceeding from weakness and exhaustion. I was told that it had been suffering from diarrhœa for several days, and had got much worse to-day. I ordered the people to send up immediately for medicine, and ordered brandy-and-milk to be given. The father came up in about an hour and a half, and said the child was dead. On my remonstrating with him for not sending up at once for medicine, he said the child had "worsened" after my departure, and he did not think anything would do it any good. I gave a certificate.

Another time I was sent for to see a similar case, where the child had been sick and purged for several days. This was a bastard child, and the father of the mother, who came, told me that there was "so much bother kicked up if a child *happened* to die without having a doctor to attend it." This child was not so bad as the last, and got better; but I have no doubt, from the conduct of the grandparents of the child, had they not fully believed that all hope of recovery was past, they would not have sent even when they did.

In death in such cases the medical man can do nothing but give a certificate. If he refer the case to the coroner, that omniscient functionary "sees no necessity for an inquiry." I am, Sir, yours &c.,

Chorley, Oct. 25th, 1875. M.R.C.S. ENG.

Mr. Alex. Duke.—There is such a dislocation; but it is of extremely rare occurrence, unless in connexion with fracture of the lower end of the radius. When our correspondent speaks of the sigmoid cavity of the radius, he, of course, refers to the semilunar cavity. Dupuytren met with but two cases. Sir Astley Cooper does not record a single instance. Malgaigne has collected about twenty cases of dislocation of the lower end of the ulna forwards or backwards; the latter the more frequent. Our correspondent will consider whether it is worth while going to law to vindicate his conduct. He will perhaps find more satisfaction in thinking that he has seen and reduced a dislocation so uncommon as to be unknown to a rival practitioner, who does not seem to have acted over courteously.

THE FLEXIBLE STETHOSCOPE.

To the Editor of THE LANCET.

SIR,—You have honoured the flexible stethoscope with a special notice, somewhat damning it with faint praise. Having used exclusively this instrument for upwards of forty years, I may be perhaps considered as having sufficient experience in its use to have arrived at some conclusions respecting it. I believe its advantages to consist in its capability of perfect adaptation to the parietes of the chest; its capability of application ordinarily with little or no disturbance to the patient; but, most of all, in the purity of the sounds it conveys, in consequence of having only one medium of conveyance—viz., the air contained in the tubing causing no confusion with that transmitted by the wood of the ordinary stethoscope. I believe any ear-piece attached to the gutta-percha tube to be injurious, as the end of the tubing itself adapts to the meatus more accurately than an ivory or wooden ear-piece. This is a most important consideration. My first use of the flexible stethoscope was suggested to me by Dr. Sibson during his residence as house-surgeon to the Nottingham General Hospital, and, as far as I know, Dr. Sibson is entitled to any commendation which may attach to its invention.

This stethoscope may be made by any person at about one shilling outlay. I leave to those who have brought it as a new instrument and a recent invention before the profession to explain their grounds for such an assumption, and remain, Your obedient servant,

Scarborough, Oct. 21st, 1875. R. S. HUTCHINSON, M.D.

VACCINATION IN YUCATAN.

IN 1848 the population of this peninsula was 60,000; but in two years it dwindled to about 30,000, in consequence of a war with the Indios bravos, and especially through an epidemic of small-pox. To prevent the ravages of this disease, the Government decreed compulsory vaccination; but the decree has had no effect, as the Yucatanese believe that the pits of small-pox are signs by which the Virgin Mary recognises her servants, for whom exclusively the gates of heaven are open. Thus the inhabitants object to vaccination, and those upon whom it is forcibly performed cut off the piece of skin on which the vaccine matter has been deposited.

THE STUDY OF ORGANS EXTRACTED FROM THE BODY.

AT the late Congress of Brussels, Dr. Heger read a paper on Artificial Circulation. This consists in killing an animal, and removing from it a viscus, as, for instance, the liver, the lung, or kidney. The circulation is kept up in the organ by means of defibrinated blood taken from the same animal or one of the same species. A viscus extirpated from an animal retains its vitality for some time; and when this viscus is kept, as it were, alive by artificial circulation, its functions and its peculiar properties may be studied. Experiments have gone further in these researches, and even the action of medicines, as atropine and chloral, has been watched upon isolated and extirpated organs kept alive by artificial circulation.

A NEW PHASE OF QUACKERY.

AT the Guildhall Police Court a few days ago a representative of the *Morning Advertiser* waited on the Alderman presiding, to ask whether some steps could not be taken to put a stop to the following disreputable proceeding:—A quack, giving an address in the City, was in the habit of sending circulars relating to certain medicines to every barmaid who advertised for a situation. Such circulars, the applicant contended, must have an injurious effect morally. The Alderman regretted he could do nothing in the matter. He would, however, place the documents in the hands of the police. It is quite conceivable that a very serious amount of evil may be caused by the dissemination among young women of such literature as that hinted at in the Court. We hope the police will see their way to preferring a charge against the offender.

Pelham.—The Local Government Board may sanction an appointment under the circumstances mentioned by our correspondent; but it is not likely to do so, unless special reason is shown for such a course.

Mr. P. Carden is thanked.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Munk, London; Dr. Brown-Séquard, Paris; Mr. Soelberg Wells, London; Dr. Spencer Thompson, Torquay; Dr. Wiltshire, London; Mr. Gamgee; Mr. W. F. Teevan, London; Dr. Broadbent, London; Dr. William Carr; Rev. W. D. West; Mr. L. Egerton, Glasgow; Dr. Brushfield, Woking; Mr. Hughes, Calais; Surgeon-Major Rogers; Dr. Adams, Secunderabad; Dr. Bailey; Messrs. Kinmond, Leamington; Mr. Pocknell, London; Mr. Crookshank, London; Dr. Fox; Dr. Hutchinson, Scarborough; Dr. J. Morris, Barnsley; Mr. Rodwell, Norwich; Mr. P. Teale, Leeds; Mr. Holder, Hull; Dr. Foster, Birmingham; Mr. Lascelles, Chorley; Dr. Farquharson, London; Mr. Cooke, London; Mr. Hunter, London; Mr. Berry, Wigan; Mr. Radford, Aspall; Mr. Brett, Watford; Mr. Duke, Aberdeen; Mr. Redwood, Rhymney; Mr. Dowse, Highgate; Mr. Hall, Needham Market; Messrs. Spiller and Co., London; Dr. Heffernan, Spennymoor; Messrs. Blackie and Co., Liverpool; Mr. Harston, London; Dr. Wright, Katmandoo; Mr. Gardiner, Norwich; Dr. Mason, Surbiton; Mr. Corrie, R.N.; Mr. Piggott, Alford; Mr. Palmer, Nayland; Mr. Seaton, Nottingham; Mr. Thomson, Bristol; Dr. Bramwell, Newcastle; Dr. Deane, St. Ives; Mr. N. Baker, London; Mr. Russell, Windsor; Mr. Nettleship, London; Mr. Jepson, Grimsby; Mr. Harmar, Aboyne; Mr. Moore, Petersfield; Staff Surgeon MacDonnell, Gosport; Mr. Phillips, London; Mr. Cobbyn, Sandon; Dr. Munro, Nettlebed; Dr. Macintosh, Chesterfield; Messrs. Livingston, Edinburgh; Dr. Collyer, Enfield; Dr. Faber, Freudenstadt; Mr. Hewetson, Leeds; Mr. Denman, Hull; Mr. Hutton, Frome; Mr. Fendick, London; Mr. Morgan, Glasgow; Dr. Thompson, Hull; Dr. Brunton, London; Mr. Carson, Waterloo; Mr. Wright, Liverpool; Mr. Wilson, Derby; Dr. Buchanan, Glasgow; Mr. Cooper, Builth; Dr. Clapham, Wakefield; Mr. Joll, London; Mr. Whalley, Bradford; Mr. Galabin, London; Mr. W. Sykes, Sheffield; Mr. George, Weymouth; Mr. Reeves, London; Mr. Winter, Leamington; Mr. Warren, London; Dr. Nolan, Gort; Mr. Clark, Winchester; Mr. Hordley, Hartshill; Mr. Rodwell, Loddon; The Registrar-General of Edinburgh; Medicus; A Working Medical Man; M.D.; Two Staff Officers; H. H.; Cyclops; J. C.; A Subscriber; A. B.; Gamma; The Registrar-General; W. M. Y.; An Old Medical Salt; A Life Governor, &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Godfrey, London; Dr. Hardwicke, Rotherham; Mr. Thorn, Norwich; Mr. Clare, Leeds; Mr. Cordwent, Taunton; Mr. Greenwell, Poynton; Mr. Proctor, Shiffnal; Mr. Hyslop, Church Stretton; Messrs. Jolly & Sons, Norwich; Dr. Walker, Chesterfield; Mr. Duke, Stratford St. Mary; Mr. Robertson, Melbourne; Mr. Miller, London; Mr. Legge, Aberdeen; Mr. Forward, Axminster; Mr. Revis, Olney; Mr. Evans, Towcester; Dr. Macpherson; Mr. Greenwood, Liverpool; Mr. Moore, Middlewich; Mr. Cornish, Manchester; Mr. Hale, Barrow Hill; Mr. Wicks, Bicester; Dr. Munroe, Hull; Dr. Walker, Anerley; Dr. McLachlan, London; Dr. Underhill, Tipton; Mr. Davies, Taibach; Mr. Winstanley, Teignmouth; Medicus, Bridlington; E. T.; O. D.; A. B., Llanelly; O. P., London; Septimus; Joki; A., London; Medicus, Kirkdale; Alpha, Chipping Norton; A. R.; Medicus, Hull; X. Y. Z., Sheffield; B. B. J.; M.D., Poynton; G. W. R.; A. P.; C. E. T.; L. M.

Welshman, Western Morning News, Newcastle Chronicle, Birmingham Morning News, Local Government Chronicle, Cork Constitution, Manchester Guardian, Liverpool Post, East London Observer, Metropolitan, Surrey Advertiser, Huddersfield Chronicle, Leamington Spa Courier, Liverpool Mercury, Macclesfield Courier, Lincoln Gazette, Isle of Man Times, Record, Keighley News, and *Boston Guardian* have been received.

Medical Diary for the ensuing Week.

Monday, Nov. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8 P.M. General Meeting; Revision of Laws. —Mr. Jabez Hogg, "On Concussion of the Spine, followed by Impairment and Loss of Vision." — Mr. W. Adams will exhibit a Patient on whom he had Operated for Obliteration of Depressed Cicatrices.

Tuesday, Nov. 2.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Calculi of Cystic Oxide; Epithelioma of Tongue and Jaw; Cancer of Rectum—Colotomy; Carcinoma Lipomatosum; Distended Diverticula of Intestine; Pulmonary Embolism; Tubercle of Pancreas; Tumour in Upper Jaw; Double Cancer of Male Breast; Tubercular Lupus of Tongue and Palate; Fatty Tumour in Male Breast; Abscess in the Heart; Syphilitic Heart; Syphilitic Pneumonia; Parts after Tracheotomy; Aneurism of Aorta; Elio-sarcoma of Brain; Syphilitic Disease of Pharynx and Larynx; &c. &c.

Wednesday, Nov. 3.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1¼ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

OBSTETRICAL SOCIETY OF LONDON. — 8 P.M. Dr. Geo. Roper, "On Prolapse of the Funis during Labour." — Dr. Swayne (Clifton), "On a new form of Blunt Hook and Sling for assisting Delivery in Breech Presentations."—Mr. Lawson Tait, "On a Case of General Dropsy in a Fœtus"; "Note on a Diseased Placenta."—Dr. Heywood Smith: "Notes of a Case of Ruptured Vagina during Labour, with Recovery."—Dr. Wiltshire: "Spontaneous Rupture of the Vagina; Recovery."—And other communications.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. H. C. Sorby, "On a New Method of Measuring the Position of Bands in Spectra."

Thursday, Nov. 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HARVEIAN SOCIETY.—7¼ P.M. Council meeting.—8 P.M. Dr. A. Meadows, "On the Diagnosis and Treatment of the Curable forms of Fibroid Tumours of the Uterus."

Friday, Nov. 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 6.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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Lectures
ON SOME
NERVOUS DISORDERS THAT RESULT FROM OVERWORK AND MENTAL ANXIETY.

BY GEORGE JOHNSON, M.D., F.R.S.,
PROFESSOR OF MEDICINE IN KING'S COLLEGE; PHYSICIAN TO KING'S COLLEGE HOSPITAL.

LECTURE III.

GENTLEMEN,—I described to you in my last lecture many of the symptoms and signs of functional disturbance in various organs which may have their origin in mental and emotional influences. I now wish to point out to you that some of the most formidable disorders of the nervous system may result from the same causes. A study of the more serious consequences of excessive brain work and of mental anxiety and shock will serve to impress upon you the practical importance of an exact diagnosis and appropriate treatment in the early stages of these disorders of the nervous system.

There are few diseases more terrible than epilepsy, and this dreadful malady is one of those which are often traceable to causes such as we are now considering. Many years ago, when I was physician to the Public Dispensary in Carey-street, and afterwards when seeing out-patients as assistant-physician of the hospital, I obtained the histories of a large number of cases of nervous disease, and I will now give you, as briefly as possible, the results of that inquiry, so far as relates to the exciting causes of epilepsy. On analysing the histories of 37 cases of epilepsy, I found that no less than 28 were probably the result of what are commonly called and understood as mental influences. In 5 the fits were the result of some obvious bodily disease or of intemperance, and in 4 no probable cause could be assigned. The cases of epilepsy to which I have referred as having their origin in influences acting primarily on the mind, naturally divide themselves into two classes, distinct, though closely allied. 1. The first class includes those cases in which epilepsy has resulted from great terror or excessive and sudden grief, and in which the first fit comes on almost immediately after exposure to the exciting cause without being preceded by warning symptoms. 2. In the second class are included those cases of epilepsy which arise from excessive mental work or continuous grief and anxiety, and which are preceded for a variable period by warning symptoms. Out of the 28 cases to which I have referred, 11 belonged to the former class and 17 to the latter.

Amongst the exciting causes which have acted suddenly in producing epilepsy, I may mention the sight of a supposed ghost which had been dressed up in order to terrify. In one case the ghost was a boy covered by a sheep-skin. One girl attributed her fits to the fright of hearing a knocking, which she believed to be supernatural. A woman became epileptic on hearing of the sudden death of a friend; she felt, as she said, "a sudden turn and agitation," and within an hour she had a convulsive fit. A man walking along the street saw a workman killed by falling headlong from a scaffold close to his feet. Instantly the horrified passenger fell in an epileptic fit, and he had been epileptic for years when I saw him and obtained his history. A boy was playing in the street, when a policeman terrified him by threatening to take him to the station for making a noise. He ran a few yards, and fell in a fit at the door of his house. The fits recurred, he became paralytic, and died two years afterwards.

When epilepsy results from a sudden mental shock, the first fit usually occurs immediately or within a few hours; but in some cases an interval of days, weeks, and even months, may intervene, the patient meanwhile manifesting signs of nervous disorder. The most remarkable example of a mental shock renewed and aggravated by nightly recurring dreams, and at length, after an interval of two years, culminating in epilepsy, is afforded by the second case, whose history I gave in my first lecture. From what I have seen of analogous cases, I believe that the habit of dreaming might have been checked and the chain of morbid phenomena broken by a judicious use of soporifics at any time during the two years before the occurrence of the epileptic convulsions.

Those cases of epilepsy which result from excessive brain work, from anxiety or continued grief, are usually preceded by a train of nervous symptoms; and it is during this period of what we may call the incubation of the disease that preventive measures may be resorted to with a reasonable hope of success. The symptoms which precede the full development of epilepsy are similar to those which I described in my last lecture as resulting from mental shock and anxiety: terrific dreams and visions, starting, struggling, talking, moaning, and sometimes screaming during sleep; a sense of fatigue in the morning, the patient often declaring that he is more tired when he gets up than when he goes to bed; often there is a sense of pain, weight, or constriction in the head, loss of appetite, disorder of digestion, and general weakness. These symptoms continue for a variable period, sometimes for many months, but in other cases only for a few weeks or even days, before the occurrence of the first epileptic fit, which generally takes place in the night, and during sleep. The nocturnal disturbances then continue, sometimes in an aggravated form; and after an interval, which varies from a few hours to several months, a second fit of epilepsy occurs, and so by degrees the disease is established.

Now, let me here guard against a possible misconception. I do not maintain or believe that every overworked or anxious man whose sleep is disturbed by terrifying dreams, or who talks, screams, or starts up in his sleep, will necessarily become epileptic or insane. Such an opinion would be very unreasonable, but, expressed in the hearing of one of these nervous patients, it might contribute much to bring about its own verification. The symptoms which I have described indicate, as the doctor says of Lady Macbeth, "a great perturbation in nature," which, if neglected, may lead on to epilepsy, or an outburst of delirium or mania. Obviously, then, they demand the most earnest attention, with a view to ascertain their cause, and then to find a remedy.

CASE 6.—One of the worst cases of epilepsy from overwork which I have ever met with was that of a youth, R. M——, who at the age of eighteen was a patient at the hospital. The disease had commenced about five years before. He was then a very intelligent boy, of a somewhat excitable temperament, and he was employed as a reader in a printing office. He worked at that occupation about ten hours a day in a close room. For about a month before the commencement of the fits he often complained of feeling tired and stupid, and he suffered from headache; at the same time, too, his parents noticed that he talked much in his sleep, and sometimes walked about the room in a state of somnambulism. At length he was seized with a violent fit in the night, and after a few days he had a second fit. The fits then recurred frequently, his memory and most of his mental faculties gradually became impaired, and he was soon rendered unfit to continue his occupation as a reader. The boy's parents were healthy, and there was no evidence of hereditary tendency to nervous disease. Now there is reason to believe that a holiday or a diminution of his daily work, with the aid of some sedative at night during the month in which the warning symptoms of coming mischief presented themselves, might have saved this poor boy from the misery of an incurable epilepsy.

The following case presents some interesting and instructive features:—

CASE 7.—In March, 1851, I was called to see a merchant's clerk (J. R. S——), aged twenty-eight. I was told that he had been delirious for three days. I found that his head had been shaved, his temples leeched, and his neck blistered, and he had been kept on a rigidly low diet. The result of this treatment had been an increase in the violence of the paroxysmal delirium, but at the time of my visit he was quiet and answered questions rationally. His skin was cool and moist, his pulse moderately quick, and his pupils natural. I ascertained, not only from his family, but also from his employers, that he was a very steady and temperate man. His wife told me that for several weeks before his illness his nights had been very disturbed; that in his sleep he had talked almost incessantly of his business; that in the morning he appeared unrefreshed; that his appetite had been bad; and that he had been gradually losing strength. When I inquired for the cause of all this disturbance, I was told that the fatiguing and harassing nature of his employment was the only cause for anxiety of which his family were aware. It seemed evident that the case should be treated as one of delirium from exhaustion; and accordingly I prescribed a mutton chop with a glass of porter, and at bedtime forty drops of laudanum. The next day I found that he had slept well and there had been no return of the delirium. He rapidly recovered, and at the end of a week he returned to his employment. About three weeks after he had returned to his work I was asked to see him at his employer's warehouse, where I found that he had suddenly fallen in an epileptic fit whilst engaged in washing his hands. I again inquired particularly for sources of anxiety, and I was again told by his family that overwork was his only trouble; but his employers, who were friends of my own, assured me that there was nothing in his work to trouble a healthy man. The fits recurred again and again. His wife told me, in the month of October, that his nights were constantly disturbed by dreams, and that he talked, moaned, and frequently called out in his sleep. He became a confirmed epileptic, was soon compelled to give up his situation, and about two years afterwards died. It was not until the month of February, 1852, nearly a year after I first saw the patient, that I learnt the real cause of his nervous disorder. His father then told me that my patient's wife was a confirmed drunkard, and that when drunk she was extremely violent; that she had more than once threatened to stab her husband, and that on one occasion she had actually wounded his hand with a knife. My informant had from the first been aware that this was the cause of his son's misery and restlessness; but he was unwilling to speak of it, even to me, until matters had become desperate. It is evident that the information thus tardily given is the central fact in the history of the case, and until its sad domestic history was revealed there appeared no satisfactory explanation of the poor man's continued and increasing nervous disorder.

I have seen other cases similar to this within a comparatively recent period in private practice, but for obvious reasons it would be inexpedient to publish them.

The delirium which occurred in the early period of this case is a good example of the kind of delirium which is sometimes brought on by intense mental anxiety in persons of strictly temperate habits. Great and sudden terror may be followed almost immediately by maniacal delirium. Quite recently we have had in the hospital a boy fifteen years of age, who became violently delirious immediately after being terrified and assaulted by two men as he was returning from his work in the neighbourhood of London. But the delirium which results from overwork and anxiety rarely if ever occurs without being preceded for a variable period by disturbed sleep, and the other signs of nervous disorder which I have before described. Sleep-talking and somnambulism are amongst the most frequent precursors of delirium. When an anxious patient is talking in his sleep he will sometimes answer questions as if all his faculties were alive, and yet, when he awakes, he may have no recollection of what he has said or heard. In other cases he appears, while sleeping, to be carrying on a conversation with someone whom he imagines to be present. I was once told by a very intelligent woman that her husband, who ultimately became insane, was of what she called "a very close disposition," so that he would never willingly speak of his troubles to her or to anyone; but whenever he had been unusually worried, he talked so much in his sleep that she heard from him then, not only that he was anxious, but also the cause of his anxiety. "Infected minds to their deaf pillows will discharge their secrets." The transition from a state of delirious sleep to delirium in the waking condition may be direct and rapid, but there sometimes occurs a transient intermediate stage, during which a man starts up in a state of confusion and terror, looking about him distractedly, and perhaps talking wildly, and recovering complete consciousness and self-possession only after being frequently spoken to and roused by being touched or roughly shaken.

CASE 8.—Many years ago, when I was house-physician of the hospital, I had under my care a shoemaker whom I had known for some time as an excitable man of intermittingly intemperate habits. He had now a sharp attack of gout, and one evening he astonished the ward by setting up a loud and continuous shouting. I was called to him and found him still roaring at the top of his voice, and as he continued this in spite of my loud remonstrance, I took him by the shoulders and gave him a vigorous shaking. This immediately stopped the noise. The man had been terrified by a dream, and he was only half awake until I roused him by the shaking.

In some instances the excitement on first awaking is accompanied by a temptation to commit suicide, or to do violence to others; and the patient will afterwards speak of these feelings as most distressing and terrible. In other cases he begs that he may not be left alone lest he should destroy himself, or that those whom he most loves should remain away lest he should injure them. These symptoms, if permitted to continue unchecked by judicious treatment, may be quickly followed by an outburst of maniacal delirium, or by an epileptic seizure, or sometimes, as I have seen in several instances, by both these terrible consequences in succession. In no case whose history I have investigated has an outbreak of delirium of this kind occurred without being preceded for a longer or shorter period by some of the premonitory symptoms which I have described. I have heard and read of men becoming suddenly delirious and mad without warning or any discoverable cause. I have never seen such a case, but I have met with more than one which, without a careful examination, might have passed for such—cases in which there was a deep and abiding cause for anxiety which was not revealed, even to the nearest relative or friend, until it was discovered after it had wrought irremediable mischief on the nervous system of the patient.

CASE 9.—One such case was that of a clergyman whom I had known for some years as a man of powerful mind and body, until, to the surprise and grief of his family and friends, he suddenly, as it appeared, became insane, and subsequently epileptic, when he was just over thirty years of age. His habits were strictly temperate, but he was disposed to be over-anxious about his parochial work. His wife observed that his appearance and manner were changing; he became unusually reserved and sometimes irritable. He was at a distance from all other members of his family, and his anxious wife had no suspicion either of the real cause of the change which had come over him or of the serious consequences which were threatened. At length he became suddenly and furiously delirious in the middle of the night. The mental disease continued and became complicated with epilepsy; and after nearly four years of suffering he died. Now the cause of this terrible calamity was not discovered until the time for prevention had passed. His income was limited, and insufficient for the wants of an increasing family; he was in pecuniary difficulties of which no one but himself knew until the state of his affairs was disclosed after his illness. He was naturally reserved, sensitive, and proud; and he had concealed his difficulties from his wife, probably from an unwillingness to distress her with a knowledge of them. Of course his own anxiety was intensified by this reserve, and by his not seeking that relief which might have been obtained if he had imparted his troubles to his family and friends.

CASE 10.—In September, 18—, I was consulted by an officer, aged forty-six, in a high position in the army and in society, on account of an attack of loss of consciousness, which had occurred while he was in bed three days before I saw him. I inferred from his description that he had had an epileptic attack. I observed that he had what I have described as the "anxious eye"; but, in reply to my particular inquiries, he assured me that he was not overworked, and that he had nothing to trouble him. I saw him again in a few days, when I repeated my inquiries and received the same answer. In November his sister called to tell me that he was in the country acting very strangely, and evidently insane. I inquired for sources of mental anxiety, and was told that it had recently come to the knowledge of his family that some years since he had formed a *liaison* with a lady, by whom he had had several children, and whom he had recently married. For reasons which need not be mentioned here, this affair had for some time caused him the most intense anxiety, and was without doubt the cause of his mental derangement. He came up to town in a state of maniacal excitement. I had a consultation with Dr. Monro and with the surgeon of the regiment. He was sent to an asylum, where he was generally happy in the belief that he possessed boundless wealth. He had occasional epileptic fits, and after some months he had a rapid succession of epileptic attacks and died.

I could give the details of a considerable number of cases of whose history I have an intimate knowledge, in which consequences equally disastrous, though differing in different cases, have resulted from similar causes, and especially from the influence of suppressed grief, care, or anxiety, the cause of which has been neither known nor suspected by the patient's nearest friends, until it has been brought to light after the onset of some alarming illness—an attack of mania, or epilepsy, or paralysis. Now, in order to prevent these calamitous results, it is of the highest importance that the true nature of these interesting cases should be recognised in their earliest stages, when preventive treatment is often attended with complete success. It often happens that we are consulted by an anxious patient who believes that he has some serious organic disease, and who complains of some of those symptoms of nervous disorder to which I have so often referred. He feels certain that his heart, or his lungs, or his kidneys, or perhaps his brain, must be in a state of incurable disease. We notice the patient's anxious appearance and manner, and, after inquiring for other sources of disorder, we arrive at a positive conviction that all the symptoms have their origin in some disturbing mental influence. If, then, we express this opinion to the patient we shall probably so far gain his confidence as to obtain from him an acknowledgment of trouble and anxiety, of which perhaps he had never before spoken to anyone. Or, if he hesitate, as perhaps he may, to make a confessor of his physician, we may at least succeed in directing his attention to the true source and nature of his sufferings, and so induce him to confide in some friend, and thus put himself in the way of obtaining needful advice and assistance, while we carry on the medical treatment of his case. In this way we may often be instrumental in preventing the development of serious disease which, when it has passed beyond the initiatory stage, is cured with difficulty, if at all; while, on the contrary, an error of diagnosis—a failure to appreciate the nature and origin of the symptoms—may be attended with very disastrous results, partly by confirming the patient's hypochondriacal fears as to his health, and partly by suggesting a plan of treatment the reverse of beneficial.

Before leaving this part of my subject I may mention that when a patient has once been delirious or insane from the effects of mental anxiety, he is very liable to suffer from restlessness or to have his sleep disturbed by frightful dreams and visions, if at any time subsequently he is weakened by illness or over-fatigue, or exposed to mental worry. A woman who has once been in an asylum has several times complained to me of these nervous symptoms, and on each occasion she has been quickly relieved by an opiate at bedtime for a few nights in succession. In such cases it is probable that the mere dread of a return of the disease is often a source of great anxiety; and the same observation applies to epileptic patients. One man told me that he always sleeps soundly for a few nights after he has had a fit, and he explained this by saying that for some time after the occurrence of a fit he has no fear of an immediate return, which at other times he so much dreads that he cannot sleep with comfort.

Amongst the nervous diseases which are frequently the result of mental shock, *chorea* or *St. Vitus's dance* is well known to be thus excited in a very large proportion of cases. One of the most interesting problems in pathology is to explain the fact that chorea may result from such apparently different causes as the mental influence of terror and the mechanical plugging of minute cerebral vessels by fibrinous particles detached from an inflamed endocardium. I do not propose to discuss that question now, neither shall I attempt to account for the fact that a similar mental shock will excite in one patient delirium, in another epilepsy, and in a third chorea; but I wish to impress upon you a fact of practical importance with reference to the preventive treatment, which is this: that as in cases of delirium and of epilepsy excited by mental shock, so in cases of chorea, the symptoms of the special nervous disorder may not commence until some days after exposure to the exciting cause; but on careful inquiry it will generally be found that in the interval the patient's sleep is broken and disturbed by dreams, as a result of which the effect of the original mental shock is perpetuated and intensified until the nervous disorder reaches its full development.

CASE 11.—At the present time (December, 1874) I have in the hospital a boy fifteen years of age, in whom a severe attack of chorea was excited by fright. As he was walking in the dark a large black dog jumped over a fence by the side of the road, and came so close to him as to knock a basket out of his hand. He was very much frightened, but a week elapsed before the symptoms of chorea appeared. In the meantime, however, his sleep had been disturbed every night by terrifying dreams, which made him more and more nervous. The symptoms since his admission have rapidly yielded to the soothing influence of ten grains of chloral hydrate taken three times a day.

Now, the practical lesson which I wish to convey to you is this, that in all probability if he had taken a ten-grain dose of chloral at bedtime for three or four nights after his fright he would have slept without dreaming, his brain would have been soothed, and the mental shock therefore would not have developed into an attack of chorea.

The nervous symptoms which result from mental shock and emotional excitement sometimes assume the form of *hysteria*. Let me remind you that this disease is not necessarily, as its etymology would seem to imply, a result of uterine disease or irritation. Every one of its characteristic symptoms may be fully developed, not only in those who have a healthy uterus, but in those who do not possess a uterus. It is more common in women than in men, for the reason that the more excitable nervous system of females renders them more liable to this form of disorder. The globus hystericus—the sensation of a ball rising into the throat and threatening suffocation—is the form of hysterical symptom which I have observed more frequently than any other in anxious patients of both sexes. It is always a distressing symptom, and it often alarms the patient greatly. This painful sensation is often excited by some sudden mental emotion, and it may occur at any period either of the day or night. In many cases, especially in men, it has been complained of only at night, and it has appeared to be connected with the distressing dreams by which the patient has been nightly disturbed. The dreams and the hysterical globus have both been cured by the same means.

CASE 12.—One of the most remarkable cases of this kind was that of a man sixty years of age, who assured me that for about a year he had scarcely passed a night without being disturbed by a frightful sense of suffocation, for the relief of which his son and daughter often had to assist him to the open window. He had no cough, nor was there any evidence of disease within the chest. His countenance was expressive of great mental anxiety, and he admitted that he had been much troubled by circumstances, the particulars of which he did not communicate. I prescribed a grain of opium in a pill every night at bedtime. He came again at the end of a week and told me that since taking the pills he had slept well, and had not once been disturbed by the horrible sense of choking which had so long distressed him. From that time I saw him no more; I therefore conclude that he had no return of his distressing complaint. I have seen many cases similar to this, as regards the symptoms, the etiology, and the results of treatment.

I have no doubt that in some cases the nervous sensation of globus is excited by some local irritation of the throat. When a nervous woman, or even a very nervous man, gets a common sore-throat, the distress and alarming sense of impending suffocation are often quite disproportioned to the physical changes in the throat which we can see with the laryngoscope.

CASE 13.—A poor woman who was very anxious and much overworked had a slight choking fit while she was eating, and afterwards she felt sure that some substance was still lodging in her throat. She went to one of the hospitals, where the house-surgeon passed a probang, but that rather increased her distress. When she came to me I found the mucous membrane of her fauces and pharynx congested, but her intensely anxious face and nervous manner, and her description of the "rising" in her throat, were the most significant facts. It was not until after many days, and then very gradually and with occasional relapses, that she escaped from the conviction that some solid mass was sticking in her throat and threatening suffocation.

Case 14.—Not long since I was consulted by an unmarried lady, about forty-five years of age, who for several months had been disturbed nearly every night by attacks of choking, which compelled her to sit up in bed. She had a pallid and delicate, but not an anxious look. On examining her throat I found that she had a very long and slender uvula, which was always in contact with the back of her tongue. I cut off about two-thirds of the uvula, and from that time she had no more attacks of suffocation. In this case I have no doubt that the distressing attacks of suffocation were excited during sleep by the elongated uvula.

ABSTRACT OF Introductory Lecture

Delivered at Glasgow University at the opening of the Medical Session 1875–6.

By GEORGE BUCHANAN, M.D.,

PROFESSOR OF CLINICAL SURGERY.

The lecturer, at the outset of his address, welcomed the students to the University, and expressed the hope that ere they parted at the close of the session that respect which ought always to be entertained by students to their professors might be augmented by that confidence and warm feeling which were the privilege of true friendship. He pointed out that upon the senior students devolved great responsibility. He did not hesitate to say that the value of the session would very much depend upon how they conducted themselves. The 300 old students would have an immense and a very important influence upon the studies of the juniors by their conduct and example. Consequently, he appealed to the senior students—the appeal was scarcely necessary—by the love they had for the University, and by their hope of success in future life, to show such an example to their juniors that the present session would not fall behind former ones in respect of diligence and earnestness. He keenly sympathised with the junior students who were at the University for the first time. He could easily understand the feeling of dismay with which they would look at page 99 of the Calendar, where there was detailed the amount of study which would be required of them before leaving the University. Most of the students who were present for the first time were comparatively ignorant—if not altogether ignorant—of medical science, and between the present day and that day four or five years hence, when the Principal would place upon their heads the much-coveted velvet cap, they would require to undergo a very remarkable metamorphosis. There was only one way in which the work could be done, and that was by using as their talisman the three words—"Regularity, method, and economy of time." As to regularity, let no student ever miss a lecture or demonstration unless absolutely compelled by ill-health or some necessary cause.

Medical science might be divided into two great parts—that of the principles, and that of the practice of the healing art. The latter was certainly the aim of medical education, but in order to a sound practice a man ought to be well acquainted with the principles of his profession. Hence he maintained that the grand object of the student in attending the University was to store his mind with the principles of his profession. "A knowledge of principles is to a certain extent a foreknowledge of events. Given certain agencies at work—an acquaintance with their properties enables us to foretell with considerable accuracy the result of their action. A common observer believes that the tide will flow and ebb to-morrow, because it has flowed and ebbed ever since he remembers, and he learns it has done so for ages back. But the astronomer knows that it must flow and ebb to-morrow, for the same cause which produces its movement to-day will act in the same way till disturbed by some other force. His knowledge is certain, being drawn from an acquaintance with the causes of the phenomena. If our knowledge of principles were perfect, our knowledge of events would be certain. Hence this acquaintance with causes, and the changes which they produce, is a far higher kind of learning than that derived from mere observation. What is true absolutely of mathematics, mechanics, and the exact sciences, is to a certain extent applicable to medicine. If our knowledge of anatomy, physiology, and pathology were perfect, we could foretell with precision the course and termination of every disease. And the more accurate our information on these points, the more correct will be our prognosis or prediction of the probable issue of any case of disease. So that it should be your aim during your student life to gain a good knowledge of those branches of medical study on which are founded the principles of scientific medicine." Professor Buchanan proceeded to say that the foundation principles of their science were chemistry, anatomy, and physiology. Chemistry was a fascinating science; but he was afraid there was a tendency on the part of students, in the study of it, to substitute ideas for things. The student seemed to devote a good deal of his time to the study of chemical nomenclature, and some of them were able to emit correct answers to chemical questions in hieroglyphics of which they could hardly expound the signification. He maintained that it was better for a student to know well, and to be able to handle a few substances, than to make any number of figures of which he did not thoroughly comprehend the meaning.

The lecturer passed on to say a few words to the junior students on the subject of physiology, a science which, he said, was advancing with such rapidity that the text-books of ten years ago were absolutely of no use. It consisted of two things—first, observation; and, secondly, reasoning on that observation. It was impossible for the students to observe all the tissues and facts that constitute physiology, and he advised that they should each of them obtain a thorough knowledge of one particular form—for example, a blood globule—which would illustrate the rest. With the view of carrying out this idea he suggested the formation of a Microscope Club, to meet on the Saturdays in a room in the University. When observations were made science was advanced by reasoning upon them, so that the two methods of scientific research were observation and theory. Theory might be familiarly described as the mind groping out in search of truth, a voyage of discovery after new territory of science, like Columbus on the Atlantic. As an example of a beautiful theory almost proved, but just waiting further corroboration, he instanced the germ theory of putrefaction. It is hardly possible to believe anything else than that putrefaction occurs by chemical changes produced by the presence of a germ, and the experiments could hardly be explained upon any other basis than that these germs, being in the atmosphere, were wafted towards them. They had never been seen or examined, however, and scientific men were waiting quietly for the elaboration of the means of examination and the greater perfection of instruments to enable them to see those at present invisible motes.

Of all the studies that engaged the attention of students, if there was one more important than another, that was anatomy. It had the peculiar characteristic that upon the day the student obtained his degree he was supposed to have knowledge of anatomy such as befitted a student of the University of Glasgow, but from the day the cap was placed on his head that knowledge gradually disappeared unless special attention was directed to it. When the young graduate commenced practice there was little time to devote to that purpose, so that in the course of a few years his knowledge of anatomy was a great deal less than when he sat on the benches of the College. The knowledge of therapeutics and pathology, and certainly of medicine and surgery, gradually increased the longer a man practised, and just in proportion the knowledge of anatomy went away. The practical branches would be the business of their lives, and having stored up thoroughly all knowledge of the fundamental branches and principles of the profession they would be prepared to pass on to the more important details.

As to the hospital practice, a great deal of difference of opinion existed as to whether a student should begin practice there in his early years or later in life. He was of opinion that for those who came to the University for the first time, and who knew nothing at all of medical science, it would be a waste of time to attend regularly the infirmary during the first winter session, and therefore they ought to devote their time entirely to anatomy and chemistry. There was a great tendency on the part of students to store and cram their minds with facts, so as to pass creditably at the examinations. He invoked them to get quit of that idea. The examinations were not so bad; they were really not so serious; they were meant to test if possible, not what questions the students could answer, but if they were fit for professional life; and if students would keep that in mind before the examinations, they would not trouble so much with mere question and answer. If it was in the power of the students after getting their degrees —either by saving up beforehand or obtaining a bursary— to keep about the College for a year longer, they would learn more in a month or two after their examinations were over than during all the time before.

The learned Professor concluded:—"I have embodied in the compass of a few sentences the varied and important studies which you must master if you wish to become successful practitioners of medicine. I think it is important at the outset that you should know what you have before you, and what will be expected of you, so that, setting yourselves fairly to the acquisition of the requisite knowledge, and disregarding all allurements which would tend to break your habits of study, you may in the end successfully obtain your qualifications to practise, and issue forth on your philanthropic mission, a credit to your University and an ornament to your profession. Let it not be supposed that I underrate the difficulties which lie before you; 'tis not so long since I grappled with them myself. I would have you often think of them—but with the determination to master them, not to succumb. Our profession is not a path strewed with flowers, either in its acquisition or its practice. Its acquisition is the result of years of earnest and laborious study, its rewards are often tardy of coming. It cannot be considered a lucrative one, and the first years of its practice are usually far from encouraging to the young aspirant. Yet when fairly engaged in active duty you will rarely find a medical man who would exchange his profession for any other. If it be the highest triumph of man's genius to save a fellow-creature from destruction—to rob the grim tyrant of his expected prey—how pleasing the reward which you will reap in the grateful thanks and untold blessings of the affectionate wife to whom you have restored a much-loved husband, of the fond parent to whom you have rendered back a darling child, of the faithful companion for whom you have regained a much-valued friend. It is in this view that you are to regard the true aim of medical science; it is in this aspect that you are to estimate its rewards."

ON A CASE OF

CONVULSION FROM BRAIN INJURY.

By W. R. GOWERS, M.D.,

ASSISTANT-PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL AND TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

The investigation of convulsive seizures may throw light either on the relation of a given alteration in the brain to certain movements, and therefore on the localisation of function in the brain, or upon the laws which govern convulsive seizures considered apart from the special change which causes them. It is impossible to watch the course of many convulsions without being struck with their conformity to (and correlated divergence from) certain regular types. It cannot be doubted that the changes in the nerve centre of which the convulsion is the outward sign, possess certain common features in different cases apart from the locality of their cause. To these Dr. Hughlings Jackson has called frequent attention. The case described below throws little light on the localisation of function in the brain; for, although there was defined laceration, the whole of one hemisphere was exposed to pressure from effused blood. But the opportunity which it afforded of observing the exact characters and course of the convulsive movements, during a long series of fits, was such as to render it possible to ascertain with considerable minuteness the details of many attacks, and on this account it is described.

It will be convenient to give first an outline of the case, and afterwards to describe the details of the convulsive seizures.

A man, apparently about fifty years of age, was admitted into University College Hospital Nov. 30th, 1874, under the care of Mr. Erichsen, whom I have to thank for permission to watch the case. The man had fallen down in the street and had been picked up unconscious. When brought to the hospital he had partly recovered consciousness. He seemed to understand questions, but his answers were unintelligible. He intimated, in reply to questions, that he had pain in the head, but could not point out its locality. Some bleeding from the left ear was noticed, and subsequently some extravasations appeared beneath the left conjunctiva. In this state he lay for six days. On the sixth day convulsive attacks set in, and recurred day after day until his death, six days subsequently. In these attacks, as will be mentioned presently, the right side was affected much more than the left, and after they had lasted for two days there existed distinct right-sided weakness. After the commencement of the fits his mental state became much more dull. The character of his speech was doubtful. Sometimes a few words were uttered indistinctly, but apparently correctly; at other times he used words which were evidently not those which he meant to employ, and he occasionally uttered sounds which were apparently a meaningless repetition of certain syllables. His articulation was confluent—i.e., syllables were run one into another. Swallowing was difficult. His stools and urine were passed into the bed. His urine, towards the last, contained a little albumen, but no sugar. The convulsive attacks were at first very frequent, one occurring every few minutes both day and night; during the last few days they were less frequent. His temperature, never below 99°, rose, the day after the fits commenced, to 102°, and continued between 100° and 102° until his death. From the first there was rapid loss of flesh. The immediate cause of death was apparently asthenia.

Post-mortem examination.—A fracture was found in the left side of the skull, extending from above the occipital protuberance to the external meatus, into which it passed, and thence extended inwards as far as the roof of the tympanum. There was no hæmorrhage between the skull and the dura mater, but beneath the dura mater a thick layer of coagulum lay over the whole left hemisphere. The hemisphere itself appeared rather smaller than the right, and here and there the convolutions had evidently been flattened by the pressure of the clot. All the convolutions were blood-stained. The chief damage to the convolutions was in the temporo-sphenoidal lobe. The outer surface of this lobe in the posterior half was broken up by laceration and effusion of blood over an area of one square inch and a half. The middle convolution was that chiefly damaged. In front of this was a smaller area of laceration, involving the apex of this lobe and part above the apex, and this laceration was separated from the larger injury by an undamaged portion. Some softening existed in the margins of the lacerations. One or two minute lacerations existed in the anterior part of the inferior temporo-sphenoidal convolution. In the orbital lobule were one or two small spots of extravasation beneath the pia mater, and other small spots of laceration at the outer margin of the frontal lobe, about half an inch from the anterior extremity of the inferior frontal convolution. The rest of the convolution was undamaged, and so also was the island of Reil. There was no laceration of the superior middle or ascending frontal convolutions. The damaged convolutions showed, on microscopical examination, the evidences of acute inflammatory changes extending through the entire thickness of the grey matter. Further, adjacent convolutions, which were apparently intact, exhibited much disintegration of the grey layers. The convolutions at a distance from the damaged areas were healthy. Beyond some pneumonia of the lower lobe of the right lung no other disease was found in the body.

Description of the fits.—The fits presented, for the most part, considerable uniformity in the course and distribution of the convulsive movement. The part affected varied chiefly according to the severity of the fit; some attacks were slight, others were severe. It will be convenient to describe first the several degrees of what may be termed the typical attacks, and then the way in which some attacks deviated from that type.

In the slighter fits the head alone was affected. In the more severe attacks the head and right arm were involved; in the most severe attacks the head, right arm, and both legs were convulsed. In the slightest fits clonic spasm of the facial muscles alone was observed; in all the others tonic preceded the clonic spasm. There was no pallor at the outset. During the latter part of the severer attacks, in which respiration was interfered with, the face became dusky and congested.

Aura.—Most of the attacks were apparently preceded by some sensation about the mouth. There was an uneasy voluntary movement of the lips, and the hand was frequently raised to the mouth. Every time this occurred, after a few seconds a fit came on. Occasionally a slight cry preceded the fit, and during the severe fits a peculiar noise was made in the larynx.

Spasm of muscles of mastication, tongue, and palate.—In a large number of cases the first spasm occurred in the muscles attached to the lower jaw, and it commenced in these muscles simultaneously on both sides. The masseter and temporal muscles were both involved. The muscles above the hyoid bone, genio-hyo-glossi especially, were affected strongly, while those below the hyoid bone were almost or quite free from spasm. On opening the mouth with a screw gag while the clonic spasm was going on in the muscles of mastication, the tongue was seen to be moved rapidly in the same way. The tip was moved forward a little at each spasm, until at last the tip was thrust between the teeth. The palate was seen working up and down in rapid movement synchronous with the clonic spasm in the tongue and muscles of mastication.

Spasm in facial muscles.—After the clonic spasm had lasted for some seconds in the muscles of mastication, twitching began in the face, and usually commenced simultaneously in the right zygomaticus and the right platysma myoides. The right angle of the mouth was drawn outwards, and the platysma stood out conspicuously on the surface of the neck, the left platysma remaining still. Soon after the zygomaticus, the right orbicularis palpebrarum was contracted, and the spasm extended to the triangularis nasi and the levator labii superioris. The left orbicularis palpebrarum was also slightly affected. Both corrugator supercilii muscles were involved, simultaneously and equally.

The head was either straight or directed to the right. The eyes were usually directed to the right, but presented in some fits a curious alternate movement from one side to the other, to be described presently. The pupils during these slighter fits were small throughout. The respiration was not impeded.

Spasm of right arm.—In the more severe fits the spasm invaded the right arm soon after affecting the face. It began in the deltoid, and involved the muscles of the upper arm before those of the forearm. Both flexors and extensors were involved. The position of the hand during the spasm was peculiar: the fingers were flexed; the thumb was flexed and bent under the first and middle fingers, so that its tip projected between the middle and ring finger. It continued in this position after the spasm ceased.

The *left arm* was always free from movement, except that in one or two of the most severe fits it was jerked as a whole by the contraction of the left pectoral muscles.

Spasm in legs.—In other, still more severe fits, the convulsion invaded *both* legs, soon after it commenced in the arm. The two legs were affected simultaneously, the *left* leg rather more severely than the right. Both were at first rigid in tonic and then jerked in clonic spasm. The right leg, however, was extended at all joints, so that it lay upon the bed; the left leg was slightly flexed at the hip and knee joints, in consequence of which it was raised about a foot from the bed, the thigh being at an angle with the trunk, and the leg parallel to the surface of the bed; it was held in that position.

Muscles of trunk.—The sterno-mastoid was involved on the right or left side at different times; the turning of the head was the result of its contraction. The trapezius was involved on the right side; it was not certain whether it contracted on the left side, but it was thought to do so in the severer fits. The pectoralis major was convulsed on the right side in all the fits in which the right arm was involved; that of the left side was still, except for a slight jerking in one or two of the severest fits. The intercostal and abdominal muscles were unaffected in the slight, but were involved in the severer fits, and then were affected together, and those of the two sides equally. The affection of these muscles and the consequent arrest of respiration occurred in all the fits in which both arm and legs were involved; in none of those in which the face alone was affected without the arm; while in the fits in which the face, head, and right arm only were affected, the legs remaining still, the respiration was arrested in the severer, and continued unaffected, or slightly accelerated in the slighter attacks.

The *pulse* became more frequent during a fit, and irregular towards its close. The pupils were dilated during the latter part of the severe fits.

Cessation.—The modes in which the convulsion ceased varied in different attacks. As a rule, the spasm ceased in the limbs some time before it ceased in the muscles of the face, but it occasionally ceased simultaneously in the arm and in the face, and even in the arm, leg, and face. In one severe fit the movement in the arm continued some time after that in the leg and face had ceased.

The *average duration* of each fit was one minute and three-quarters. The duration of the tonic stage was about one-fourth, that of the clonic stage three-fourths, of the whole duration of the fit.

Varieties in distribution of the convulsion.—In some fits the spasm did not extend to the upper part of the face, but was confined to the muscles of mastication, the right zygomatic muscles, and the right platysma. Some of the fits began distinctly in the right zygomaticus, without any preceding affection of the muscles of mastication. From the zygomatic muscles the spasm spread to the rest of the right half of the face. In these fits the right orbicularis only was involved, the left eye remaining widely open, while the right eye was forcibly closed. The occipito-frontalis muscle on both sides was involved. The eyes were sometimes directed towards the right, the axes being parallel; often, however, the eyes converged, the left eye being directed a little inwards, while the right was in the middle position. The eyes were occasionally jerked, conjugately, in clonic spasm, while clonic spasm was going on elsewhere.

Alternate movement in the head and eyes.—A curious alternation was observable in several fits in the earliest movements. In some, the spasm in the masseters was preceded by a slight twitch in the left angle of the mouth and left side of the chin. In other fits the first spasm was a slight movement of the head, first to the left, then to the right; and as the head turned to the right, the right side of the mouth became drawn outwards, and the fit followed, with spasm in the right side of the face, as already described. Very frequently the eyes were first directed towards the left, then to the right, in the way just described, as the convulsion involved the right side of the face; and were subsequently turned to the left, and finally back again to the right, in which position they remained for a minute or two after the fit was over. The position of the head, as a rule, corresponded to the movement of the eyes. The deviation of the head was distinctly the result of spasm in the sterno-mastoid on the side opposite to that to which the head was turned.

Ophthalmoscopic observation during the fit.—During one severe fit, in which the left eye remained open while the right was closed, I was able to watch a retinal artery and vein by the direct method of observation, from the very commencement to the end of the fit. Not the slightest diminution of their calibre could be observed; the artery remained of precisely the same size. When respiration was arrested and the face became dusky, the vein appeared distended and darker; no other change was observed. It is to be remarked, in connexion with this absence of spasm of the retinal vessels, that pallor of the face was likewise absent.

REMARKS.

Among the interesting points presented by the case is the commencement of the convulsion in the muscles of mastication. The involvement of those muscles in the course of a fit is common enough, but it is rare for them to be the seat of the first spasm in a convulsion of deliberate march. I am not aware that spasm in the palate has been before observed. Its distinctness in this case, and correspondence in time with the clonic spasm in the tongue and muscles of mastication, make it probable that the three are commonly associated.

Whilst the mouth was held open the mechanism of tongue-biting could be very distinctly observed — the gradual jerking forwards of the tongue till its tip was thrust between the champing jaws.

Relation of tonic to clonic spasm.—The essential unity in nature of the tonic and clonic spasm was in this case very distinct. At first the contraction appeared, to both eye and hand, to be continuous—i. e., tonic. Long before the least intermission in the continuity of the spasm was visible to the eye, the hand laid upon the convulsed part could detect that the apparently continuous spasm was really a succession of contractions which by their quick repetition produced a tetanic state, and, though they could not be seen, could be felt as rapidly recurring vibrations. Gradually, the interval between these contractions becoming longer, the intermission was distinctly visible, and, becoming still more complete, the characteristic clonic stage was developed.

I do not think that this relation between the tonic and clonic spasm has received the attention which it deserves. If the difference between them depend in all cases, as I believe it does, merely on the interval between the successive muscular contractions, and the transition between the two be perfectly gradual, it is not easy to accept the difference of cause commonly assumed for the two forms, and which refers the tonic spasm to the "spontaneous" undue action of the nerve-centre—the clonic to its irritation by venous blood. The inference from their essential unity is the unity of their cause.

The relative affection of the muscles of the two sides presented some peculiar features. The equal affection of the muscles of mastication of the two sides is in full accordance with their bilateral use. So, also, according to the usual law of convulsive seizures, the muscles of the forehead were affected simultaneously on both sides; while those attached to the angle of the mouth were affected only on one side at a time. Curiously, however, the orbicularis palpebrarum was affected on both sides in some fits; on one side only in others. The mode of affection of the limbs is not easy to explain. Invariably one arm and *both* legs were convulsed, the other arm escaping entirely. May it be connected with the more frequent simultaneous use of the legs than of the arms? It is to be observed that, in the right leg, spasm of the extensors predominated; while in the left leg that of the flexors was distinctly greater than that of the extensors.

Not less singular is the alternation which existed in the commencing spasm of the head. The spasm on the side chiefly affected (right) was preceded by transient contraction on the opposite (left) side, and even by a still earlier slight and passing affection on the right side. This preliminary alternation may, however, be compared to that which is seen not unfrequently at the close of an epileptic fit, in which the head is, at the commencement, turned to one side. In these cases, as the fit is passing off, it is common to see the head and eyes gradually turn towards the other side from which they turned at the commencement of the fit, and remain for a little while in this position after the fit has ceased. This deviation is not due to paralysis by exhaustion of the side first affected, but is the distinct result of the development of spasm on the opposite side. These two forms of alternate movements—the preliminary alternation which precedes the fit, and the subsequent alternation during its course—may be fairly compared. The latter is regarded by Dr. Hughlings Jackson as an instance of the influence exerted by each half of the brain upon the muscles of both sides of the body. The preliminary alternation I have described may be thus explained, or it may be regarded as an instance of reciprocal action between the two halves of the brain, related in a curious way to the development of the spasmodic process. The commencing evolution of the fit is accompanied by a similar process on the other side more easily manifesting itself than the severer "discharge" on the side chiefly in operation, but transient and ceasing, perhaps by inhibition, as the intenser action of that side is evolved.

The absence of any arterial spasm in the retina during the fit is a feature of considerable interest. It is not, however, surprising; for it accords with the entire absence of facial pallor. But it proves, at any rate, that a severe fit may occur under the circumstances of cerebral irritation without any evidence of coincident arterial spasm.

Queen Anne-street.

TWO CASES OF EXCISION OF CANCER OF THE BREAST BY SCISSORS-CUTTING UNDER ETHER SPRAY.

By THOMAS MOORE, F.R.C.S. Exam.

As the exhibition of a general anæsthetic during an operation always entails more or less risk to the life of the patient, and a corresponding degree of anxiety on the operator, any other means of producing insensibility to pain should be a matter of great interest to the profession. The use of our best local anæsthetic—freezing by ether spray—has, unfortunately, hitherto been almost impossible in operations where the incisions have to be carried to any depth, owing to the difficulty of cutting through the hardened tissues. In an article in The Lancet of Aug. 29th, 1874, Dr. B. W. Richardson asserted that he had overcome this difficulty, so far as operations on the breast at least were concerned, by the substitution of scissors for the knife; and he gave the history of two cases in which he had tried this method with unequivocal success. Since that time two patients have come under my care suffering from cancer of the breast, and at the same time from disease of the heart. As I made use of Dr. Richardson's operation in each of these cases, an account of my experiences with it may, perhaps, prove of interest, and will, I hope, induce others to make trial of it.

Case 1 was that of a maiden lady, aged forty-eight, from whose right breast I had, in July 1873, removed an adenocele without the aid of any anæsthetic. Several members of her family had died from cancer, but this tumour did not present features of malignancy. Neither she nor her friends would consent to its removal until it had become as large as a cocoa-nut, and a considerable surface of the skin over it had ulcerated. From this surface there had been several attacks of hæmorrhage, uncontrollable by styptics; and removal of the tumour appeared to afford the only hope of averting her speedy death. The heart's action was laboured and irregular, with a loud systolic murmur; the pulse was intermittent and feeble; and she had become almost childish from debility. Under these circumstances a general anæsthetic seemed out of the question, so I proceeded to operate without one, having previously exhibited brandy-and-water largely. The operation presented no special features of difficulty, but although the sensitiveness of the patient was considerably lessened by the state of almost dementia into which she had fallen, she yet suffered much pain. The after-progress of the case was satisfactory, the wound healed quickly, and the heart's action and the mental state both gradually improved.

When this operation was performed, a hard tumour, the size of a hazel-nut, could be felt in the other breast. This gradually increased in size, but my patient declined to have it removed until it had become as large as a turkey's egg, was very painful, and the skin over it was retracted. As the cardiac murmur and some irregularity of the pulse still persisted, I did not think it advisable to recommend a general anæsthetic; but at length (on the 19th of January last) induced her to allow me to operate by Dr. Richardson's method.

The ether spray was used by my partner, Mr. Cross, in accordance with the directions given by Dr. Richardson in the article referred to above. First a spray of common ether was directed over the breast for five minutes to chill it, and then a spray of anæsthetic ether for about three minutes until the part was frozen. I then cut the flaps with a pair of sharp-edged scissors, but I did not carry the incisions as low as the pectoral surface of the tumour. So far my patient did not complain of any pain. I then proceeded to use a pair of tooth-edged scissors to the deeper parts, but I found it impossible to raise the tumour from its attachments, partly because it was adherent to the pectoral muscle, but principally, I think, and as subsequent experience has shown me, because I had not made the first incisions deep enough. A considerable quantity of blood now welled up into the wound, and the freezing was consequently ineffectual. As my patient began to suffer much, and the rate of progress made by the tooth-edged scissors was slow, I was constrained to take up a scalpel and finish the operation as quickly as possible. The wound, which was dressed with oiled lint and cotton wool, subsequently healed fairly well.

Case 2.—A maiden lady, aged sixty-four, came on Sept. 9th, from a town fifty miles distant, to place herself under my care. She was suffering from a very hard scirrhus tumour of the left breast, rather larger than a turkey's egg, which she had first noticed eight months before, when it was as large as a walnut. There was no adhesion to the parts beneath, nor were there any glandular swellings, but there was some retraction of the skin over the centre of the tumour, and much lancinating pain. A niece had died from cancer six months before, but there was no history of the disease having shown itself in any other member of her family. She was thin and looked sallow, but her friends assured me that she had not altered in appearance for many years. The heart sounds were feeble, with a systolic murmur, and the pulse was very small and weak at the wrist. She informed me that her usual medical attendant had told her that she was suffering from heart disease.

As a general anæsthetic appeared to be contra-indicated, I determined to give Dr. Richardson's method another trial, in spite of my previous somewhat unfavourable experience of it, especially as I felt that most of the hæmorrhage and pain which occurred in the former case might have been avoided, if the parts had been more decidedly frozen, and if the incisions for making the flaps had been carried to their full depth at once.

On the 14th of September the operation was performed as follows:—First a spray of common ether was directed on to the breast for five minutes; then two sprays of anæsthetic ether were directed—the one by Mr. Cross, and the other by our assistant, Mr. Bayfield—on either side of the tumour for five more minutes, until the whole breast was frozen quite hard. I then, after making an angular cut in the skin at the outer margin of the tumour, carried the lower blade of the cutting-scissors deeply down through the breast until it appeared to rest upon the pectoral muscle. Then, keeping this blade as deep as possible, I easily cut the lower flap, about an inch from the tumour, with three or four strokes of the scissors. The upper flap was cut as easily. I next thrust the fingers and thumb of my left hand deep into the wound, and, grasping the tumour firmly, raised it as far as possible from the pectoral muscle. It was then easy to detach it with a few strokes of a pair of tooth-edged scissors. The operation so far was completed in less than three minutes from the time of the commencement of the first incision, and was attended with very little loss of blood. When the spray was withdrawn there was some hæmorrhage from three small vessels in the tissues which had been cut by the sharp-edged scissors, two of which were treated by torsion, and the other tied with silk, the ends of the ligature being cut off short. The edges of the wound were brought together by six sutures, and each of the twelve spots through which the needle was passed was previously separately frozen by the spray.

My patient, who declared beforehand that she was extremely sensitive to pain, gave very little indication of having felt any during the operation, and said afterwards that "it hurt her, but not a great deal." That her estimate of her extreme sensitiveness was correct (and indirectly the success of the anæsthetic) was proved by the fact that, during the introduction of one of the sutures through a part of the skin which had been accidentally insufficiently frozen, she cried out loudly, and declared that this "hurt her worse than all the rest put together."

The wound, which was dressed with oiled lint and cotton-wool, united by first intention, except in a spot where I had made a slight notch at the junction of two cuts of the scissors, and at the place of the first incision; but there never was more than just enough discharge to moisten the dressing, and that was entirely dried up by the sixteenth day. The patient was confined to her bed for one day, and to her bedroom and an adjoining sitting-room for a week.

The scissors used for making the first incisions were ordinary "elbow-scissors," with the blades inclined to the handles at about a third of a right angle; those for making the deeper incisions were tooth-edged and slightly curved "on the flat of the blade."

My experience of these operations has shown me that in using this method three things must be particularly attended to:—1. That the whole breast should be thoroughly frozen before the commencement of the operation, as otherwise hæmorrhage may afterwards prevent the freezing action of the spray. 2. That the incisions should be made at once to their full depth, as the difficulty of afterwards carrying them deeper, especially if there be hæmorrhage, is considerable. 3. That great care should be taken not to notch the skin, as doing so with scissors bruises as well as cuts it, and retards the healing process.

The success of my second operation, in the satisfaction it gave both to my patient and to myself, was such that I shall not hesitate to employ this method for the future for the excision of any tumour which does not require dissecting out from the subjacent tissues; for I was able to perform it about as quickly as I have performed similar operations with the knife under chloroform, and the wound healed as rapidly as could be desired.

Petersfield.

CASES OF DIABETES MELLITUS.

By M. CHARTERIS, M.D.,

PHYSICIAN AND LECTURER ON CLINICAL MEDICINE, GLASGOW ROYAL INFIRMARY.

While treating two cases of diabetes in my wards in the Royal Infirmary I became acquainted with the details of the following case from the personal narration of the patient.

A. B——, aged fifty-two, in an excellent business position in the city, in 1869 became aware of his having diabetes, and his usual medical attendant ordered him a diet consisting of beef and milk and dry toast. At that time he voided daily about 250 oz. of urine, with a specific gravity of 1044. He continued under that treatment for about a year and a half. The quantity varied little, and the specific gravity remained the same. The dietary became very irksome to him, and he had lost in weight about a stone and a half. A consulting physician who was called in recommended a purely skimmed-milk diet. This was adopted in 1872, and was continued for two years and three months. He drank thirteen pints or 260 oz. of milk daily, and passed about the same quantity of urine. Latterly he decreased the quantity of milk, because so much became nauseous to him, until it fell to 180 oz., the urine voided falling to 140 or 150 oz. The specific gravity of the urine under this treatment was 1020, but though low it was still loaded with sugar whenever it was tested. His weight had decreased to 11 st., and he was becoming despondent and extremely feeble when he made, as he terms it, his discovery about diabetes. He found that he commenced to wheeze when he breathed the cold air, and that it ceased on his return to a warm room. On putting his head below the bedclothes a slight perspiration came upon him, the saliva returned, and his tongue and mouth became moist, instead of dry, as formerly. When he withdrew his head again, and breathed in the open, his mouth and tongue again became dry and parched. This moistness and dryness of the mouth alternately occurring under the conditions mentioned having arrested his attention, the question arose in his mind, how could this moisture be obtained without remaining in bed? To accomplish this he put on a respirator, and also a knitted woollen cloth over both the respirator and his nostrils when in the house, or even in bed, and was careful in protecting the nostrils as well when he went out. He also began to practise breathing by the nostrils alone, and found that breathing exclusively in this manner day and night, except when engaged in conversation, was highly beneficial. Having perfected himself in respiring by the nostrils alone, he laid aside both the respirator and the cloth, only muffling himself carefully up when he went out at night or in frosty weather. He avoided going out at night as much as possible, and refrained from all cold diet or drink, invariably taking them warm. Under this treatment an amendment was apparent in less than fourteen days, and in less than a month it was very marked. The quantity of urine and sugar steadily decreased, while his weight increased, so that in six months he had regained his usual weight of 13½ st. The sugar at the same time disappeared from his urine, and he had acquired his usual health and spirits. He has continued in this favourable condition for the last two years, and in addition to the milk (heated) which still forms his staple article of diet, he is able to take some toasted bread and potatoes, and in addition a glass or two of wine at dinner. In fact, he lives like any other temperate man, and, being a very intelligent person, he has formed his theory in regard to the treatment, as already mentioned. Briefly expressed in his own words, it is this:—"Hitherto the attempt has been made to prevent production of sugar by giving a non-saccharine diet. This is no doubt perfectly correct, but in addition to this the treatment I adopted was intended to promote the consumption of sugar produced. This design of consuming sugar by breathing through the nostrils in warm weather or by means of a respirator, is that when the proper quantity of sugar has been consumed, the abnormal production will then cease. The aim of this treatment is to raise the blood-heat to its proper temperature, and to restore to the lungs their partially lost combustive power, and so enable them to consume as much secreted sugar as will maintain the blood at its proper temperature. When that purpose is accomplished the organs will regain their proper function, and the patient recover."

As previously observed, two cases of diabetes were in my wards in the Royal Infirmary, and I resolved to try the treatment mentioned upon them. The patients were informed of the object in view, and aided our efforts in every way.

CASE 1.—Patient, a single man, aged twenty-eight, was admitted passing 260 oz. of urine on the 14th of June. His disease had lasted twelve months, and various modes of treatment had been put in force and abandoned. The specific gravity of his urine in the morning was found to be 1035, and in the evening 1038, his weight being 10 st. 3 lb. In accordance with the principle mentioned in the foregoing case, he was ordered to wear a respirator during the day, and at night to cover the respirator and the nostrils with a knitted woollen cloth. The following was the dietary in this and the succeeding case:—Breakfast: Eggs, fish, one pint of tea, and biscuits. Dinner: Steak, biscuits, and cabbages. Supper: Tea, biscuits, and milk. Three pints of sweet milk were also taken during the day. The biscuits were prepared at my suggestion by Mr. Walker, biscuit manufacturer, of this city, who, after repeated trials, made a biscuit palatable to the taste, and possessing no, or at least only a very small quantity of, starch in its composition. On the 18th of June, 1875, the patient stated that he perspired freely, and that, on awaking, his mouth was not parched but moist. The quantity of urine passed, which was carefully ascertained every day, was as follows on the dates mentioned.

	Total amount in ounces.	Specific gravity, 10 A.M.	Specific gravity, 10 P.M.	Weight.
June 18th	248	1040	1033	—
,, 22nd	236	1037	1031	10st. 0lb.
,, 26th	230	1035	1030	—
,, 30th	218	1033	1029	9st. 9lb.
June 3rd	212	1039	1030	9st. 11lb.
,, 7th	200	1033	1030	—
,, 11th	168	1037	1034	9st. 10lb.
,, 18th	150	1037	1034	—
,, 22nd	120	1032	1032	10st. 0lb.
,, 26th	100	1034	1033	—

After this, he went to the Seaside Home at Dunoon, and subsequently resumed his occupation in a distant part of the county, and was able satisfactorily to do so according to the account of his friends.

CASE 2.—The patient was a married man of healthy parents, and employed as a railway pointsman in a country district. He observed that he was passing more than an average amount of urine twelve months ago, but thought nothing of it until he found his sexual powers entirely gone. His urine was tested, and gave abundant evidence of its saccharine properties. On admission the quantity passed in twenty-four hours was 330 ounces. The patient complained of great thirst, gradually increasing weakness, pain in his loins, and a numbness affecting especially his fingers and toes. With every anxiety to do what he was told, he found it extremely difficult to refrain from drinking water or any other liquid. A similar course of treatment as in the other case was adopted with the following results:—

Date.	Urine in ounces.	Sp. gr.	Sugar per ounce.	Sugar per diem.	Weight.
April 25th	330	1034	34	11·220	9st. 5lb.
May 17th	180	1038	34	6·120	
,, 18th	190	1035	35	6·650	
,, 19th	200	1040	40	8·000	
,, 20th	200	1036	30	6·000	10st. 2lb.
,, 22nd	200	1036	34	6·800*	
,, 24th	170	1032	30	5·100	
,, 26th	130	1032	32	4·800	9st. 12lb.
,, 28th†	140	1033	32	4·480	
June 1st	135	1032	32	4·320	
,, 3rd	130	1031	31	4·030	
,, 4th	130	1040	37·53	4·880‡	
,, 7th	125	1032	31	3·875§	
,, 9th	120	1033	31·5	3·780	
,, 12th	120	1027	28	3·360	
,, 15th	100	1036	32	3·200	
,, 17th	100	1031	30	3·000	
,, 19th	100	1036	33	3·630	

* Urates 1·05 per cent. † Went home for three days.
‡ Estimated by Dr. Milne. § Urates ·95 per cent.

I saw the patient again on 23rd Sept. He was employed as a railway porter. His weight was 11 st. The specific gravity of the urine was 1032, and the quantity voided in the twenty-four hours was 120 ounces. The usual tests indicate the presence of sugar.

Remarks.—I have not hesitated to give the details of these cases to the profession. The mode of treatment is simple, and in its originator's hands has been attended with the most beneficial results. In the two cases I had good also accrued, though not to the same extent. The publication of the cases will, I trust, stimulate others to give it a fair trial and record the results. It has one advantage—it cannot possibly do harm.

Glasgow.

NOTES OF FIVE CASES OF ARROW-WOUNDS (RECEIVED IN THE SOUTH SEA ISLANDS), TWO FOLLOWED BY TETANUS AND DEATH.

BY SURGEON ALFRED CORRIE, R.N.

(*Continued from p. 620.*)

CASE 2.—Edward R——, aged eighteen, seaman. This man, when on shore at Santa Cruz Island, received a punctured wound of left arm, about the insertion of the deltoid muscle, from an arrow (supposed to be poisoned, as before named), at a distance of some seven or eight yards. A little hæmorrhage took place at the time. The wound was at once sucked by a man near.

Fifteen minutes after the accident the man was seen by the medical officers on board. The wound was enlarged and washed, carbolic acid and glycerine were injected, and a stimulant in the form of brandy-and-water administered. The patient received the injury at 3.30 P.M. on August 12th, 1875. At 8 P.M. he complained of some pain about the part, a little headache, but nothing more. The wound was dressed.

Aug. 13th.—Slept but little during the night; no sickness, chills, or headache; some pain, swelling, and inflammation in the neighbourhood of the wound; tongue clean; bowels regular. Temperature 99·8°; pulse 80. Ordered linseed-meal poultice.—8 P.M.: Vomited twice after meals; more pain and swelling at the seat of wound. Continue poultice. Temperature 99·8°; pulse 88.

14th.—Passed a good night; slept well; felt rather faint when he awoke this morning; nasty taste in mouth; less pain about wound; no vomiting or headache; tongue clean. Temperature 99·4°; pulse 100.—8 P.M.: Taken food well;

wound still very painful; continue poultice. Temperature 98·4°; pulse 80.

15th.—Slept well; wound not looking so healthy; no sickness, headache, or rigors; taking food tolerably well; continue poultice. Temperature 98·4°; pulse 84.—8 P.M.: No change perceived in patient. Temperature 98·4°; pulse 72.

16th.—Passed a good night; some discharge from wound; bowels regular; continue poultice. Temperature 98·4°; pulse 80.—8 P.M.: Complains of more pain about wound; some swelling above and below, with inflammation around; not taken food very well to-day. Temperature 98·4°; pulse 68.

17th.—Slept well; wound painful; pain shooting up and down arm; no enlargement of glands in axilla; wound was laid open to let out some pus; tongue clean; continue poultice. Temperature 98·8°; pulse 80.—8 P.M.: During the day suffered from a severe rigor; some headache, thirst, anorexia, and general constitutional disturbance. Temperature 102°; pulse 112. Forty-five minims of solution of hydrochlorate of morphia ordered at bedtime.

18th.—Slept but little during the night; the least noise awoke him and made his arm jerk, an unhealthy discharge coming from the wound; part very painful, much swelling and hardness about it; skin hot, face flushed, thirst, no inclination for food, bowels confined, headache, and general feverishness. Put under chloroform, and a free incision made; much unhealthy pus let out; at the bottom of the wound, which was found to be very deep, nearly to the bone, a small piece of rough bone was discovered belonging to the tip of the arrow. It was removed, and the wound dressed. Temperature 100°; pulse 88. An enema of turpentine given; beef-tea, four ounces of wine, &c.—8 P.M.: Very restless during the day, unable to sleep in spite of hypodermic injections of morphia; the least noise or movement caused much spasm of the arm; taken but little food, drank much, vomited several times during the day; bowels not opened by enema; tongue coated with a white fur; headache. Temperature 100·6°; pulse 100. Ordered an injection of morphia.

19th.—Very restless during the night; if he fell off to sleep he was awoke with spasms in his arm. Complains of stiffness about the jaws and neck, unable to open mouth widely or protrude tongue freely, which is thickly coated with a brownish fur; unable to swallow solids, and some difficulty in taking fluids; pain about dorsal and cervical regions; slight spasmodic action of muscles of lower extremities. Temperature 99·4°; pulse 100. Suffers much from thirst; bowels constipated; passing water freely; occasional vomiting. The wound is not very painful; much stiffness and thickening about it; an unhealthy discharge, but not much of it. Redressed; enema of beef-tea, port wine, &c., given, and injections of morphia every five or six hours.—8 P.M.: Temperature 104°; pulse 120. Has slept but little during the day; suffered much from constant spasms in the arm; breathing short and hurried; difficulty in getting his breath at times; much distress in swallowing; able to take a little nourishment in small quantities; convulsions becoming more frequent and severe. Large doses of chloral hydrate were given per enema, but failed to promote sleep.

Between 12.30 and 3.30 A.M. of the 20th he suffered from two or three violent spasms. At 3.30 the first one came on, of the following nature:—Jaws firmly fixed; head and neck thrown back by the violent contraction of the muscles; body bent backwards to form almost a complete arch (opisthotonos); muscles rigid, felt like a piece of hard board; respiration hurried and laborious; pulse rapid, irregular, and fluttering at first, gradually getting smaller and smaller; countenance pale, anxious, and greatly disfigured, presenting a most pitiable appearance. The spasm lasted but a few minutes, when the patient fell back breathless and pulseless, and death closed the scene.

He suffered from slight delirium only a few hours before death; before that all his mental faculties were perfectly clear. He never lost control over bowels and bladder. The great absence of sleep was very marked in this case in spite of constant and large doses of chloral and morphia.

He died on the eighth day of the accident and some forty to forty-five hours after tetanus set in. Death appeared to take place from suffocation, in conjunction with extreme exhaustion.

(*To be concluded.*)

ON THE RAPID RELIEF OF NEURALGIC PAIN.

By SPENCER THOMSON, M.D.

Amidst the various improved methods of treatment which have become established in the practice of medicine during the last twenty years none are more strikingly beneficial than those which enable us to subdue, with tolerable certainty and celerity, the agony of neuralgic pain, or of what, for want of a better word, or perhaps deeper knowledge, we call neuralgia. It needs not but to refer to works on Practice of Medicine, published not so long since, to see how little comparatively in the way of relief could be afforded during the paroxysm. For this external applications were chiefly trusted to, in the hope, often vain, that they might in some degree palliate the suffering, until the disease itself had been conquered after a longer or shorter interval by the not always certain quinine, carbonate of iron, arsenic, or other antiperiodics. All this is greatly altered, and I think we may now congratulate ourselves that a large number of cases of so-called neuralgia may be quickly, either permanently cured by the relieving remedy, such as phosphorus, or relieved, until such time as specially curative agents, or curative general treatment, have removed the tendency to the recurrence of the pain. As one of the newest of the remedies, I would first allude to one which is much too slowly making its way into the domain of practical therapeutics; I allude to the recently introduced "tincture of Gelseminum sempervirens," or yellow jasmine. In my presidential address delivered before the South-Western Branch of the British Medical Association, in 1874, I alluded to this remedy as having proved very successful in my hands, and in a paper I read this year at the Plymouth meeting I was able to state how fully it had fulfilled my expectations during the twelve months that had elapsed since my former notice of it. Directly or indirectly it had been used by me, or by my authority, in at least forty cases to which it was applicable, and with almost constant success. In using the word "applicable," I do so in accordance with my own experience that the remedial power of the gelseminum seems confined to those branches of the trifacial nerve supplying the upper and lower jaw, more particularly the latter, and more especially when in either jaw the pain is most directly referred to the teeth or alveoli; indeed, I can scarcely recall an instance of the above in which relief was not speedily and thoroughly given. The usual expression of the patient has been, "It acted like a charm." In illustration I give one case.

On Sunday afternoon, June 20th, the housemaid of a friend, a retired medical man, came to me with a note from her master, stating that she had been suffering from agonising pain, of what was thought to be toothache, for six-and-thirty hours. Nothing gave relief, and no dentist could be found to remove the only suspicious tooth. I sent her home with a bottle of gelseminum tincture, which I keep for home use, desiring that she should have twenty minims at once, and twenty more within two hours if not relieved. Her master sent me a note in which he stated that the patient had experienced immediate relief.

The above case was not one of distinct toothache, but rather of pain affecting the alveoli generally of the affected jaw. Still, even in toothache seated in one tooth, the remedy gives relief, provided, of course, abscess is not actually in formation. I have observed above, that, according to my own experience, the beneficial effect of the gelseminum is confined to neuralgic pain of jaws generally, and of teeth and alveoli more particularly; and a short paper, in the *Practitioner* for August 1875, by Dr. Gamgee, of Birmingham, supports the view. In September, 1875, there were published some cases of other neuralgias, even one of sciatica, in which cure was effected, under the care of Dr. A. Jurasz, of Heidelberg. Should the remedy indeed prove generally useful in neuralgia, it will of course give it additional value in our materia medica, but at present it has gained no such position, either according to my experience, or, as far as I can learn, that of most others.

In the notices I have met with on the use of the gelseminum, the doses quoted seem all too small. I now almost invariably prescribe, for an adult, twenty minims of the tincture as a first dose, to be repeated any time after an hour and a half if relief is not given. I have rarely had to order a third dose, and I have never found any inconvenience result from the larger doses. In one instance, a gentleman who, unadvisedly, took thirty minims at once, and immediately afterwards went out driving, told me he experienced for an hour or two some uncertainty of vision when guiding his horse. A severe attack of neuralgia of the jaw was, however, cured by the one dose, and did not return. One young lady, to whom I gave two twenty-minim doses during the night for a severe neuralgic attack, more particularly of the temporo-auricular branch of the inferior maxillary nerve, complained of a little heaviness next morning. In this case little if any relief was given; but the teeth and alveoli were not implicated, and it is only when these are that complete relief can be calculated on according to my own experience.* The above case was at once cured by the solution of phosphorus, to be noted presently.

As further illustration, I may mention the case of a lady who was under my care last winter for local disorder, but who also suffered severely from neuralgia, attacking at one time the lower jaw and at another the orbital and frontal nerves. The gelseminum invariably relieves the maxillary pain, but has no effect whatever over the frontal. For this, however, for a long time at least, I found a most efficient remedy in phosphorus, given in the liquid form. The form I have used is that given by Ashburton Thompson in the *Practitioner* for Oct. 1873. It is taken without repugnance, rarely causing disorder of the stomach or eructation, and, what is most important, keeping perfectly. One of the cases I have mentioned was treated with a preparation which had been made four months at least. I have found a twenty-minim dose, equal to one thirty-sixth of a grain of phosphorus, give rapid relief, and, what is important, independent of locality.

Even phosphorus, however, we know, will, after a time, lose its power in some obstinate cases of neuralgia—at all events its power of giving rapid relief; and then it is that the invaluable hypodermic administration of morphia comes to our aid. This remedy, and its mode of administration, are too well known to require comment here; but it is far from being as generally employed as it ought to be. This, perhaps, is due to various causes, but of these I believe the principal are—the means of administration not being always readily available, and the objection of patients to the pain consequent upon the use of coarsely constructed instruments. The first of these objections I have endeavoured to meet by the use of a very portable hypodermic apparatus, enclosed in a metallic case, with ample supply of needles, and the great desideratum, an always moist and efficient piston; and by always carrying a supply of Sansom's gelatine discs, as made by Messrs. Savory and Moore. The second objection is met by the use of very fine steel needles only, as made for me by Mr. Hawksley, of Oxford-street. The discs, which contain one-sixth of morphia in each, are a very safe and efficient dose for most cases, although in some it may be well to begin with a less amount, and in many it may be advisable to increase the dose considerably—half a grain, or even double that amount. I may here give it as the result of a very large experience in the hypodermic administration of morphia, that concentrated solutions are the reverse of advantageous. In the first place, they are not so safe as the more dilute; and, in the second, they do not act so quickly and agreeably. The usual strength I employ is one grain of hydrochlorate of morphia in forty minims of water, rarely in thirty. The slight increase of bulk is of no consequence, and in administrations I can count by the thousand I have never seen the slightest bad consequence, in the way of abscess or otherwise, result to the patient.

With morphia, and occasionally—but only occasionally—atropia, to use hypodermically; with phosphorus in solution; with gelseminum, aided at times by the ordinary external appliances, such as heat, or freezing if need be; aconite, and chloroform,—one ought to feel fully prepared to meet and subdue at the time most cases of neuralgic pain, and, indeed, of pain generally.

Of course the after-treatment, which is to obviate the recurrence of the disease, does not fall within the scope of this paper. This paper would not, however, be complete without some notice of other remedies which have lately come to the front in the treatment of neuralgia. Of these the Calabar bean, as advocated by Dr. Munro, deserves a thorough trial. In one case only have I used the discs introduced under the eyelid, but in that a severe frontal neuralgia was certainly alleviated; having other remedies in which I placed confidence, I probably did not persevere sufficiently. Fleming's tincture of aconite in one minim doses repeated at intervals of an hour, I have found relieve severe neuralgia of the eyeball, and the tincture of actæa racemosa very useful when pain in the same situation seemed the result of a general rheumatic condition.

The object of this paper, however, is not to enumerate the long list of remedies, internal and external, which have been used in the treatment of neuralgia—a list which shows how urgently a successful treatment was needed,—but rather to direct attention to the remedies I have dwelt upon. I cannot, however, close without adverting to Dr. Evans's paper in the *Practitioner* for September, 1875, upon "Nitrite of Amyl in Facial Neuralgia." His account of the relief afforded in the anæmic cases would point to this new agent as one requiring careful trial, hopeful of results.

Ashton, Torquay.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procœmium.

KING'S COLLEGE HOSPITAL.

OPERATIVE INTERFERENCE IN CASES OF CLEFT PALATE.

(By Sir WILLIAM FERGUSSON, Bart.)

AT p. 784, vol. ii. 1873, of this journal we described the details of operative procedure that had just been adopted by Sir William Fergusson for the closure of the cleft in the hard palate, in place of the Langenbeck operation. Although the operation had suggested itself to the mind of Sir William quite independently, and was thought at the time to be original, he subsequently discovered that a similar device had been recommended by Dieffenbach, although there was no evidence to show that that surgeon ever carried it into effect. Since the first notice, we have at various times published the notes of several cases in which the operation has been practised, and announced two or three modifications of the operation as originally performed. During the past eighteen months Sir William has operated in this manner in a large number of cases, both in hospital and in private practice, some of which would have been quite beyond the reach of the ordinary operation. Instead of stripping muco-periosteal flaps from off the hard palate, after the plan of Mr. Avery and Langenbeck, and bringing them together in the middle line so as to close the opening, Sir William Fergusson detaches a piece of bone on each side of the cleft, and then forces the bone, periosteum, and mucous membrane towards the middle line and fixes them there. The steps of the operation are briefly as follows:—The patient is first put under the influence of chloroform, followed or not by ether, and the jaws kept wide apart by means of a gag. The levatores palati and the palato-pharyngei muscles are then divided by means of a rectangular knife. After this the mucous membrane is pared from the edges of the cleft, care being taken to remove mucous membrane only. Two apertures are then made, with an awl, through the hard palate on each side of the fissure and close to the edge, the holes on one side exactly corresponding with those on the opposite side. A fine silk suture is then passed from the mouth through each of the holes on one side, across the floor of the nasal cavity, and made to enter the mouth again through the corresponding holes of the opposite side. An incision from before backwards is then made through the mucous membrane and periosteum on each side, just outside the sutures. The operator, by means of a small chisel, next cuts through the hard palate in the site of these incisions. The two pieces of bone thus detached are then forced towards the middle line, and fixed by means of the sutures. Where the hard and soft palates are operated on at the same time, Sir William usually puts two sutures into the hard palate, and three in the soft, and fixes them in the following order:—Reckoning from before backwards, the second suture in the hard palate is first tied, then the three sutures in the soft palate, and last of all the foremost suture in the hard palate. When everything is thus made firm, lint is placed into the apertures in the hard palate made with the chisel, and allowed to remain two, three, or even four days. The lint is then removed, the sutures taken out, and the parts left to recover. It is interesting to note that the hard palate soon becomes consolidated, so that in a few months it often seems to be bony throughout; or, if not bony, to be at least made up of very dense fibrous tissue.

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* That gelseminum has not yet received the attention it merits is evident from the difficulty of procuring it. During the meeting in Edinburgh in August, I inquired for it in vain at most of the principal chemists.

On Saturday last we saw the operation as described above performed on a man aged about thirty, whose case had previously been considered almost too bad for any surgical interference, the patient having for many years worn an obturator. On the same day we had the opportunity of observing the excellent results obtained in three or four other cases that had been operated on within the last four or five weeks, and are still in the hospital.

WESTMINSTER HOSPITAL.

SURGICAL CASES AND NOTES.

There are at the present time a number of interesting cases in Mr. Cowell's wards at this hospital. Among the cases in the Accident wards are two men who were injured at the same time by a boiler explosion. One sustained a compound fracture of the tibia and simple fracture of the fibula, and the other a severe contusion of the back by the forcing open of a door. The right half of the back seems to have received the full force of the flat margin of the door, and the skin covering its whole surface is black from ecchymosis. Over the lumbar vertebræ and extending over the left loin there was an enormous thrombus. No damage to the spine was apparent beyond some contusion, and the only symptoms were, for the first twenty-four hours, retention of urine, and for about three days some numbness of the right leg.

In St. Matthew ward we noticed a good, nearly healed stump after amputation of the thigh. The patient, a man about twenty-three years of age, had been the subject of strumous degeneration of the knee-joint, with abscesses burrowing in all directions; and the case had been an unfavourable one for resection of the joint. The disease was of long standing, the joint being thoroughly disorganised, and some of the cartilage at the back of the patella had been removed. The patient has made an uninterrupted recovery, notwithstanding that the walls of abscesses entered largely into the surfaces of the flaps. A patient in an adjoining bed is a good instance of the rapidity with which an ulcer often heals after transplantation of skin.

In St. Mark's ward we saw an old man who had undergone amputation of the leg a few days ago. His stump, which so far looked remarkably well, had no dressing of any kind—a condition in marked contrast to the thigh-stump before mentioned. Mr. Cowell remarked that he observed no fixed rule with regard to dressings. In some he preferred none, in others he thought the support and protection of dressings of service, and in a few cases he had adopted Professor Lister's antiseptic plan of dressing with great advantage. In this case he had discarded dressings in order that any occurrence of hæmorrhage might be at once known by constant observation of the stump, and that any dragging of the flap upon the prominent end of the tibia might be avoided by the careful adjustment of a small pillow beneath the end of the stump; and he was further anxious to avoid the lowering of the vitality of the margins of the flaps which is sometimes induced by a continuation of the use of cold wet dressings. The man is in a low condition of health, and a previous amputation of the great toe, with its metatarsal bone, had been followed by considerable sloughing and subsequent mischief.

In Holland ward there is a very good example of a menstrual ulcer of the leg. The patient is about twenty-three. The uterus is very imperfectly developed, and she has always menstruated scantily; but during the last four years the discharge has entirely ceased from the uterus, and the function has since always been performed through the ulcer. Ten months ago Mr. Cowell had a similar ulcer under his care, which rapidly healed on the re-establishment of the healthy function. In this ward there is also a case of resection of the knee in a little girl.

In Percy ward is a patient from whom Mr. Cowell removed an enormous adenoid tumour of the right breast about four months ago. The growth, which was nearly as large as the patient's head, presented some of the characteristics of malignant growth, and the skin was much implicated. Nearly the whole of the skin had to be removed with the tumour, two triangular flaps only being saved from the upper part of the mass for the purpose of affording a covering for the wound. A section of the growth showed it to be of an adenoid character. The greater part of the wound healed. Nodules of new growth, however, soon appeared in the flaps above mentioned, and speedily coalesced and formed large round lobes. Ulceration ensued, with considerable discharge. The growths were subsequently dressed with a chloride of zinc and opium paste, by means of which the growths have been almost entirely destroyed, and little or no discharge remains. The patient is, however, in a very weak state. The return growths have shown a remarkable tendency to exfoliate and come away.

Another case is that of a woman who is just convalescent from necrosis of the whole shaft of the tibia. Mr. Cowell removed it by laying two cloacæ into one and dividing the large sequestrum in half with a strong pair of bone forceps; the anterior half of the bone was divided first, and the upper and lower portions were separately withdrawn from the wound; the posterior half was then treated in the same way, and all the necrosed bone removed. The large cavity thus left has gradually filled up and contracted, and a good strong tibia is the result.

In this ward there are three cases of hip disease in children. One, in the early stage, has been treated by extension with a weight for two months, and is now convalescent. Another had adhesions, with the limb fixed in a flexed position; under chloroform the adhesions were separated, a long splint was applied, and the patient has made an uninterrupted recovery. In a third case there are some complications; some disease of the pelvis accompanies the hip mischief. A large abscess of the thigh was first emptied with the aspirator, and subsequently two free openings were made, one above and the other below, under the carbolic spray. Drainage-tubes were introduced, and the dressings were daily renewed on the antiseptic plan, and with the best result. The case is, however, one in which there is not much to be done.

In Queen Anne ward there is a case of fracture of the olecranon; also a case of a child who was run over, in whom the pubic bones were separated three or four inches, with some laceration of the vagina. The right thigh was the seat of a contused wound, extending from Poupart's ligament, winding round the inner side of the thigh, and terminating below the popliteal space. This wound was followed by a good deal of sloughing. A catheter was passed, and it was found that, fortunately, the bladder had escaped injury. The pubic bones were gently pressed together, the wound dressed, and the legs kept together by a couple of sand-bags. Although this at first appeared to be a very serious case, the child made an uninterrupted recovery. The child is now made an out-patient, but the wound is not yet healed in the region of the popliteal space, and a splint will be required for some time to prevent contraction of the knee.

HÔPITAL ST. ANTOINE.

CASES OF SYPHILITIC HEADACHE AND NEURALGIA CURED BY CALOMEL IN SMALL AND REPEATED DOSES.

(Under the care of Dr. Peter.)

In syphilitic headache, which is always so painful and often produces obstinate insomnia, as well as in neuralgia of venereal origin, Trousseau used to prescribe calomel in very small and repeated doses; for instance, one centigramme (or about one-sixth of a grain) a day, divided into ten doses, administered at one hour's interval, so that the patient would take one milligramme only (or about one-sixtieth of a grain) every hour.

Dr. Peter, following Trousseau's example, uses this drug in similar cases as well as in doubtful ones, in which it has the excellent effect of speedily determining the nature of the disease.

Dr. Peter often quotes the instance of a young girl who entered Trousseau's wards for a severe facial neuralgia. For more than fifteen nights the patient had not slept, on account of the intensity of the nocturnal pains. The illustrious "clinician" noticed on the girl's temple the presence of a very small tumour, painful on pressure, and which he thought must be of syphilitic origin. Possibly the tumour rested on some filament of the temporo-facial nerve and produced irritation of it. Anyhow, he resolved to prescribe calomel immediately in doses as above described. The very same night the young woman slept four hours. The next night was attended by perfect sleep, and the pain disappeared entirely on the third day, though the size of the tumour had not much decreased.

Amongst other cases treated in like manner by Dr. Peter, the following are worthy of being noted.

A woman, aged twenty-three, was admitted on October 9th, 1874, for various syphilitic manifestations, large *plats muqueux* of the vulva and anus, a general papulo-squamous syphilitic eruption, &c. For these lesions the patient had already been put under a course of protoiodide of mercury before entering the hospital. But her chief complaint was a most violent nocturnal headache, beginning at 4 P.M. and lasting till 4 A.M., and which completely deprived her of sleep. Moreover, she had fever, and complained of intense pain along the nerves of the left arm and in the brachial plexus of the same side. On October 10th, instead of continuing the use of the protoiodide of mercury, as had been prescribed in town, Dr. Peter ordered one centigramme of calomel in ten doses, each to be given at an hour's interval. The next day (the 11th) the patient's report was that she had suffered less during the night. The headache commenced only at 6 P.M., and left her at 2 A.M., after which time she was able to sleep. The pain in the arm had been the same. In the night of October 11th-12th the headache almost completely disappeared. It commenced very slightly at 7 P.M., and was so slight that the patient was able to sleep almost the whole night. The fever had also ceased. The calomel was then discontinued, nevertheless the night of October 12th-13th was excellent. The headache went off entirely, and the pain in the arm had diminished considerably. From that moment the classic treatment of syphilis—viz., the protoiodide of mercury—was resumed in order to combat the other syphilitic manifestations.

In another woman, who entered Dr. Peter's wards on the 20th of February this year, the syphilitic headache had been going on for nearly a month. It had been general at first, but after a fortnight became confined to the left side of the head. As usual, the pain was much more intense at night than in the day, and prevented sleep. Together with this headache, the patient complained of an intense pain in the right side, and indeed it was for this latter ailment that the patient had sought admittance into the hospital. Dr. Peter stated that it was seated in the situation of the chondro-costal articulation of the left side, which was slightly tumefied. Moreover, the patient had syphilitic roseola. On Feb. 22nd ten milligrammes of calomel were prescribed, but through some mistake only two were given. The patient suffered much from the head during the night. On the 23rd ten doses were administered. The headache disappeared almost completely, and the patient slept for ten hours. On the 24th, the stitch in the side, which had been already less painful two days before, when only two doses were taken, diminished to such an extent that it required rather strong pressure to produce any pain. On the 25th the ten doses were again forgotten, and the patient did not sleep so well as on the previous night. The sleep was, however, better than at first, and the headache less intense than before the calomel was used. The ten doses were given this day, and the patient slept from 8 P.M. till midnight. From that hour she only got sleep in snatches, but without having any pain in the head; the pain in the side had by this time completely disappeared. On the 27th the general treatment of syphilis with a syrup containing iodide of mercury and iodide of potassium was commenced. The headache was only felt two hours in the nights of the 27th and 28th, and afterwards entirely ceased.

The remarkable features of this mode of treatment, says Dr. Peter, are—first, the rapidity of its action; next, the fact that it is successful in cases where the really specific treatment of syphilis fails. It constitutes, in a manner, *the* medicine of nocturnal syphilitic pain; but cannot replace the other plan of treatment for other syphilitic manifestations. Its use is indicated whenever nocturnal pain is very intense and interferes with sleep. It diminishes pain and its consequences the very first night it is given, and generally extinguishes suffering by the second night. The treatment may be carried on for three days, and that period of time is almost always enough for its success. If, however, the desired result has not been obtained, it ought then to be suspended for one or two days, so as to prevent salivation; and it can be resumed afterwards for two days successively, in which case Dr. Peter has never seen it fail.

Dr. Peter thinks that this plan of treatment is thus efficacious because—first, the drug is mercury; and, secondly, the absorption of these very small doses is exceedingly rapid, and the repetition of the action takes place every hour. Whatever the explanation may be, adds Dr. Peter, it is to Trousseau that he is indebted for the idea of using calomel in this manner, and to him belongs all the credit.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 2nd inst., Mr. George Pollock, the President, occupying the chair. Several specimens of interest were shown, and at the close of the meeting the list was far from exhausted. Among the more striking specimens were examples of visceral syphilis, contributed by Mr. Gould and Dr. Greenfield; a case of cancer of both male breasts, by Mr. Wagstaffe, accompanied by full statistical details; calculi of cystin, by Mr. Heath; and a rare form of carcinoma, by Dr. Fagge.

During the evening Dr. H. J. Philpot was elected a member of the Society.

The proceedings commenced by Dr. COUPLAND relating briefly the results of his microscopical examination of the specimens from a case of Infantile Syphilis shown by him at the last meeting. In the heart there occurred abundant infiltration of small round cells imbedded in a structureless matrix, and separating bundles of muscular fibres, many of which were atrophied. The infiltration was most marked around the vessels. In the lung the gummatous nodule was composed of a reticulum of fibrous tissue, with round cells in its meshes, while at the margins of the growth there was an infiltration of the alveolar wall, causing compression of the air-cells. There was periarterial and peribronchial thickening. In the liver, the central parts of the gumma presented similar characters to that in the lung, and at the margins of the mass there was a similar infiltration of round cells between the hepatic cells, and in the portal canals. Lastly, he had examined the kidney, which presented a normal appearance to the naked eye, and had found essentially the same change in that organ—viz., a massing of nuclei around vessels and between the tubules in the cortical portion of the gland; in fact, an interstitial nephritis.

Mr. GOULD showed a specimen of Syphilitic Disease of the Heart, taken from the body of a man forty years of age, who had died suddenly. There was found a large pulmonary apoplexy on the left side, but no other lesion save in the heart, where the anterior wall of the right ventricle was occupied by greyish-white tissue extending as far as the ventricular septum, and invading the wall of the right auricle. The left ventricle was healthy. Microscopically there was an infiltration of small round cells between the muscular bundles on the surface of the heart, while the centre of the mass was wholly composed of fine fibrous tissue forming a reticulum containing round cells. There was no history obtained, except that for some time past the patient had suffered from cardiac dyspnœa; and Mr. Gould remarked that the characters of the growth were those usually described as syphilitic.

Dr. Greenfield showed a specimen of Syphilitic Pneumonia, interesting chiefly on account of its bearing on the case shown by Dr. Coupland. The specimen, of which also microscopic sections and drawings were exhibited, was removed from the body of a child twelve months old, who died in the out-patient room at St. Thomas's Hospital. There was no history of acute illness. The child had suffered from cough for some time. The history altogether was scanty. At the post-mortem examination the whole of the right lung was found to be solid, extremely dense, and tough; the pleura was slightly inflamed, but free from old thickening; the bronchi, slightly inflamed, contained mucopurulent fluid; the cut surface of the lung was of a yellowish-white colour, and on close examination the tissue appeared to be everywhere interspersed with fibrous bands of varying thickness. Microscopically a great part of the lung structure was found to be taken up by a new growth, consisting of an enormous infiltration by a small-celled growth around the vessels, and of vascular fibrous tissue in various stages of development, producing thickening of the walls of the air-cells. The air-cells were compressed and in many places destroyed, but their epithelium was in great measure normal. In some places there was catarrhal or fibrinous exudation into the air-cells. Dr. Greenfield remarked that the condition of the lung resembled that described under the name of syphilitic pneumonia or diffused syphilitic cirrhosis, when occurring in newly-born children; and from the history of the case, the age of the disease, and the striking resemblance of the new growth to the infiltration round the gumma in Dr. Coupland's case, he was inclined to believe it to be syphilitic. At any rate he would be glad to know whether there were any distinctions between the clinical or pathological characters of syphilitic infiltration and chronic pneumonia or cirrhosis.—Dr. Goodhart drew attention to two specimens which he had brought forward about two years ago: the one he had styled "syphilitic pneumonia" was associated with other evidence of syphilis; the other presenting much the same characters as those described by Dr. Greenfield, occurred in a boy after fracture of the ribs.—Dr. Green said that no doubt the changes described by Drs. Greenfield and Coupland were such as are met with in the lungs of syphilitic infants, but it was open to question as to how far the infiltration described was peculiar to syphilis. The change was simply that due to a chronic inflammatory process, and collateral evidence was necessary before ascribing the change to syphilis. He alluded to cases which he had seen.—Dr. Greenfield inquired whether in these cases the change was general throughout the lung, or had occurred only in patches, and whether there was any evidence of the disease having originated in an acute pneumonia?—Dr. Green replied that in such cases—whether "cirrhosis" or chronic pneumonia arising out of acute change—there was no histological character distinctive of the one or other process.

Mr. Wagstaffe exhibited a male patient who had been the subject of Cancer in both Breasts. In March, 1874, the man came for advice, having a large nodular growth, implicating the skin, in each breast, and induration with enlargement of the lymphatic glands in the left axilla. Both breasts were removed, and the patient made a good recovery. Subsequently a portion of the larger masses in the left axilla was removed. There has been no indication of recurrence. Dr. Creighton had examined the tumours, which were examples of true scirrhus, and stated in his report that the acini of the mammary gland were well marked, in some places a germination of epithelium presenting a ridged and fenestrated appearance. The alveoli were formed by bands of fibrous tissue, including an adenoid network, an appearance favouring the view held by Waldeyer as to the perivascular growth of mammary tumours. The softer parts of the larger tumour were composed of masses of cells in places caseous, but doubtless developed from the acini of the gland. Mr. Wagstaffe then gave an interesting statistical account of cancer in the male breast. He had collected 51 cases, including 42 recorded by Mr. Milton in the 40th volume of the Medico-Chirurgical Transactions. The right breast was about as often affected as the left. The age of the subjects varied from twenty-five to eighty, and the duration of the disease from one to eight years. In the majority the adjacent tissues were infiltrated, and although there was often decided constitutional infection, yet some benefit was derived from operation. Among the successful cases he mentioned one operated on by Mr. Cæsar Hawkins, the patient surviving six years; and one recorded by Warren of eleven years' duration. In the Paris Register, out of 9118 cases of cancer, only five occurred in the male breast. The present case was further unique in the implication of both breasts, and that at so short an interval from one another.

Mr. Croft exhibited a specimen of Sarcoma of the Breast also removed from a male subject. The patient was fifty-two years of age, and the tumour, which was of rapid growth, projected in a series of three prominences from the breast; the upper part of it was soft and elastic, the rest being firm; the skin was involved. On removal it proved to be a spindle-celled sarcoma, confirming the diagnosis of its nature which Mr. Croft had first adopted. The patient did not rally from the operation, and died eight days afterwards.—Mr. Maunder referred Mr. Wagstaffe to a specimen of scirrhus cancer of the male breast in the museum of the London Hospital.—Dr. Coupland inquired whether any special allusion had been made in Dr. Creighton's report on Mr. Wagstaffe's case to any vacuolation of the mammary gland cells at the growing margin of the cancer, as this was a character insisted on by Dr. Creighton himself as of essential importance in the development of new growths. Dr. Coupland added that at the margins of the syphilitic gumma in the liver he had just described there was notable vacuolation of the hepatic cells, confirmatory of Dr. Creighton's views.—Mr. Wagstaffe stated that here and there vacuolated cells were met with, but they did not appear to be specially related to the development of the cancer in his case; and their presence had not been laid stress on by Dr. Creighton.—Mr. Marsh pointed out that fibrous tumours beneath or in the neighbourhood of the mamma might be mistaken for schirrus, and he referred to a case where a fibrous growth beneath the gland was prior to removal held to be cancerous.—Mr. Wagstaffe explained that he only tabulated cases which had been recorded as "cancer." Doubtless some were not malignant.—The President had seen three cases of true scirrhus in the male breast. One case, in which he had operated about nine years ago, was still living. Another case was followed by recurrence, but the patient was lost sight of. Lastly, the third case was that of a gentleman from the West Indies, on whom removal was practised two years ago, with, as yet, no recurrence. He saw the case operated on by Mr. Hawkins, the patient dying from apoplexy six years after.

Mr. Heath showed specimens of Cystin Calculi removed from a male twenty-eight years of age, who had previously passed a few calculi when he was seized with retention of urine. Passage of a catheter disturbed numerous calculi, which Mr. Heath extracted by median lithotomy. The calculi were 19 in number, all but 3 being imbedded in the prostate. They were of greasy section, not yet green in colour, a change which Mr. Heath pointed out was due to exposure to light, supporting this statement by one or two interesting facts. It was curious that so many of the calculi should have occurred in the prostate, since they are certainly of renal origin. The larger ones from the bladder presented a nucleus and concentric lamination of their outer layers, the latter character being unusual in cystin calculi. Only once after the operation was cystin found in the urine. Mr. Heath showed a specimen of the same calculus removed by Liston by lithotrity, and he read passages from a letter from Sir Henry Thompson concerning the only case that gentleman had had.—Mr. Hicks, who had examined the calculi chemically, microscopically, and by means of the polariscope, stated that they were almost wholly made up of pure cystin, even the larger ones in which the lamination occurred. He had found, further, that cystin crystallises in two forms—viz., (1) in six-sided prisms, as usually described; and (2) in four-sided tables;—the latter from hot solutions.

Mr. Heath then exhibited a specimen of Epithelioma of the Tongue and Lower Jaw, from a male aged fifty-two.

When first seen there was extensive disease in front of the tongue, with infiltration of the sublingual tissues. Two months later Mr. Heath removed the diseased structures by laying open the lip down to the hyoid bone, sawing through the jaw on each side of the symphysis, and removing part of the tongue and subjacent soft tissues with the galvanic écraseur. The patient made a good recovery, and although three inches of the jaw were removed, the two halves came well together. The tongue was chiefly free from disease. There was not much pain in the part, but the patient had suffered from pain in the occipital region, which disappeared after removal of the mass. This could hardly be due to extension of the disease to the base of the skull, as in a case recently reported. He also showed a specimen of Cancer of the Rectum, in which colotomy had been performed two years and nine months before death. At the time of operation there was difficult defecation, and an epitheliomatous mass protruded from rectum. The disease involved the vagina. Besides the local mischief, there was found after death a large mass of secondary growth in the liver, far advanced in degeneration.

Dr. Hilton Fagge showed a specimen of Carcinoma Lipomatosum, obtained from the right kidney of a female aged fifty-seven, who died from bronchitis and emphysema. The left kidney was granular. The right kidney was smooth on the surface, here and there exhibiting whitish nodules, and the whole of the hilus was occupied by what appeared to be fat, only it grew into the substance of the organ, and invaded the renal vein. It did not grow into the pelvis or calyces, which were compressed by it. When examined in the fresh state under the microscope it seemed wholly made up of fat-cells, but after hardening it presented the typical alveolar structure of carcinoma, resembling the variety mentioned by Cornil and Ranvier, who were the only writers who mention its existence. There were no secondary nodules.

Mr. Knowsley Thornton showed a recent specimen of a Gangrenous Ovarian Cyst. The patient, twenty-eight years of age, was four months and a half pregnant when she came under the care of Mr. Spencer Wells for an ovarian cyst. The cyst was tapped, a procedure followed by slight rise of temperature on the few following days. Five days after tapping the patient became suddenly collapsed, with thready pulse and falling temperature. She slightly rallied, but next day, when ovariotomy was decided on, the alarming symptoms were again renewed. Methylene was administered during the operation of removal, and she seemed to improve, but died the same night. The cyst, which had been to the right of the pregnant uterus, was found lying behind this and to the left, the pedicle being twisted and the cyst itself in a state of gangrene. The fluid in the peritoneum, too, had a mawkish odour.

The meeting then adjourned.

MEDICAL SOCIETY OF LONDON.

At the meeting held on Nov. 1st, Dr. Routh, President, in the chair, the time was principally occupied by a revision of the laws of the Society. Some alterations were made, amongst which was a change of the hour of meeting from 8 o'clock to 8.30.

At a late period of the evening Mr. W. Adams exhibited a patient on whom he had operated for Obliteration of Depressed Cicatrices. The patient, Miss S——, aged twenty-six, had presented four cicatrices on the neck, one of large size on each side below and behind the angle of the jaw, and one on each side under the jaw towards the chin, the two latter being of small size, but deeply depressed, with adhesions to the bones. Of the two former the one on the right side was deeply depressed and adherent to the bone, but the corresponding one on the left side was not depressed. All these cicatrices were the result of abscesses caused by necrosis of the jaw-bone proceeding from difficult dentition in cutting the wisdom teeth at the age of twenty. The teeth had been extracted with difficulty, but small portions of bone continued to come away for several years, and all the molar and some other teeth on both sides of the lower jaw had to be removed. The operation performed for the large depressed cicatrix on the right side consisted in subcutaneous division of all the deep adhesions, and then thorough eversion of the cicatrix, turning it as it were inside out, and keeping the cicatricial tissue raised by two needles passed through its base. This tissue, at the time swollen and infiltrated, gradually sank to the level of the surrounding skin after the removal of the needles on the third day. Since the operation, performed more than three years ago, there had been no disposition whatever to a return of the depression, and but a very slight trace remains of the cicatrix. The two smaller cicatrices had been excised, but in one of these depression returned, and at the desire of the patient the subcutaneous operation was performed a month ago, and to all appearances is perfectly successful. Mr. Adams, in conclusion, remarked that the present case was the third in which he had operated by this subcutaneous method, first suggested and performed by himself in March, 1864.—Mr. Spencer Watson congratulated Mr. Adams on the success of the operation in the present instance.—Mr. Coles asked Mr. Adams if he would operate in this way for depressed cicatrices in the groin.—Mr. Royes Bell related a case of a depressed cicatrix with eversion of the eyelid, in which he operated a first time by Mr. Adams's method and failed, but a second time, by transplanting a flap, succeeded.—Mr. Hainsworth did not see any advantage to be derived from operating on cicatrices in the groin.—Mr. Adams, in reply, said he had not operated in this way on the groin, but thought the method might be applied with success.

Mr. Hainsworth exhibited a portion of Meat Preserved by a New Process, which he believed applicable to dissecting-room purposes. The meat had been put in the liquid (of which the ingredients were nitre, common salt, borax, and boracic acid) in March, 1874, and had no smell.—The President and Mr. Lang made a few remarks, and the meeting adjourned.

Reviews and Notices of Books.

Atlas of Skin Diseases. Consisting of a Series of Coloured Illustrations, together with Descriptive Text and Notes upon Treatment. By Tilbury Fox, M.D., F.R.C.P., Physician to the Department for Skin Diseases in University College Hospital. Part I. London: J. and A. Churchill. 1875.

Illustrations of Clinical Surgery, &c. By Jonathan Hutchinson, F.R.C.S., Surgeon to the London Hospital. Fasciculus I. London: J. and A. Churchill. 1875.

Quite recently the first instalments of these two contributions to pictorial medicine, which are likely to prove valuable and interesting to the members of the profession, have been issued from the well-known publishing house of Messrs. J. and A. Churchill. We have used the words "valuable and interesting" advisedly, for although the opinions of teachers are greatly divided as to the merits of diagramatic representations of disease, it must be confessed that the majority of practitioners and students have a great weakness for works of this class. It is true that some teachers strictly forbid the use of anatomical and physiological atlases in their class-rooms, as calculated to tempt the already too willing student from the rugged roads of experimentation and induction into the pleasanter but less certain paths of imagination and deduction. And it must be acknowledged that the conduct of such teachers is in the main worthy of approval, more especially if graphic illustrations are made to take the place of original study and practical observation. No one can become an anatomist merely by studying an anatomical atlas, for although such an atlas may be legitimately employed to impress more deeply upon the mind of the student the knowledge he has previously gained by dissection and the handling of the dead body, it can, of course, never supplant the actual interrogation of Nature. But if anatomy cannot be learned by means of diagrams and illustrations alone, how much less can a real and substantial knowledge of morbid changes be acquired by such means! To attempt to become a practical physician or surgeon, or, indeed, a physician or surgeon of any kind, by means of an atlas, would be as useless and vain as to attempt to become a geographer merely by studying maps. What maps are to the geographer anatomical and pathological delineations are in many respects to the medical student. They serve as records and standards of reference of what has already been accomplished, as well as to suggest, if they do not actually point out, the direction in which we must travel in search of fresh knowledge. With these qualifications and limitations we give the works before us our hearty approval.

The first part of the Atlas of Skin Diseases, by Dr. Fox, is a new and improved edition of the classical work issued by Bateman in 1817, which, in its turn, was an extension and elaboration of the excellent delineations of Dr. Willan, published in 1798. As Dr. Bateman improved upon Willan's work, Dr. Tilbury Fox has improved upon and even perfected Bateman's work. Of the seven figures in the four plates of the first part of this atlas, which comprise the erythemata and urticaria, four are new; and it is announced that, of seventy-two plates, more than half will be original, the remainder being those used from "Willan and Bateman," but in many cases improved so as more faithfully to represent the appearances of disease. Judging from the merits of the drawings in this part, we have little hesitation in saying that the completed work will prove to be one of the best atlases of the more common forms of skin diseases extant. To say that the work is issued under the editorial supervision of Dr. Tilbury Fox, and that the letterpress is from his pen, is to give the best guarantee of excellence and accuracy. These qualities, together with the low price at which the parts are issued, will, we are confident, secure for this beautiful atlas the large patronage which it deserves.

The Clinical Illustrations of Mr. Jonathan Hutchinson make their appearance under less auspicious circumstances. But if they have not the traditional admiration of several generations of medical practitioners in every quarter of the globe, they have at least the confidence and respect that are paid to the originality and the patient industry of their highly-esteemed author. Mr. Hutchinson enjoys, and has enjoyed for many years, the reputation of being one of the most indefatigable note-takers in London. It is to this praiseworthy habit that we are indebted for these valuable illustrations, which it is proposed to issue in quarterly fasciculi, and it is stated that enough is already in the artist's hands to extend over two years at the proposed rate of issue. When completed the illustrations will embrace affections in all the departments of practical surgery and in every part of the body. The first fasciculus contains four plates of the highest order of excellence, not only as representations of diseases, but as examples of artistic skill. In the first plate is given an almost life-like representation of an encephalocele in an infant, at the root of the nose, the cerebral tumour protruding through the frontal and ethmoidal bones. The second plate illustrates a large ivory exostosis of the right orbit in a woman aged fifty. In the third plate are given three illustrations of the most common forms of rodent ulcer. In the letterpress that accompanies this plate Mr. Hutchinson alleges his belief that so-called rodent ulcer is really a form of cancer, its peculiarities, in distinction from cognate forms of cancer, depending upon the tissue in which it commences. "If cancerous action," says Mr. Hutchinson, "begins in the prolabium, epithelial cancer will be the result; if on the eyelids, rodent cancer." Rodent ulcer may, however, in the early stages, be permanently cured, and even in the later stages its progress may be entirely arrested, the loss of tissue being often replaceable by transplantation or other means. The fourth and last plate of this fasciculus illustrates some of the different forms of chancre of the penis, Fig. 1 representing an inflamed indurated sore on the glans penis, Fig. 2 a hard sore with great induration on the prepuce, and Fig. 3 showing numerous small sores at the orifice of the prepuce.

After what we have stated above, it is hardly necessary to repeat that we are greatly pleased with both the works referred to, and strongly recommend them to our readers, especially to those who are removed from the great tutorial centres, and have few opportunities of observing some of the less common forms of disease in the living subject.

Zoology for Students: a Handbook. By C. CARTER BLAKE, D.Sc. With a Preface by RICHARD OWEN, C.B., F.R.S. London: Daldy, Isbister, and Co. 1875.

THIS book professes to be the substance of lectures delivered at a metropolitan hospital, and the author tells us in his preface it is his aim "to impart to others the teaching which I had received from the great master of the science in England, in order that younger comparative anatomists .... might be able to transmit to a future generation, in the days of a retrograde anatomy, somewhat of the traditions of Hunter and Owen." We have quoted the author's own words so far in order to show how admirably he has carried out his task! For not only has he imparted the *traditions* of his master, but he has given in so many places his *ipsissima verba* that there can be no mistake he has acted up to his desire. We propose further on to show how this work has been carried out, but we may first examine it as if it were original, and really what it professes to be—a textbook for students. In the first place, then, the whole construction of the book as a zoological handbook is faulty. There are no tables of classification worth noting, and the main subdivisions of the animal kingdom here employed take us back to the days of Cuvier and Lamarck. Thus, among the Invertebrata, we have the divisions of the Mollusca, Articulata, Radiata, and Acrita, and such a "retrograde" course as associating the Molluscoidea with the Mollusca, and retaining a division by which the Annuloida and Cœlenterata are curiously intermingled. We may overlook such conservatism as this in the higher divisions, but when it comes to grouping the class Crustacea under the head of Arachnida, and separating the Acalephæ (still old-fashioned) from the rest of the Hydrozoa, and positively making no mention of the Rotifera (save incidentally under the head of the Infusoria), we lose all patience, and feel inclined to close the book in disgust. The Polyzoa, too, are dragged back to their old place among the Radiata, as if their affinities with the Ascidians had never been made out. Other anomalies would, doubtless, meet the eye if there were an index to the work; but this positive necessity for a scientific textbook—above all, one on zoology—is conspicuous by its absence. The illustrations are many of them old, a few perhaps new, but none of them of much value as explaining the descriptive text on those points where diagrams are most needed. As for the text, we are bound to say that we have seldom met with a work in which compilation more abounded; it is a very patchwork; a passage here and a passage there taken from other writings held together by an original sentence make up the sum of the work.

The work which has been the most laid under contribution is Prof. Owen's "Palæontology." Nearly the whole of the palæontology in the present handbook has been transcribed *verbatim et literatim* without acknowledgment or even a single inverted comma to denote that any other teacher but the writer is speaking. We will give a few passages to show how thoroughly Dr. Carter Blake has followed in the footsteps of his master; premising that he carries his devotion so far as not to confine himself to descriptions of extinct forms, but even to use the definitions of certain classes of living animals which Prof. Owen has prefixed to his palæontological writings, to stand in the text of the handbook as descriptions of the classes referred to. We may instance on this head the description of Cephalopoda on p. 243 (pp. 95 and 96 in the "Palæontology," 2nd Edition), of the Pteropoda on p. 265 (p. 80, *loc. cit.*), of the Articulata, p. 278 (p. 41, *loc. cit.*):—

From CARTER BLAKE'S "Zoology for Students." 1875.	*From* OWEN'S "Palæontology." 2nd Ed. 1861.
"The general form of the skull and aspect of the nostrils places Dinotherium in an intermediate series between *Manatus* and *Elephas*; but limb bones have been found so associated with teeth as to prove that the Dinotherium was a hoofed quadruped of aquatic habits, apparently transitional between the large Lophiodons and the Proboscidians. The Dinotherium is found in the Miocene deposits of Germany, France, Spain, Switzerland, and India."—p. 40.	"In the general shape of the skull and aspect of the nostrils *Dinotherium* most resembles Manatus: but bones of limbs have been found so associated with teeth as to determine the *Dinotherium* to be a hoofed quadruped, of probably aquatic habits, and transitional, as it would seem, between the large Lophiodons and the huger Proboscidians. The evidences of the genus have been discovered in miocene deposits of Germany, France, Switzerland, Perim Island, and Gulf of Cambay."—p. 385.
"No form of elephant is now known in the old world, but in the Post-Pliocene period; the mammoth of species identical with that of England and Siberia ranged over the whole of the North American continent, co-existing with the true gigantic mastodon, and with a second species of true elephant (*E. texianus* mihi seu *Columbi*, Falc.), the teeth of which showed molar plates wider apart, with broader cement valleys, and more alike in form to the existing Asiatic elephant than was the old mammoth, whose teeth were adapted to browse on the branches of the northern pines, birches, and willows. The mammoth and the tichorhine rhinoceros have passed away. The gigantic bovine animal which was their contemporary (*Bubalus moschatus*), and which was like them covered with a thick, hairy coat, the better to adapt its essentially tropical organisation to the cold climate of Siberia, still exists up to the seventieth degree north latitude, and affords in northern regions almost the only gigantic representative of the Post-Pliocene fauna."—p. 42.	"These huge elephants (*i.e.*, the mammoths), adapted by their clothing to endure a cold climate, subsisted on the branches and foliage of the northern pines, birches, willows, &c.; and during the short summer they probably migrated northward, like their contemporary the musk-buffalo, which still lingers on, to the 70th degree of N. latitude, retreating during the winter to more temperate quarters............ The mammoth seems to have enjoyed a wider geographical range than any other extinct elephant. Its remains have been found in the British Isles, continental Europe, the Mediterranean, Siberia, and throughout a large portion of North America, where it co-existed not only with the gigantic *Mastodon Ohioticus*, but also with a second species of true elephant (*Elephas texianus*, Blake), the teeth of which were more adapted to a succulent vegetable diet. Existing elephants are confined to the old world."—p. 395.

It will be seen that but for a slight re-arrangement of the text the passage last quoted from the work under review is almost word for word the same as that written by Professor Owen fourteen years ago. A few more examples will suffice to show that the same curious similarity obtains in other parts of the two works. We find abundant illustrations of this in the chapter on Reptilia—*e.g.*:—

From CARTER BLAKE'S "Zoology for Students," 1875.	*From* OWEN'S "Palæontology," 2nd Ed., 1861.
"Order I. Pterosauria. (Extinct.)	"Order VI. Pterosauria.
"The pectoral members in this order are always adapted for flight by the elongation of the antibrachium and fifth digit. The vertebræ are procœlian......The cervical vertebræ are very large; those of the pelvis are small. The anterior trunk ribs have bifurcate heads. Most of the bones are, as in birds, pneumatic. The head is large; the jaws are long, and armed with teeth."—p. 141.	"*Char.*: Pectoral members, by the elongation of the antibrachium and fifth digit, adapted for flight. Vertebræ procœlian: those of the neck very large, those of the pelvis small. Most of the bones pneumatic. Head large; jaws long, and armed with teeth."—p. 270.

The rest of the section on Pterosauria (p. 142), is made up of a long transcript from the "Palæontology" (p. 274), which is followed by a description of the Dinosauria, composed also of paragraphs from the older work, including even certain quotations from Buckland's writings, also found in Prof. Owen's book.

We might multiply examples without end to show how completely our author has identified himself with his master's labours. The description of the extinct Crustaceans on pp. 305 to 307 corresponds exactly with that on pp. 47 to 49 of the "Palæontology." Sometimes, however, the transcription has been so carelessly done as to alter the meaning of the passage, as, e.g., when "cilio*branchiate*," on p. 273, is given instead of the "cilio*brachiate*" on p. 54 of the original; and certain diagrams illustrative of the geological distribution of mammals and reptiles are inaccurately copied.

Thus, then, the authorship of this work belongs as much to Prof. Owen as to Dr. Carter Blake, and, at any rate, it would have been but fair that both names should have been given as authors. To be sure, the ostensible author tells us in his preface that "he had asked Prof. Owen to give his *imprimatur* to the work," and the title-page leads us to expect that the preface by the now venerable comparative anatomist would be a new one. But it is otherwise. This "*imprimatur*" consists of some "notes" taken from a "course of lectures delivered in the theatre of the Royal College of Surgeons of England;" it must, therefore, have been penned at least fifteen years ago. In fact, we doubt very much if Prof. Owen could have been aware of the liberties taken with his writings when he gave permission for the addition of these notes. If he was, would it not have been far better and far more likely to promote the success of the work if his name had appeared as joint author, and if in that capacity he had supervised a work that sadly lacks supervision? As it is, the student who thinks to find in this handbook a trustworthy account of the zoology of the present day will be grievously disappointed. Had the author only bestowed more care and labour on its production, he might have made it really what it professes to be. But he has not done so, and the appearance of such a volume can only be regarded as an anachronism: it has come into the world twenty years too late.

SCARLET FEVER of a malignant type has broken out at Coal Aston, and several deaths have occurred. The medical officer of health has recommended the closing of the National School, in order to prevent the disease being spread by children going there from infected houses.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 6, 1875.

What the Chancellor of the Exchequer's annual statement is to the financial aspect of public affairs, the report of the Local Government Board has come to be to the social, sanitary, and, in a large measure, the moral, interests of the community. The topics touched on in the *résumé* of the Board are so many and diverse that it is impossible they should be discussed to any useful purpose except in detail. Speaking generally, the Report just issued is not calculated to awaken any great amount of enthusiasm in favour of the Board and its administration. Excluding the very excellent paper of M. Nettleship, every page testifies to the lukewarm and almost perfunctory discharge of public duty that seems inseparable from a system of government in which more than half the legislative and nearly all the executive energy of an authority, existing and acting by sufferance, is absorbed in the attempt to reconcile, or to strike the mean between, conflicting interests. This is especially apparent in regard to the great and urgent question of water-supply and two or three other matters, to which, on the present occasion, we must confine our attention.

The supposed interests of the Water Companies still present an obstinate barrier to any radical improvement. Why these commercial corporations should be held to possess a recognisable property in the public need is not apparent; but the fact that they do, and that to this property all sorts of "rights" injurious to the well-being of the population accrue, is only too obvious. Instead of enforcing such regulations as the public necessities require, the Local Government Board represents, remonstrates, and requires, without the power to command compliance. Sooner or later this state of things must come to an end; but, meanwhile, the people suffer innumerable ills, and the advantage of the many is ruthlessly subordinated to the benefit of the few. While the central and major authority fulminates impotent counsels, it is scarcely surprising that local and minor bodies play with questions of the first moment, or emulate the inertia of their supreme monitor and example. The Metropolitan Board of Works wastes precious time and burlesques business in the controversy about "gross and net value rating" and "meter-supply"; and particularly brainless vestries determine that baths and washhouses shall not be provided, first, because they will not "pay," and, secondly, because the public are "doctor-ridden on the subject of cleanliness," and "it is only necessary that a man should wash his face and hands," which he can do at home in a bowl replenished at uncertain intervals at a reasonable cost—that is, a cost which will enable the Water Companies to pocket a reasonable dividend—from water originally contaminated with sewage or animal matter in the proportion of 1150 in 100,000, or, speaking broadly, liquid manure, and only partially filtered. Dealing with the facts, and disregarding the irrelevant considerations with which these authorities worry themselves and the public, the question is sufficiently simple. Thirty years ago twenty gallons per head of the population was the daily supply required. The development of steam-power and other changes have raised the requirement, and we now need from thirty-five to forty gallons. This supply must be pure. Can the Companies cope with the growing necessity? Is it safe to trust to them? Both these queries must be answered in the negative. It is idle to discuss the minor points of rating by rental value and supply by measure. Water is a necessity of life. Nearly *two-thirds*, by weight, of the animal organism are built up of water. It is not a luxury we are having doled out to us; it is an integral part of ourselves, as essential to life as light or air. The supply of food may be left to the enterprise of commerce, because the pabulum is derived from a variety of sources; and if one runs short or fails, another may be employed to compensate for the deficiency. No such possibility exists in the case of water. The wells scattered over our great cities are contaminated by the habits or processes of gregarious life, and what we call civilisation. The population cannot for a single day dispense with the water supplied from without. Each year strengthens the proof that a point will hereafter be reached at which new sources, far removed from the centres of crowded life and commerce, must be discovered; and it is abundantly evident that, when this time arrives, it will be necessary for the State, the Commune, or the municipality to take the matter into its own hands. It is puerile to postpone the development of a scheme which will inevitably engross much time in deliberation and more in execution.

The first step must be to place the question on a practical footing. This can only be done by the constitution of some corporate authority competent to assume the responsibility and discharge the obligation of supplying a common need. Whether the supply will ultimately have to be brought from a distance, so as to comprehend the watershed of an extensive open country, or to be raised from the deep strata of the earth's crust—Nature's filter—by a system of artesian wells, the undertaking must reach a magnitude and be of a character too important to be carried out by commercial enterprise. The same principle which has been applied to the conveyance of letters and the maintenance of the telegraphic system must be adopted in regard to water-supply. The only question is one of time. If anything were needed to ripen this question it would be contributed by the perverse and blind obstinacy of the Companies, the pitiable weakness of the Vestries and Board of Works, and the puppet policy and *laisser faire* of the Local Government Board. The time to speak out and press the matter has distinctly come, and we make no apology for insisting strenuously on the gravity and urgent need of dealing boldly and directly with a problem which claims prompt solution. There is really no serious difficulty in the way of carrying out the transfer. A very simple process of appropriation, with perhaps the creation of municipal bonds to replace the shares now held by proprietors, as recommended by Mr. R. H. Patterson in his interesting work on "The Science of Finance," would suffice to satisfy the utmost legitimate needs of the financial obligation. The community would find it a profitable investment to purchase public health and sanitary facilities at the price of such compensation of "vested interests" as the transfer would require. While this resource—and it is the only available and sufficient one—lies before the country, it is in no mood to bear with the overweening folly and short-sightedness of Companies which trifle with the public health and court their own discomfiture by refusing to take the obvious means to remedy a state of things so intolerable as that represented in the Report. With what sort of temper, for example, are the public likely to regard a remark such as the following, which we reproduce from the Report of Professor FRANKLAND on the supply of the year 1874?—"In December the Chelsea Company supplied this foul water in an unfiltered condition and contaminated with fæcal matter." The average supply of this interesting Company was more than three times—3·7 to 1·0—as bad as the Kent, which derives its supply from the deep chalk wells; and the West Middlesex, Southwark, Grand Junction, Lambeth, and East London Companies are only fractionally better. If the obtuseness of the British citizen were not proverbial, it would be impossible to account for his tacit consent to be fed with so foul a fluid, particularly when the single obstacle to improvement could be instantly surmounted by a combined effort of engineering skill and finance. He can scarcely be wider awake than the Local Government Board, which drones the busy hours away quite contentedly, lulled by the consciousness that on the 29th of June, 1874, it issued a circular on "Water-supply," informing the sanitary authorities that they might now, if they pleased, construct and maintain waterworks, and even dig wells and provide water-carts, where no Company with a "vested interest" to be trenched upon, happened to exist. With such proud doings will a great Government department console itself!

Equally unsatisfactory is the delivery of the Local Government Board on the topic which, until its renaming, was nominally its own. Over-weighted with the conviction that "a certainty of obtaining out-door relief in his own home, whenever he may demand it, extinguishes in the mind of the labourer all motive for husbanding his earnings, and induces him to rely exclusively upon the rates, instead of upon his own savings, for any momentary relief which he may require from the sudden cessation of his usual employment," the Board is unable to perceive that, being driven to brand himself as a pauper and become the inmate of a workhouse the moment he falls into bad circumstances, the labourer and his family are ruthlessly deprived of their chief incentive to self-help, and reduced to a state of moral and physical dependence. The "workhouse test" is the sole remedy which the Board can devise for increasing pauperism; and in this it is the mere reflex of that policy of niggardly "relief"—parsimonious in the present and expensive in the issue—which for the moment so strangely finds favour with boards of guardians. We look in vain for evidences of that far-sighted policy of reform which alone can bring about the amelioration of public social evils grievously felt and widely deplored. There is a discouraging lack of boldness and vigour about the proceedings of the Board which makes itself apparent in every paragraph of the Report. Space will not now permit us to deal with the proofs of this feebleness, but we shall return to them. It is vain to hope for local energy while the authority in which the sum of local forces is supposed to be centred is conspicuously colourless and inert. A masterly energy of reform is what the condition of the country needs, and a policy of sanitary reconstruction and improvement should inspire. It is the want of this zeal and intelligence which renders the influence of the Local Government Board so insignificant, and its Report a meagre chronicle of doings remarkable for their modesty rather than their usefulness.

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WHAT may be termed the socio-physiological aspect of twins has received, up to the present time, little attention. The occurrence and the characteristics of twin-births—so strange an anomaly among animals which usually produce but one at a birth—have been abundantly investigated in their more directly physiological aspect. But the life-history of twins, their personal characteristics, their relations to external circumstances, have not hitherto received comprehensive study. We are therefore glad to direct our readers' attention to an interesting article on the subject in the current number of *Fraser's Magazine*. Mr. FRANCIS GALTON has extended to this more special point the means of investigation which he has employed on a wider scale to ascertain the influence of heredity and other conditions upon mental culture. His object in the investigation has been to compare, under similar circumstances, the respective influences of nature and of nurture, of inborn tendencies and of external influences. He has endeavoured to ascertain the effect of diverse training upon twins who in early life manifested a striking resemblance, and, on the other hand, the influence of similar educational circumstances upon those who were at first dissimilar. His materials were obtained by sending out circulars to twins, or to those who were the near relations of twins; and the answers to his queries have furnished him with a series of facts, apparently well authenticated, which, if they have led to no new discovery, at least illustrate very fully the conclusions which had before been reached from isolated observations.

The cases of which details were obtained ranged themselves into three classes—one in which twins presented strong resemblance, another in which they were moderately alike, and a third in which they were strikingly dissimilar. Eighty instances of the first class were met with, of which thirty-five presented instructive details. In a few cases the parallelism between the twins was complete, and in many others the physical resemblance was so close that the most intimate associates were puzzled to distinguish one from the other. Of the mistakes made under the circumstances Mr. GALTON's pages contain some very curious instances, and many anecdotes are authenticated in which one twin had been fed, physicked, or whipped in mistake for the other. In one case, indeed, a doubt still remains whether the children were not changed in their bath, and the presumed A is not really B. In another instance an artist was unable to identify, with the originals before him, the likenesses he had partially completed. Facile impersonations are very frequent, one twin replacing the other for a lesson, a punishment, or a dance, without discovery; and no less than nine accounts are given of one twin seeing his or her reflection in a looking-glass and addressing it as his twin. Even in adult life such mistakes have occurred not unfrequently.

A comparison of these cases shows how little visible effect external influence has had in determining divergence in character or physique. As a rule, resemblance at birth has entailed resemblance through life, even where the external conditions have been remarkably diverse. A profound physical change, entailing often permanent and complete alteration of mode of physical life, has alone sufficed, in most instances, to effect an apparent divergence of development, and even then the resemblance beneath the dissimilarity could often be traced in identical characteristics. On the other hand, in no case of initial dissimilarity was any marked resemblance produced by the most perfect correspondence of surrounding circumstances, lessons, changes, &c. In no case did identity of nurture override and assimilate diversity of nature, and in no case did diversity of nurture produce an essential difference between those naturally alike.

Of more immediately medical interest are the facts which Mr. Galton has obtained illustrative of the frequent identical relations of twins to disease. These facts corroborate very strongly the paramount influences of physique and heredity. The close resemblance of physical condition, which amounts in many cases to a practical physical identity, renders twins liable to be affected in an identical manner by common influences to which they were exposed. Contagious diseases, accordingly, nearly always affect twins simultaneously who are together. Diseases which are not contagious, but depend on external circumstances of very uncertain effect, frequently attack twins at the same time. Asthma and ophthalmia are instances of this, of which examples are cited from Trousseau. Still more striking are the examples in which diseases which can scarcely be said to be related to external conditions—diseases which, at any rate, are mainly the result of internal predisposition—occur at nearly the same time in twins. Mental derangement affords a striking illustration of this, of which some remarkable instances have been collected by Mr. Galton. In another case, two twin brothers died at almost the same time of Bright's disease.

Most of the cases in which differences appeared, as development progressed, between twins at first alike, were determined by a physical influence. In some cases this was a condition which led to a total change of external circumstances. In others it was a mere physical illness, which effected no such change of external condition. In four cases it was scarlet fever, in one typhus, and in one a "nervous fever." The profound effect on development which such influences occasionally produce is well known to physicians, but has hardly before been brought out by so delicate a test as the opportunity for comparison afforded in these cases. It is evident that Mr. Galton has obtained many facts of great interest and importance, and we hope he may pursue his investigations still further in the same and allied directions.

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A new series of researches has just been published by M. Bloch on the Rapidity of the Sensory or Centripetal Current in Man. The experiments, which were performed in the laboratory of M. Bernard, appear to have been made with considerable care, and the memoir was read before the Société de Biologie. The experiments of Schelske, undertaken previously, gave as a mean a rapidity amounting to 29·60 metres per second for sensory impulses. In repeating these experiments merely for the purpose of confirming their accuracy, M. Bloch considered it requisite to determine the duration of the persistence of tactile sensations; and for this purpose employed a small disc with projections. This was rotated with increasing speed till the sensation of successive shocks was lost. It was found that when the shocks exceeded fifty per second the sensation became uniform. This fact appeared to him in contradiction with the results obtained by Schelske, at least so far as analogy went; for it is known that, in regard to the senses of vision and audition, the persistence of the impression is longer than the time occupied in its transmission to the cerebrum. But there was here a contradiction to this rule; for with a period of transmission amounting, according to Schelske, to about one-thirtieth of a second, the persistence of the impression was only one-fiftieth of a second. It is unnecessary here to give the details of M. Bloch's mode of experimentation; but it consists essentially of a wheel with a thin piece of quill projecting from its border. This is made to revolve, and, as soon as the sensation is felt, the finger is flexed and scratches a line on the surface of a smoked glass within the rim of the wheel. The physiological time embraces several elements—namely (1), sensation, including its reception at the integument and its transmission through the sensory nerves; (2) the transformation of the sensation into voluntary effort; (3) the transmission through the motor nerve; and (4) the execution of a muscular contraction.

M. Bloch soon found that no modification of experiments of this nature gave satisfactory results, because in all instances the elements of the calculation include a factor—namely, the period occupied in the transformation of a sensation into a voluntary effort—which is incapable of precise estimation, and varies with different individuals and under different circumstances, so that an excitation received by the hand or fingers can actually be recorded more quickly than one received on the forearm or face, though the course of the sensory nerve is manifestly shorter. He then modified his method, founding it on the longer or shorter persistence of the sensations; so that, if two shocks are received successively, one by each hand, when the interval between these two shocks is sufficiently short (one forty-fifth of a second on the average), the two sensations are felt as one. The only explanation of this is that the sensation of the first shock persists with an intensity not sensibly altered when the sensation of the second shock arrives. This persistence appears to augment in duration in proportion as the shock is more rapid, though in feeble proportion. If the second shock be received by some part nearer the sensorium than the first—as on the nose,—apparent synchronism can only be obtained by allowing a longer interval to elapse between the two. The difference of the two intervals will, it is obvious, measure the difference in the duration of the transmissions from the more distant and the more approximate point to the sensorium. The impressions made must of course have the same intensity. The general result of all the experiments performed on these principles gave a much larger figure than that obtained by M. Schelske—namely, 156 metres per second. The rapidity of transmission was greater in the spinal cord than in the nerves, being 194 metres per second in the former and 132 metres per second in the latter. One other fact was ascertained in the course of the experiments—viz., that the persistence of a tactile sensation augments as the acuteness of sensibility diminishes.

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Much activity has been manifested on the part of the Royal Commission on Vivisection. The meetings of the Commissioners have of late been more frequent, and very considerable progress has been made in the examination of witnesses. The publication of their report will be anticipated with considerable interest on many grounds. So many sensational, exaggerated, and misleading statements have been promulgated in regard to what is actually done in this country, and so much prejudice and ignorance prevail as to the objects and nature of such experiments, that it is time the truth in regard to these things should be stated. That animal experimentation is perfectly justifiable under certain circumstances few would deny, even among those most strongly opposed to it; and, on the other hand, we believe it to be a libel on the medical profession to suppose that those who recognise the vast importance of such a method of elucidating the truth in physiological or pathological inquiries do otherwise than regard some of the alleged practices in this respect as barbarous and unnecessary. We say alleged, because it is next to impossible to discriminate between what is true, false, exaggerated, or misleading in many of the statements that have been put forward. And we need do no more than point to a paper on the "Moral Aspects of Vivisection," by Miss Frances Power Cobbe, reprinted from the *New Quarterly Magazine*, by way of illustration. This lady can have no personal knowledge of the subject, nor is it to be presumed that she possesses the physiological information necessary to enable her to discriminate between the real and the apparent results of pain in any given animal forming the subject of an experiment beyond that which can be gathered from the perusal of a description of it, drawn up in too many cases in either an inaccurate or a misleading way. Will any candid person say that anything so preposterous could have been present in Professor Rutherford's mind as to have led him to defend the vivisection of animals on the ground of "better fixing an impression by the sight of their agonies than could be effected by the verbal description of a lecturer"? Then, again, it is urged that "keenness of observation, or a memory of their own youthful insensibility, ought to teach all professors of physiology that they are indulging a maleficent tendency which already exists in their pupils' disposition when they invite mere lads of the Bob Sawyer type to watch their frightful experiments—the more frightful, so much, alas! the more attractive." To anyone acquainted with the facts, the incorrect and misleading character of such a representation must be at once apparent. Statements of this kind entirely defeat their object, and rightly so. It cannot be urged by anyone that we have treated this subject of vivisection without recognising the full measure of moral responsibility involved in it, or that we have endeavoured to interpose any barrier to its being fully and dispassionately considered by a properly constituted commission. We shall be glad of whatever light can be let into it; and if the Royal Commission, now sitting, can define the limits of our duties and responsibilities to the lower animals, and say how far we are justified, consistently with these, in having recourse to experiments, we shall be quite prepared to give their report every consideration.

Annotations.

"Ne quid nimis."

THE HOSPITAL SUNDAY FUND.

It will be generally admitted that the Report of the Distribution Committee of the Hospital Sunday Fund is, with some exceptions, almost as satisfactory a document this year as it could be under the circumstances, although it will not in any quarter excite enthusiasm. We are ashamed to have to say that the sum to be divided was less this year than last by £2871 8*s.* 6*d.* The hospitals this year have received only £22,945 12*s.* 11*d.*, against £25,307 12*s.* 3*d.* last year; and the dispensaries have received only £2531 9*s.* 2*d.*, against £3040 18*s.* 4*d.* last year. It is more easy to explain this falling off than to justify it. There are two facts to be regarded as explanatory: the first is, that the Hospital Sunday was unfortunately a very wet day; the second, that the disorderly meeting of those who were dissatisfied with the distribution of last year undoubtedly did much harm for the time being.

While a comparison of the grants of this year with those of last shows, in the majority of instances, a diminished grant, it is not so with all. The Metropolitan Free Hospital gets £280 this year, instead of £78. (We write in round numbers.) The Hospitals for Women have been generously treated, getting this year £583 13*s.* 4*d.*, against £398 11*s.* 10*d.* last year. The special hospitals, exclusive of the Chest Hospitals, which also get more, receive £2138 4*s.* 10*d.*, against £1215 4*s.* 5*d.* The Convalescent Hospitals get this year £989 12*s.* 6*d.*, against £758 2*s.* 3*d.* last year.

An important discussion took place at the meeting of the Council on Monday as to the power of the Council to review or modify the awards determined by the Distribution Committee. Both Mr. Kitto and Dr. Kennedy considered that hospitals and dispensaries dissatisfied with their awards have a right of appeal to the Council according to the instructions agreed upon this year for the guidance of the Distribution Committee; and both Mr. Kitto and Dr. Kennedy took a very active part in formulating these instructions. Mr. Brudenell Carter took the same view, and strongly—but not too strongly—expressed it. The instruction in question is to the effect that the Committee of Distribution shall present their report to the Council before the fund is finally distributed. If this is not intended to be a perfectly unnecessary and misleading instruction, it implies that the awards are not irrevocably fixed until sanctioned by the Council; in other words, that the Council has the power to alter them. Of course it is to be taken for granted that this power would not be exercised wantonly. It seems plausible to claim absolute authority and responsibility for the Distribution Committee, as Canon Miller did. But if that view is to be accepted, the Council ought not to be asked to go through the vain form of endorsing a report. In our opinion, the Distribution Committee, though entitled to great praise and many thanks, is a little too thin-skinned. A little more respect is due to the Council. Can anything be more unreasonable than to summon a meeting at a very short notice to receive the report of the Committee of Distribution, without previously circulating the report, and giving members a chance of becoming acquainted with it? This procedure, it is understood, will not be repeated another year. We are satisfied that the Distribution Committee will do well in giving a little more generosity of construction to the instruction which requires their report to be presented to the Council before the fund is finally distributed. It is by ample criticism and by appeal to the Council that full public respect is to be gained for the distribution.

THE PREVENTION OF INFECTION.

THE peculiar difficulties which beset the control of infectious diseases, and the limitations of the sanitary law as it affects them, are well shown in a case brought, in the course of last week, before the Clerkenwell Police-court. Scarlet fever, at the beginning of September, had appeared in the family of a working-man living in Islington; the disease, as would seem from the reports published in the daily journals, being present among other families occupying rooms in the same house. The eldest child of the workman referred to, while ailing from what subsequent symptoms would indicate as unrecognised scarlet fever, was sent away to Tottenham, returning home some days after with "slight dropsy," which was followed by "low fever." At the beginning of October, a medical man having certified that the children who had suffered from scarlet fever had so far recovered "as to be quite safe as regarded the power of communicating the disease," the workman removed with his family to another residence in a different part of Islington. These facts coming to the knowledge of the Vestry's sanitary officers, proceedings were taken against the workman, first for "transmitting, without previous disinfection, certain articles of bedding, clothing, and other things, which had been exposed to infection from scarlet fever," and, next, for having failed to cleanse and disinfect the premises he then occupied, he having been required to do so, under the provisions of the Public Health Law, by the Vestry. Cleansing in this case was interpreted by the Vestry, through its inspector of nuisances, to mean, among other things, removal of paper from the walls of the occupied rooms. The Vestry failed to sustain its case on the first charge, and substantially the same result followed on the second charge. It was not shown to the magistrate's satisfaction that needful disinfection had not been applied to the transmitted goods; while it was not disputed that the fitness of removal of the family had been certified by a qualified medical practitioner. Again, the requirement of the vestry that the term "cleansing" should be made to include removal of wall-papers, proved a stumbling-block to a summary decision on the second charge, the difficulty in the magistrate's mind not being lessened by the fact of the Vestry's interpretation of the law being presented to him as a matter over which he had no discretionary judgment. This charge was, in consequence, adjourned for a fortnight, in order that, if practicable, some arrangement might be come to between the Vestry and the workman. The magistrate is reported to have observed on this part of the case, that "there seemed to be a most arbitrary power vested in the nuisance authority, and he was powerless in the matter."

The result of this case is very greatly to be deplored. There is much to be done before popular feeling will move smoothly with the present provisions of the law for the control of infection, limited, and, from the strictly medical aspect, insufficient though these may be. It is of peculiar importance therefore that, when it is attempted to enforce the provisions of the law in this respect, the cases should be carefully selected, so as to avoid as far as possible any liability to failure. Few things are more mischievous in the application of sanitary law than a magistrate being brought, as it were, into collision with the sanitary authority to the deterioration of the latter's influence. So careful was the Legislature to provide for the difficulties which it saw must interfere with any attempt at stringent application of the law in this respect, and to meet the prejudice against its enforcement which might thus arise, that it gave power to the sanitary authority itself to effect necessary processes of cleansing and disinfection if owners and occupiers were unable, from "poverty or otherwise," to carry them out effectually and if they consented. So far as published reports afford a means of judgment, this case was eminently one in which the Vestry of Islington should itself have undertaken the cost of the measure it was desirous to have carried out, and not have courted failure, as it did, to the prejudice of the law. What likelihood was there of success on the first charge in face of the medical certificate given by the family medical attendant? Here the Vestry has unwisely contrived to enlist the prejudices of the medical profession against them, as well as the public. And the question is not merely that of the individual judgment of a particular medical man, but of a principle of action which very considerably affects the medical man's relations to his patients. Again, when an important provision of the law is presented to the public as an arbitrary enactment of which the interpretation must rest with an inspector of nuisances, and not with a magistrate, before whom a case based upon it is heard, it must be obvious that such a law will not be long tolerated, and that it must interfere with, rather than help, the object it is designed to promote.

It is particularly unfortunate that, at a time when it is sought to strengthen rather than weaken the law respecting the control of infection, this unlucky case should have arisen to prejudice the magistrate's bench, the medical profession, and the public alike, on the subject.

COLOUR AND HEAT.

THE curious, though somewhat costly experiment of the willow-pattern plate should not be allowed to slip out of memory. It has a bearing on the question of public health. Dr. Richardson did not allude to the topic in his graphic outline of "Hygeiopolis," but it could not be wisely excluded from a scheme worked out more fully than was possible with a fancy sketch, however suggestive and interesting. Having provided your plate, and sacrificed it to the cause of science, you put it into the centre of a clear and brisk fire. Of course it flies to pieces, but some of the fragments are probably large enough to be taken out with a pair of tongs when heated to redness, and exposed in a dark room. The pattern glows white on a dark ground, the explanation being—to speak roughly—that the dark colour of the pattern first absorbs, and then gives off, more heat than the white ground. Apply the same principle to the surface of a town or city exposed to the sun. The relative proportions of dark-coloured area, whether foliage, grass, earth, or black-slate roofing, and of light-coloured surfaces, such as stone pavements, macadamised or chalky roads, will determine the heat absorbed from the sun's rays by day, and the radiant heat given off by night. But more than this, there can be no doubt that just as the comparative heat of tropical and cold regions is one cause of winds—the cold air rushing in horizontal currents from the cooler to the warmer districts of the earth's surface,—so, in a smaller, but not unimportant degree, the displacement of the lowermost strata of the atmosphere, and the consequent ventilation of streets and houses, is affected by the colour of large tracts of surface in and arouud our great cities. The preservation of green lands has a sensible effect on the healthiness of adjacent residential property wholly apart from the facilities which these grounds may offer for pleasure and exercise. The larger bearings of these considerations will be obvious, and one small but singular custom, in which we fly in the face of nature, should be modified by them. White hats and clothes are worn in the summer because they do not so readily as dark-coloured articles absorb the heat. This is a rational expedient, but it is not so reasonable to forget, when winter comes round, that dark surfaces radiate heat, or allow it to escape, as rapidly as they absorb it. At a season when the heat of the body is almost entirely generated and supported from *within*, it seems unaccountable that people should so commonly affect dark clothing. The fact that animals in the cold regions are provided with white furs in winter points to the more judicious selection. The rule is simple enough. When it is wished to take in heat easily or to give it off rapidly, the surface should be of a dark hue; when the object is either to keep out the external heat or to preserve that which is generated within, the colour should be white or bright. The practice of putting on the most sombre and depressing garb at a season when everything has a tendency to look gloomy is unnecessary, and considering that it is the reverse of cheery, it might, with advantage to health and spirits, be extensively modified. There should be no difficulty in procuring stuffs for clothing combining sufficient substance and low-conducting material with light and cheerful colours.

HOSPITAL MORTALITY FROM SCARLET FEVER.

THE difficulty, if not impossibility, of successfully repressing epidemics of scarlet fever and other zymotic diseases, more especially in urban populations, without hospital accommodation to secure isolation of the patients, has been very generally recognised. Dr. Buchanan expressed somewhat recently an opinion that a provision of at least one bed for each 1000 of the population would be necessary in order that we should be fully prepared so to deal with these diseases that they might eventually be stamped out. Comparatively but little of this hospital accommodation has yet been provided, but this only renders the facts that may be learned from the experience of those hospitals in operation the more valuable for future guidance. In London the Metropolitan Asylums Board possess a fever and small-pox hospital at Homerton, and two similar hospitals at Stockwell. The total accommodation provided by these four institutions is 576 beds. As small-pox has scarcely existed in the metropolis during the present year, and the prevalence of fever has been very far below the average, a large proportion of this hospital accommodation since the beginning of the present year has been devoted to the treatment of scarlet fever cases. The Registrar-General in his last Weekly Return published some valuable figures giving the results of the treatment of scarlet fever in these hospitals during the first nine months of this year. The number of cases admitted during this period was 792, of which 385 were treated at Homerton and 407 at Stockwell. The number of cases discharged recovered from the two hospitals was 581, and of deaths 109. The proportion of deaths to cases treated was 14·7 per cent. in the two hospitals: 14·4 per cent. at Homerton and 15·1 at Stockwell. Thus in the two hospitals there were 6·8 cases to each death, and the Registrar-General remarks that "if it were safe to assume that the mortality in scarlet fever cases was the same, whether treated at home or in hospital, it might be estimated that there have been 18,469 cases in London since January 1st last, as we know that 2716 deaths have been recorded." An opinion is expressed that the actual number of cases has been considerably in excess of this estimate, inferring that the proportion of deaths to cases in those hospitals, 14·7 per cent., is higher than in cases treated at home. This is a subject which demands most careful investigation at a time when the provision of these hospitals for infectious diseases is being urged upon the sanitary authorities of so many of our large towns. There is much difficulty, however, in obtaining authentic returns of a sufficient number of cases occurring out of hospital to compare with these hospital results; and it is highly necessary to bear in mind that there is a natural tendency to send the most severe cases to hospital, and to leave the milder ones for home treatment.

PREVENTIVE MEDICINE.

IF the medical profession had simply a keen eye to its own interests we should not find so many of its members in the van of sanitary progress. As a matter of pecuniary profit, merely, it would be better for them if no check were imposed by vaccination on the progress of small-pox; and of all persons in the world, medical men have least apparent interest in taking up the Prime Minister's parable and joining in a crusade in favour of pure air and cleanliness. Let anyone think of the loss that would be incurred by the medical profession in the way of fees, if typhoid fever alone were obliterated from our medical nomenclature! Still, with no slight display of indifference to considerations of personal agrandisement, doctors are never tired of discoursing—and to ears that are dull of hearing often—on the beauties of cleanliness and of enforcing its close proximity to that other virtue with which it is proverbially, though not always practically, allied. Little by little the battle is being won, however, and each year finds people becoming more impressed with the conviction that it is easier to prevent than to cure disease, and that the way to set about this prevention lies close at hand—viz., in ensuring that the common things of life be good and wholesome. If we have no recent great discovery like that of vaccination to boast of, and if we have to content ourselves with the record of its triumphs expressed by the fact that during last quarter small-pox caused only 164 deaths in all England and Wales, we may still point, with some satisfaction, to the progress we are making in tracing diseases to their sources and to our success in attacking them. The doctor of the present day does not consider that he has fulfilled his task when he has prescribed for his patient; he has to ask himself whether the ailment can be attributed to any preventable cause, to satisfy himself on several matters of domiciliary and domestic hygiene, and, in the event of its being an infectious disease with which he is dealing, to do his utmost to secure its circumscription within the narrowest limits. If this be so in civil life, the duties of a medical officer of the public service have to be supplemented by a knowledge of medical topography, a consideration of favourable time and season for an undertaking and a careful preparation of the necessary means and appliances for its successful issue. Two leading articles in the same number of *The Times* recently,—the one on the Registrar-General's Quarterly Return, the other on the Congo Expedition—will serve to illustrate these two phases of preventive medicine, and to indicate that its claims on public attention are being more and more fully recognised.

REGISTRARS AS AGENTS FOR QUACK INFANT MEDICINE VENDORS.

The enterprising proprietors of a widely advertised quack medicine, which professes to afford instant relief in "convulsions, flatulency, affections of the bowels, difficult teething, thrush, rickets, measles, whooping-cough, or vaccine inoculation," and rejoices in the name of "Infants' Preservative," have recently adopted a new method to push their nostrum. A circular has been addressed to every registrar of births and deaths in England and Wales, offering to pay him at the rate of twopence for delivering a circular advertisement of this "Infants' Preservative" together with the vaccination notice at the registration of every birth. It is needless to point out how mischievous such a form of advertising would prove, which in the eyes of the ignorant invests this patent specific with an official sanction, if not recommendation. It is with pleasure we hear that a large number of registrars immediately reported the circumstance of the application to the Registrar-General, who has expressed his disapproval of registrars accepting such an agency, and his hope that "no registrar in England and Wales will comply with the invitation" conveyed in the circular. There is reason to fear, however, that all the 2193 registrars will not see the impropriety of acceding to this application without referring it to their official chief; and it may be hoped, therefore, that the profession and the public will report to the Registrar-General any case in which these circulars have, to their knowledge, been distributed in the manner above described. We shall not be surprised if we next hear of a circular from the Anti-Vaccination League being addressed to registrars, offering payment for the distribution of their pernicious literature at the registration of each birth! If the official distribution of an advertisement of a quack medicine were once sanctioned, we hardly see how the anti-vaccinators could be denied the same privilege.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

It is satisfactory to record that during the past week no fresh cases of fever have occurred on the *Cornwall* school-ship, that there has been up to the present time only one fatal case, and that all attacked are progressing favourably. Since the commencement of the outbreak 71 boys have been removed from the ship. Of these 34 were sent to the Seamen's Hospital at Greenwich, and are considered by Dr. Ralfe, under whose charge they have been, all cases of typhoid. Six boys were sent to St. Bartholomew's Hospital, 2 of whom are under Dr. Andrew, 2 under Dr. Church, and 1 each under Drs. Black and Southey. Dr. Robert Bridges, senior house-physician, informs us that 4 out of the 6 cases are classed as typhoid, but that the others are doubtful. Dr. Glen Bott, surgeon to the *Cornwall*, has had under his immediate care 31 cases, all of which are diagnosed as enterica. Of these 1 ended fatally, 8 are still under treatment in the shore hospital at Purfleet, and 22 were transferred to the Corporation hospital-ship *Rhin*, below Gravesend, under the care of Dr. Whitcombe, surgeon to the vessel. There were also sent to the *Rhin* 19 suspected cases, but all these latter are, up to the present time, quite well, and Dr. Whitcombe reports that the sick and convalescent are all progressing favourably. Thus, out of a total of 235 boys, 65 have been attacked, and one officer. With respect to the admissions into the Seamen's Hospital, Dr. Ralfe says: "The first case was admitted on the 20th of September, and was undoubtedly typhoid, with characteristic rash, diarrhœa, and pneumonia. No other cases were admitted till after the 1st of October, and on that day came a group of 19 cases, 10 of which had well-marked rash, with diarrhœa; and others had no rash, but high temperatures and diarrhœa; and 4 had only a high temperature, but no rash or diarrhœa. In most of these cases the high temperatures were continued to the end of the third and beginning of the fourth week. All these patients were admitted between the 1st and 7th of October. On the 17th and 18th of October, 6 others were sent in, less decided in character, 1 only being a well-marked case of typhoid, having a copious rash, diarrhœa, and intestinal hæmorrhage. Another had epistaxis, but no rash or diarrhœa. These are still under treatment, but the other 4 were convalescent at the end of the second week. On the 25th of October a batch of 8 were admitted. There was nothing typical about these, only slight elevation of temperature, and in one or two slight diarrhœa; their temperatures are now normal. I consider all these to be typhoid, the boys who were most susceptible to the poison taking the disease earlier and more severely, and exhibiting more marked symptoms; whilst those who were less susceptible only succumbed after repeated exposure to the infection, and then had the disease in a milder form, the latter cases being evidently extremely mild enteric fever, aborting at the end of the second week."

Several of the more important suggestions made by the Port Sanitary Authority, as to water-supply &c., have been adopted; but it is probable that the *Cornwall* will be entirely emptied and cleansed before reoccupation, when the epidemic is fairly at an end. The advisability of removing the ship to a more healthy situation (as regards the main-drainage outfalls) is also under consideration; but we shall probably be enabled next week to give a summary of the entire sanitary measures recommended. She is in a material degree under the control of the Home Office; and the last three reports of their chief inspector, the Rev. Sydney Turner, are to the effect that the ship was in excellent order, and well administered. A letter from the Port Medical Officer that appeared in *The Times* of Tuesday indicates that, in many respects, school-ships require special attention and supervision, and that, at all events in the Thames, a floating hospital in their vicinity is very much needed.

THE MAUNSELL TESTIMONIAL FUND.

We note with much satisfaction that the fund in aid of the widow and children of our late Dublin correspondent, Dr. Maunsell, raised in testimony of his public services, is augmenting rapidly, and that every prospect exists that a very creditable sum will be obtained. This is as it should be, for work such as Dr. Maunsell has done, and to the furtherance of which he devoted himself with such energy and ability, is worthy of all praise; and when, as in this case, the worker is stricken down prematurely, his family is entitled to every consideration and support.

There is, however, something in the Maunsell testimonial which merits more than a passing comment, and it is this—that this is the first occasion where a gentleman solely engaged in Poor-law medical practice, and whose writings to the superficial observer appeared to be devoted almost entirely to the interests of his Poor-law medical brethren, should have had his work recognised by contributions not alone from that branch of the profession to which he belonged, but also from men like Sir W. Jenner, Sir Dominic Corrigan, and from others in no way connected with the service. Nor is this all; distinguished laymen, such as the Lord Chancellor of Ireland, the Chief Secretary, Sir M. Hicks Beach, and several Irish members of Parliament, have also forwarded their contributions. When the late Richard Griffin, who worked so heroically to redress the grievances of Poor-law medical officers, was *hors de combat*, and a testimonial was originated in recognition of his services, hardly one member of the profession outside the ranks of the Poor-law Medical Service contributed. This evidence of respect on the part of the *élite* of the profession and of distinguished laymen for Maunsell's labours, betokens an immense advance in public appreciation of the value to the community of the services of Poor-law medical officers, and the true nature of whose work in his own country Maunsell did so much to exhibit.

A SUPPOSED HYGEIOPOLIS IN WILTSHIRE.

At the last monthly meeting of the Town Commissioners at Bradford-on-Avon, the medical officer of health reported that the annual death-rate within the Bradford Improvement District during the three months ending 30th September last had been as low as 7·5 per 1000! It is much to be regretted that such a report should prove "too good to be true," as so low a death-rate during three months in this small Wiltshire manufacturing town might have been useful as evidence of the possibility of the rate of 8 per 1000 in the imaginary Hygeiopolis. Unfortunately, however, facts and figures are against the accuracy of this low death-rate. The medical officer of health acknowledges that 20 deaths occurred in Bradford during the three months; the population of the Improvement District at the Census in 1871 was 4871, and as it is improbable that it now exceeds 5000, it is easy to calculate that the annual death-rate last quarter was equal to 16 per 1000 instead of 7·5. It is evident that in order that 20 deaths in three months should give a rate of 7·5 per 1000, the population must exceed 10,000, and it is impossible to believe that the population of Bradford-on-Avon has more than doubled itself since 1871. At the meeting, when the report containing the announcement of this low death-rate was presented, considerable discussion took place among the commissioners as to alleged nuisances arising from slaughter-houses in the town. The general conviction seemed to be that these slaughter-houses, although not considered nuisances when they were first used as such, are without doubt improperly situated now, and that nothing would be satisfactory except their removal out of the town. In spite of the blunder now pointed out, Bradford-on-Avon appears to have enjoyed good health lately, but we would urgently recommend its sanitary authority to abate the slaughter-house nuisance that exists in its midst at once, and not to wait for a high death-rate to result therefrom before taking active steps in the matter.

PROPYLAMIN IN ACUTE RHEUMATISM.

This remedy, which was first recommended by a German army surgeon, has been used with remarkable success in the Garrison Hospital at Dresden. According to his report in the *Berlin. Klin. Wochenschrift*, Staff-surgeon Dr. Leo treated twenty-eight soldiers exclusively in the manner first tried by Dr. Loewer, of Altenburg. Of a solution of one gramme of the drug in 120 of peppermint-water, with 10 of sugar, a tablespoonful was given every two hours; altogether from three to five grammes were so taken by each patient, whose limbs were bandaged with cotton-wool and cardboard. All the twenty-eight cases suffered from multiple joint affections; in fourteen cases the disease appeared for the first time, in the other fourteen it was recurrent once or repeatedly. Five cases were complicated with slight, five with severe affection of the heart, one with acute œdema of lungs, and one with diphtheria. All were restored to perfect health and military duty except one, which required a course of the Teplitz waters, though there is a certain prospect of his ultimate fitness for service also. The average duration of the illness in these cases was 17·7 days per head; none was discharged before full recovery was proved by increased weight of body and gymnastic exercises. The effect of propylamin is summed up by the author to have been marked by the following points:—1. The disease becomes very soon subacute, and remains so to the last. 2. The sedative effect on the nervous system is shown by decreased tension in the circulatory apparatus; pulse and respiration become slower, and high fever decreases within thirty-six hours. 3. With at first profuse, then more gentle perspiration, pain decreases very markedly. 4. The colour of the skin acquires a peculiar greyish tint (?) 5. Sleep quickly returns, and is not interrupted by pain. 6. With a cleaner tongue appetite returns fast. 7. The quantity of urine is not much increased; it is mostly clear and transparent, only slightly acid, and with little sediment. 8. All patients took the drug without dislike; it was never applied externally. The discrepancy of results in the use of propylamin Dr. Leo ascribes to the great differences in its preparations. According to the careful analysis of Petit, the amount of alkali in the officinal drug varies from 0·02 to 0·55 in 1 gramme. This may be due to the defective mode of preparing it, or to the variable constitution of the herring-brine from which it is made.

"SEA LEGS."

Nothing is more curious among the phenomena of sea-sickness than the disappearance of the symptoms while their cause persists. It is a remarkable instance of the rapid accommodation of the organs of the body to conditions which at first produce a very profound disturbance of their functions. The mechanism of this accommodation will be understood only when we know with certainty how sea-sickness is produced. It must be remembered that the effect is comparative, not absolute. A passenger making an occasional voyage, who has become accustomed to a moderate degree of movement and can bear it without discomfort, is prostrated by a greater degree or an unusual variety of movement. Even the sailor who is undisturbed by any motion of his ship may be rendered sick by that of a small boat. This acquisition of indifference to the motion of a ship is usually simultaneous with that of the power of balancing the body so as to counteract the lateral inclination of the vessel to one side or the other. A correspondent has called attention to this circumstance and to the relief afforded to commencing discomfort by a similar studied adjustment of the position of the body to the surface of the vessel, so as to counteract its displacement. He points out that animals may sometimes be observed to neutralise the lateral roll of the vessel in the same way. But such adjustment can counteract none of the vertical movement of the ship, and there is strong evidence to show that it is the vertical motion to which sea-sickness is chiefly related. The acquired indifference to the toss is clearly more than the advent of the "sea legs," although the two are often simultaneous.

THE CROYDON FEVER EPIDEMIC.

During the week ending 30th ult. no less than seven more fatal cases of enteric fever were registered in Croydon, raising the number of deaths which have resulted from the disease since the outbreak of the epidemic last spring to 72. The number during the last week of October exceeded by two that in any previous week of the epidemic. The Registrar-General considers that the first fatal case of the epidemic occurred in the week ending 27th February, but during the seven weeks ending 10th April the deaths only averaged one per week. In the next nine weeks, ending 12th June, 28 fatal cases occurred, averaging rather more than 3 per week, after which the fatality declined again to

17 in the next fourteen weeks, ending 18th September. After the middle of September the disease again became more actively fatal, and caused 20 deaths in the six weeks ending 30th October, a higher average than at any previous period of the epidemic. Although this epidemic has now prevailed for more than eight months, and has caused these 72 deaths, independently of a far larger number of attacks, it may be said that no earnest and thoroughly independent attempt has been made to discover its real cause. One-half of those in Croydon who trouble themselves about this remarkable epidemic are as certain that it is due to the contamination of the Croydon water through its intermittent supply, as the other half are determined to accept no other cause than the sewage farm. Under these circumstances we are glad to see a suggestion from a correspondent of the *Croydon Chronicle*, that a general meeting of the inhabitants should be called to consider what means ought to be taken to ascertain the cause of this epidemic. An appeal from an influential public meeting of ratepayers to the Local Government Board for a thoroughly independent investigation of all the circumstances of the epidemic by one of their experienced medical inspectors, would probably be the most judicious step that could be taken. It is of far more than local interest that the cause of the Croydon epidemic should be discovered, as each epidemic which is satisfactorily traced to its true source is not only a valuable contribution to our knowledge of the causation of disease, but it weakens the power of what has been called "vulgar fatalism," which is the greatest obstacle to sanitary progress.

SANITARY PROGRESS IN TOWN AND COUNTRY.

In the Quarterly Return just issued by the Registrar-General especial reference is made to the evidence of sanitary progress afforded by comparison of recent death-rates in town and country, with those which have prevailed in past years. During the three months ending September last, the annual death-rate in the thirteen millions and a half persons living in our large towns was equal to 22·3 per 1000; whereas in the remaining population of rather more than ten millions, living in the smaller towns and villages and in purely rural districts, the death-rate was but 17·2 per 1000. Compared with the average rates in the same populations during the corresponding quarters of the ten preceding years the urban rate showed last quarter a decline of 1·6 per 1000, but the rural rate had only decreased by 0·1 per 1000. A comparison of the mortality from diarrhœa during the recent summer is instructive. In our eighteen largest towns the annual death-rate from diarrhœa during the summer quarters of 1873 and 1874 had averaged 4·5 and 3·8 per 1000, while in the same quarter of this year it further declined to 3·6. In fifty other large towns this diarrhœa-rate has been successively 2·9, 3·0, and 3·2 per 1000. In England and Wales, exclusive of these sixty-eight large towns, the rate from diarrhœa, which was but 1·3 per 1000 in the third quarter of 1873, had increased to 1·4 and 1·6 in the same periods of 1874 and 1875. Thus, the death-rate from diarrhœa, a disease the mortality from which appears to bear most consistent proportion to sanitary condition, and which in the past three years has shown a marked decline in our largest towns, has somewhat increased in the large towns of the second rank as to size, and has increased more markedly in our principally rural population. While noticing the undoubted evidence of improved sanitary condition in our largest towns, the Registrar-General, in remarking upon the absence of similar proof of progress in the rural districts, partly attributes it to local boards of guardians, who were constituted the rural sanitary authorities by the Public Health Act of 1872, not having yet formed an adequate estimate of their responsibilities under that Act; and partly to the fact that "except in certain localities where combined sanitary districts have been formed, the medical officer of health is usually a local practitioner, often without any special qualifications for the appointment, who receives an almost nominal salary." In our largest towns, with few exceptions, efficient medical officers of health have been appointed who, being debarred from private practice, have devoted their whole energies to the furthering of sanitary progress, and with satisfactory results. In our smaller towns and our rural districts the Registrar-General concludes that "the growing evils of overcrowding, the increasing difficulties of sewage-disposal, and the continued pollution of streams, in many cases used as sources of water-supply, have not even been kept in check." The aspect of sanitary matters in rural districts implies a partial failure of the provisions of the Public Health Act of 1872.

CHLORALISATION.

The popular appreciation of chloral, with its effects for a time so delightful, and ultimately so delusive, will not be lessened by an account copied by a contemporary from *Galignani* of the virtues of this hypnotic. According to Dr. Papillaud, whose paper read before the Academy of Medicine is the basis for the account, chloral is a remedy of almost universal use, and almost unlimited power. Two cases of lock-jaw under his care, and six under that of Dr. Verneuil, have yielded to its influence. In small-pox it has permitted, if not caused, recovery. In pleuro-pneumonia it is equally useful. But its greatest, most precious, and, it must be admitted, most permanent effect is to be found in its power of soothing the last sufferings. "A dying person may thus be spared the physical and moral sufferings of his approaching decease. A consumptive girl, by the administration of chloral, died without pain, instead of wrestling uselessly with asphyxia." Unquestionably sedatives have a place in the treatment of disease of the highest importance, but their use needs careful regulation, and the agony of death can rarely be assuaged except by accelerating its course and hastening its end. Our feelings and belief forbid us to obscure consciousness during the last moments of life, and still more do they add fresh force to the continued validity of the sixth commandment, without a violation of which the euthanasia can hardly be actively secured.

PERVERSITY IN PAVING.

There is no really supreme or controlling authority in the metropolis, and it is vain to expect uniformity of administration. Each vestry does what seems right in its own eyes, or in the eyes of the multitude of its councillors, and the public suffer the consequences. Streets are pulled up or blocked at will by divers bodies, so that it is seldom safe to calculate upon reaching any given spot by a particular route at a fixed time. The chances are always in favour of some authority having blocked the thoroughfare, although it was blocked a week previously "by (some other) authority." The diversity of methods of paving, pitching, and lighting, consequent on the multiplicity of petty governments, is even more embarrassing. A few yards of a roadway will be paved with stone, a length further on there will be asphalte, and then a distance will be laid with wood. Some thoroughfares in the metropolis are conspicuous for this treatment. The Strand suffers seriously, much to the inconvenience of its inhabitants. The residents and those who pass much time in St. James's-street are especially to be pitied. They live under two vestries, which, as a matter of course, cannot agree, even to act on their respective convictions, or guard the interests of their own ratepayers. Wood pavement seems on the whole the best, and probably it need not be so laid as to set the teeth of everyone who drives over it on edge by the vibration communicated to carriage wheels. But it is useless to hope that wood or any other kind of pavement will be generally adopted—first, because, as we have said, there is no controlling authority to reduce the chaos of vestries to order; and, secondly, because these bodies seem painfully bent on proving their entire inefficiency and unworthiness to be entrusted with local affairs, possibly with a view to self-extinguishment. In the interests of humanity to horses, cleanliness, and health, a durable, smooth, and noiseless street pavement is a necessity, and one which ought to be uniformly satisfied.

FLOODS AND FEVER.

MR. R. B. GRANTHAM has called attention to the powers possessed by local authorities to drain land and store water. The Land Drainage Act of 1861 and the Public Health Act of last session appear to provide all needful facilities for self-protection. If any new motive is wanting to compel landowners to take action, it may be found in the fact that after floods like those by which large tracts of country have just been inundated there is a serious peril of virulent fever. The water acts on decayed or decaying organic matter, vegetable and animal, and when it subsides, and the decomposing surface is again exposed to the air, it gives off vapours laden with the germs of disease, and fostering the rapid growth of other germs in the atmosphere which they impregnate. These exhalations, which are, in point of fact, miasmata akin to those which prove so fatal at the close of the rainy season in tropical climates, are not, unfortunately, confined to the districts in which they take their rise. They are liable to be blown by the wind, or borne by the insensible currents on the earth's surface, into neighbourhoods not immediately interested in the financial question whether it is worth while to drain. Just as fever in the hovel may breed fever in the palace, so undrained land in a suburban district may give rise to a malady which will invade and decimate a town. It is desirable that this should be remembered, and even considered, in local councils. Apart from the exceeding folly of wasting all the water which falls in a district, there is the possibility of finding the flood followed by an epidemic of fever, and in this contingency the adjacent towns and "populous places" may participate, although they resolutely decline to share the cost of sanitary precautions and prevention.

TAKING LYMPH FOR VACCINATION.

WE are not sure whether to feel grateful or sorry for a decision recently obtained from a magistrate of the Birkenhead Police-court, whereby the mother of a child vaccinated by the local officer was mulcted in the sum of "five shillings and costs" for refusing to allow "a small quantity of lymph" to be taken from the vesicle on the arm of her infant. It is always unfortunate when the law must be put into operation to coerce a well-meaning but prejudiced person to perform an act to which his own common-sense should prompt him. There is intolerable ignorance prevalent, and we regret to say fostered, about vaccination. The industrious wrong-doing of the opponents of this merciful provision against a hideous social scourge is a scandal to the intelligence of some score of silly fanatics, and the multitude of their dupes. But this prejudice against taking lymph from a vesicle ought long ago to have been extinguished. We cannot but deplore that there has been need to appeal to the law. We fear some reproach attaches to vaccinators. Instead of explaining to the mothers of healthy infants that it is because their children are so clean and healthy they are selected as sources of supply, and that taking the lymph will, as a matter of fact, reduce the irritation attendant on the last stage of the process; and then taking only a moderate quantity of the fluid, medical men too often pounce on the arm, pierce the vesicle so clumsily as to draw *blood*, and by the formidable array of points or tubes charged from the arm strike terror into the mother, and really irritate the child. We are speaking with candour of the results of observation, on a topic which needs to be touched. Vaccinators will consult the best interests of their profession if they deal considerately with the prejudices of well-meaning parents, and avoid creating an impression, wholly groundless, but which it is difficult to remove. Properly performed, the operation of charging a few tubes or points from a vaccine vesicle is a relief to the child, and reduces the amount of inflammation; clumsily carried out the same process is an evil. The thing being necessary, it should be done with care.

THE VETERINARY DEPARTMENT OF THE PRIVY COUNCIL.

DR. ALEXANDER WILLIAMS, as chief officer of this department, has recently submitted to the Lord President his annual report on the working of the Contagious Diseases (Animals) Act during the past year. Three Orders in Council only have been issued, relating to importations from Schleswig Holstein, to foot-and-mouth disease, and to certain hitherto disputed points as to the reading of the Act, including the order relating to glanders. Pleuro-pneumonia has prevailed in England and Scotland, but no case has occurred during the year in Wales. A total of 6898 cattle were slaughtered by order of local authorities, the awarded compensations amounting to upwards of £44,000. No returns of cases of foot-and-mouth disease appear. The summary of details as to foreign countries is very fragmentary, but it appears that during the year under consideration pleuro-pneumonia has existed in Germany and the Netherlands, cattle plague in Greece, Italy, Abyssinia, and Turkey, and foot-and-mouth disease in most of these countries to a greater or less extent.

The importation of foreign animals into Great Britain showed a slight decrease as compared with the previous year. A travelling inspector has been added to the department, whose duties chiefly relate to the transport of cattle, both as regards disinfection and the prevention of cruelty and suffering in the foreign as well as the coasting and inland trades. It is probable that this officer will have plenty of work to do. There are now 1706 inspectors holding office under the Act, 371 of whom are veterinary surgeons and 1021 officers of police.

CHEMISTRY IN SWANSEA.

UNLESS he is belied by the local newspaper, Mr. William Morgan, "analytical chemist and public analyst for the borough of Swansea," gave at the Glamorganshire Quarter Sessions the other day some singular evidence in regard to train oil. He began by producing "certain samples of oil which he said were all a mixture of rape-seed oil and a little train oil, only differing in degree as to proportion. There was a little gallipoli oil in one of the samples." Asked by the Chairman the simple question, "What is train oil?" he replied by the equally simple answer, "I don't know." It was a vegetable oil, but he did not know its constituent parts, and could not say how much of it there was in the samples he had analysed. Here some dim misgiving crossed the worthy analyst's mind, and he added, "(taking a book from his pocket and looking into it), I wish to correct myself; I find here that train oil is taken from a whale." On this the Chairman not unnaturally inquired, "Then it is not a vegetable oil?" and received the now triumphant reply, "No, a mineral." In cross-examination Mr. Morgan explained "that he knew all along that train oil was a mineral oil, but he got confused." We, after reading the report, which we must assume is correct, are compelled to ask whether public analysts of Mr. Morgan's stamp are common in Great Britain. Is it possible for a man to be convicted of crime on the evidence of an "expert" so astoundingly ignorant or so deplorably puzzle-headed? The question is one of the gravest importance to the community, for there is but too much reason to fear that many of those to whom the office of public analyst has been entrusted are quite unfit for it.

AIR-PRESSURE IN THE TREATMENT OF DISPLACEMENTS OF THE UTERUS.

DR. CAMPBELL, of Georgia, advocates the use of air-pressure in the reposition and treatment of displacements of the uterus. He places the patient not in the "knee-elbow," but in the "knee-and-breast" posture. In this position the breast rests on the couch, the knees are placed perpendicular to the same, and the spine allowed to become convex downwards. This permits complete relaxation of the abdominal muscles. While the patient occupies this position he admits air into the vagina, and by this means replaces the uterus. He further recommends "nightly self-replacement," and for this purpose advises the use of the "pneumatic self-repositor." This is a slightly curved tube of glass open at both ends; one end of the instrument is to be introduced into the vagina by the patient in the "genu-pectoral" position, and, according to Dr. Campbell, "self-replacement is completely and instantly accomplished." We have often tried this method, and have found that in some cases it answers admirably, while in others it fails as completely in effecting reposition of the organ. The cases in which it fails are not only those in which adhesions exist, but almost all cases of acute retroflexion with enlargement of the body of the uterus—cases in which reposition can be effected generally by the hands. The cases to which the method recommended by Dr. Campbell applies are, so far as our experience goes, those only where the displacement is slight, and which can easily be reduced by the hand.

DR. HARDWICKE.

THE following report of an inquest is taken verbatim from *The Times*:—

"Yesterday Dr. Hardwicke held an inquest at University College Hospital on Thomas Hoare, aged nine, who, it appeared, died at the University Hospital through a fall. The house-surgeon did not appear. Mr. Murrey, the coroner's officer, in answer to questions, said he had summoned him, and could not account for his absence, unless, as he had heard upon the point, there was some dissatisfaction among the hospital staff that there was no fee. The coroner said the medical officers of hospitals were bound, under the Medical Witnesses Act, to give evidence in all cases in hospitals under their charge without a fee. It might be that they could not come to a conclusion in a case without medical evidence; and conduct of this sort on the part of a medical officer of a public institution had a tendency to bring that institution into bad repute. If, in this instance, the medical officer or house-surgeon had stayed away because he wanted to be paid, it was a most contemptible excuse. Indeed, it in fact amounted to a contempt of court; and, if he were assured that in this instance the medical officer had received the proper twenty-four hours' notice, he would be inclined to put the Act in force, and would do so on repetition. At the request of the jury, an intimation was to be made through the coroner that the jury considered the conduct of this medical officer insulting both to the coroner and the jury, and the summoning officer was requested on all future occasions to summon the medical officer personally, with a clear twenty-four hours' notice, when the coroner threatened, in the event of non-attendance on the part of such medical officer, to enforce the penalties. The jury ultimately agreed, without medical evidence, to return a verdict, 'That the deceased died from the effects of injury to the head caused by falling from a van.'"

The truth of the matter we have ascertained to be simply that the house-surgeon in question, having received no intimation whatever, either written or verbal, that an inquest was about to be held, and being consequently unaware that his services were likely to be required, had left the hospital for the afternoon for purposes of private business. The only person who appears to us to be to blame in the affair is the coroner's beadle, who had failed to serve the house-surgeon with a legal notice. The statement of the coroner's officer as to the dissatisfaction felt among the hospital staff in the matter of fees is, we hear, absolutely untrue. The patient had died in the hospital, and the resident officers, who are all accustomed to appear in the coroner's court, are well aware that no fees are ever paid under such circumstances, that such is the law of the land, and that therefore it would be useless to expect them. On going to press, we have received a letter from the gentleman implicated, which we publish in another column. It will be found to completely refute the allegation made at the inquest.

THE PROGRESS OF VACCINATION IN INDIA.

WERE it not hopeless to expect to produce any effect on the Anti-vaccination League by an appeal to their reason, we might adduce some of the facts which are annually reported from India in proof of the remarkable benefits which vaccination has conferred upon the native races of that country. It must be remembered that epidemics of small-pox are common enough in India, when deaths from that disease may be counted by thousands, that popular prejudice against vaccination has had to be gradually overcome, and that it still continues in some parts of India as strong as ever. The Sanitary Commissioner for the Punjab, in his latest report, shows on the one hand that there has been a steady decrease in the mortality from small-pox in certain districts in proportion to the subsidence of the prejudice against vaccination, and, on the other, that in those districts where small-pox mortality has increased the prejudice against vaccination continues as strong as ever, and the people resort to all sorts of subterfuges to defeat the efforts of vaccinators. In the small town of Jagadhri, in the Umballa District, there were no less than 433 cases, with 93 deaths, and the progress of the epidemic was rapidly extending, but, owing to very great efforts on the part of the medical authorities to spread vaccination, the western half of the town had scarcely a case.

A PLAGUE SPOT.

MR. J. J. SKEGG has, in a report presented to the vestry of St. Martin's-in-the-Fields, drawn special attention to the fearfully insanitary condition of Bedfordbury, and has pointed out that it is an area which may well be dealt with under the Artisans' Dwellings Bill of the past session. It seems that the population of this notorious group of houses average nearly seven hundred to the acre, and that the houses themselves are wholly unfit for human habitation. Mr. Skegg's report gives a terrible picture of a condition of things which we fear is far from uncommon in many parts of London, and to remove which it is to be hoped that the local authorities will exert all the powers vested in them. When we read of thirty-six inhabitants packed in a house of nine rooms, with one filthy closet and one cistern, with a staircase so rickety as positively to be dangerous, and when we are told that the case is not exceptional, we feel that grave responsibility will rest with those who allow such a condition of things to remain. Much money has been and is being spent to improve "the finest site in Europe," but we cannot feel quite sure that it is justifiable to spend large sums upon decorating our public places while they are allowed to act as screens to an amount of squalor and misery which makes one shudder to contemplate. What would be the opinion of an intelligent foreigner on visiting this country, which has spent millions on the abolition of slavery and on various foreign missions, should he discover that within a stone's-throw of the National Gallery, and in the absolute centre of the metropolis, there exists a potential plague-spot, which seems to mock at our professed Christianity, and to declare that our social progress is a sham?

THE WORCESTER INFIRMARY.

THE Executive Committee have passed the following resolution, which has been adopted unanimously at a meeting of the Governors:—

"That the following addition be made to Rule 59:—'In case of the unavoidable absence of the hon. medical officer and his substitute, the house-surgeon shall attend to the out-patients of such absent officers, and shall record the fact of his having done so in a book to be laid before the Executive Committee; and the hon. medical officer, when called upon to do so, shall furnish such explanations, not in violation of professional confidence, as the Executive Committee may require.'"

We are not averse to the principle that if honorary medical officers fail often to keep their engagements they should be responsible to the Executive Committee. But perhaps a little more gracious way of stating the principle might have been devised than the rider of Earl Beauchamp, which is suggestive of rather more inquisitiveness than it is pleasant to think of. Let us hope that the good taste of the Executive Committee will prevent them from spoiling the just concession which they have made.

THE CONGO EXPEDITION.

WE are very glad to notice the just, and even liberal, recognition, in Commodore Hewett's despatches, of the valuable assistance afforded by the medical officers in the above expedition. When the Ashantee war commenced it was said, and said with great truth, that it was a battle with climate and disease for our enemies; and the results of previous experience on the African coast were naturally quoted to give point to the gloomy predictions then so common. It is only by the exercise of great judgment in selecting a proper season, and by extreme care and thoughtful consideration in making the preparations for such an undertaking, that it can be carried out at all. The naval doctors, in this Congo affair, rendered essential services, and they are to be congratulated on the prominent position their names occupy in the Commodore's despatches to the Admiralty.

ST. ANDREWS GRADUATES' ASSOCIATION.

UNDER the revised name of the "St. Andrews Graduates' Association," the St. Andrews Medical Graduates' Association has been reconstituted. The Council of the Association is actively engaged in promoting the re-election of Dr. Richardson, F.R.S., as assessor of General Council in the University Court of St. Andrews—an office which has fallen vacant by the resignation of Patrick Anderson, Esq. Dr. Paul is honorary treasurer, and Dr. Sedgwick resumes the office of honorary secretary.

THE MANDAMUS AGAINST THE KEIGHLEY GUARDIANS.

ON Wednesday last, in the Queen's Bench Division of the High Court of Justice, an application was made in this case, which was admitted by counsel to be of a "most unusual and novel" character. The application was for a rule calling upon the Local Government Board to show cause why the mandamus should not be quashed, on the ground that the guardians were not in a position to appear when the rule was argued, as they were taken by surprise! Counsel said the guardians were anxious to "explain their reasons why the writ ought not to have been issued," which they were unable at the time to do; he also admitted that they could not make a return to the mandamus, although he told the Lord Chief Justice that the law and the facts were all on their side. The Lord Chief Justice rejoined: "Then you can make the return. We cannot assist you." The application was refused.

MORTUARIES.

A LEADING article on this important subject which appeared in *The Times* of the 1st inst. will, as we hope, induce the Metropolitan Board of Works, through their chairman, to deal with the question comprehensively. If, indeed, as our contemporary indicates, the laws that now prevent the conveyance of a dead body over certain boundary lines were repealed, and the wants of the metropolis regarded as a whole, the number of mortuaries need not be very large. As the operation of the Artisans' Dwellings Act tends to lessen overcrowding, so will it also tend to diminish the urgent necessity for mortuaries. But until these buildings are established and used systematically, no considerable advance can be made in preventing the spread of contagious and infectious diseases. A corpse ambulance should be attached to each mortuary, so that the dead might be removed decently, and without any unnecessary delay.

H.R.H. THE PRINCE OF WALES.

WE are glad to be in a position to state that the health of the Prince of Wales and his suite had been most satisfactory up to the time of their arrival at Port Said. The temperature was of course felt to be increasing by those on board the *Serapis*, but everything had gone well; the weather had been fine and the water smooth, and a subsequent telegram from Aden indicated that the Prince's health, as well as that of the whole party, had not been in any way affected by the change of climate, food, and mode of life. His Royal Highness was in excellent spirits, and much enjoying his trip.

HARVEIAN SOCIETY.

A LARGE attendance of members and visitors assembled at the first meeting of the Harveian Society on Thursday, Oct. 21st, when Mr. Carr Jackson read his paper "On the Early Recognition and Treatment of Lateral Curvature of the Spine." Mr. Jackson is known to have devoted special attention to this subject, and his very practical and suggestive remarks gave rise to an interesting discussion. Numerous applications for membership were received, and it is evident that this useful Society will derive fresh impulse from the establishment of the Harveian Lectureship.

HEALTH OF POST-OFFICE SERVANTS.

THE Twenty-first Report of the Postmaster-General on the Post Office is issued this week. We find that the health of the *employés* in London was last year exceptionally good. There was a diminution in the number of ordinary cases of illness to which the working staff are always liable, such as bronchitis, catarrh, and rheumatism; and Dr. Waller Lewis, the chief medical officer of the department, adds that if a more perfect system of ventilation without draughts could be devised for the various offices, these diseases would be still further reduced. The mortality from all causes amounted to between 6 and 7 per 1000. Attention is again called in the Report to the reprehensible practice of giving drink to letter-carriers—a practice which, it appears, is carried on to an extreme extent at Liverpool.

EPSOM COLLEGE.

WE have received several letters desiring us to direct our attention towards the sanitary condition of the Royal Medical Benevolent College at Epsom; and we have inserted letters both from those who blame and those who defend the management. We intended to have reported on the College this week, and had arranged for the visit of our Commissioner, but the head master wrote to say that, as the governing body were responsible for the management of the school, he would rather that we made our application to them. This we have done, and we have now received the official sanction to make our inspection.

AT the recent Berks Quarter Sessions the medical officer to the gaol, Mr. O. C. Maurice, reported the following extraordinary case to the Court. One day he was told that a prisoner in the reception-cell wished to see him immediately. On proceeding to the cell he found the man lying on his face quite dead. An inquest was held, and a verdict of "Death from natural causes" was returned, in spite of the protest of Mr. Maurice, who rightly urged that it was impossible to ascertain the cause of death without making an autopsy. The prisoner, who was a hale, hearty-looking man, in the full vigour of life, was admitted on a Monday night, and in the early part of the next day was lying dead; and yet no post-mortem examination was allowed to be made. The inquest, which resulted in the finding above stated, was worse than useless. The man might have died from violence, poison, or have committed suicide. We are glad to find that Mr. Maurice, with the sanction of the visiting justices, has forwarded a statement of the case to the Secretary of State. A somewhat forcible expression of opinion may reasonably be expected from this august functionary.

THERE are few medical officers of health in the kingdom who in their periodical reports have not to comment on the increase developed in the rate of infantile mortality. The medical officer of health for Nottingham, in a report on the health of the town during the third quarter of the year, deals at some length with the subject. In all centres of industry where it is the custom to employ women in manufactories maternal neglect of course ranks high as one of the causes of the waste of infant life. Apart from this, in Nottingham the districts where the mortality below one year of age is highest are those where the houses are of the worst construction, dirtiest, and most closely packed together—in effect, to bad sanitary conditions is due a large amount of the extra mortality prevailing.

THE memorial stone of a new hospital was laid at Stockton on the 30th ult., by Mr. Marshall Fowler, J.P. The hospital and its appurtenances will occupy two and a half acres of ground. The buildings now being erected consist of two blocks, the administrative department and the Marshall Fowler wing, which will afford accommodation for thirty in-patients. Should the means be forthcoming, it is intended at some future time to add other wings, when it is estimated that the number of beds may be raised to 102.

AT a meeting of the Strand Board of Works held on Wednesday last, Dr. Joseph Rogers gave notice of the following resolution:—"That this Board, having learned with astonishment and regret that the Metropolitan Board of Works has declined to undertake the establishment of public mortuaries in the metropolis, notwithstanding the representations contained in the memorial of this Board, and the confirmation of the facts by the chairman of the Works Committee of the Metropolitan Board, to which body the question had been referred in bringing up their report, feels that the question cannot be allowed to remain any longer in abeyance, and therefore directs the clerk to write to the President of the Local Government Board requesting him to grant an interview to a deputation from this Board, who desire to make such representation as may induce the Government to take action in the ensuing session of Parliament." The resolution will be considered at the next meeting of the Board, and, should it be adopted, Sir Charles Russell, Bart., and Mr. W. H. Smith, the representatives of the borough in Parliament, will be asked to introduce the deputation.

MR. WM. PENNY BROOKES, F.R.C.S. Eng., has been publicly presented with a testimonial and an address referring to his long residence at Much-Wenlock, and his public spirit and industry in everything relating to the welfare of the town, but especially with reference to the establishment of the Wenlock Olympian Society. The testimonial consisted of an elegant tea-service, epergne, and salver, the latter bearing the following inscription:—"Presented to Wm. Penny Brookes, of Much-Wenlock, F.R.C.S., by neighbours and others, in token of their sincere esteem, and of their appreciation of his life-long devotion to objects of public welfare and the improvement of his native town."

IT may not be generally known that Sir Trevor Lawrence, who is now seeking the suffrages of the electors for Mid-Surrey, is a member of the profession. We hope our medical brethren in the constituency will show that they are not unmindful of the claims which the present candidate has upon their support. An augmentation of the scanty number of doctors in Parliament is highly desirable, in the interest alike of the public and of the profession. Who so fit to take part in debates on the large questions of sanitary reform, which can be shirked no longer by the Legislature, as men who have had a practical acquaintance with the destruction entailed by a disregard of the laws of health?

WE would call the attention of our readers to the fact that the opening meeting of the Epidemiological Society will be held on Wednesday next, on which occasion the new President of the Society, Mr. J. Netten Radcliffe, will deliver an inaugural address. We believe the subject of Mr. Radcliffe's discourse will be the progress of epidemiology in England during the past quarter of a century. From Mr. Radcliffe's profound acquaintance with this important branch of medicine, a most instructive and lucid exposition may be anticipated.

WE are enabled this week to contradict a somewhat prevalent rumour to the effect that an outbreak of typhus fever had appeared in certain parts of Richmond. We are assured that the town is singularly free from fever of any kind. The cases of typhoid which occurred some time back are said to have been mainly imported from other localities.

THE winter session was commenced at Edinburgh University on Monday last, when the opening address was delivered by Sir Alexander Grant, the principal. In the Medical School, Mr. Chiene gave an introductory address.

Galignani announces that Madame Brés, M.D., is about to commence medical practice in Paris. It will be remembered that a few months ago it was reported that this lady had been offered a handsome salary if she would take charge of the Sultan's seraglio at Constantinople, but that the terms of the engagement were too irksome to permit her to accept the offer. We shall be curious to learn the result of the experiment now undertaken by the lady.

The East London Medical Defence Association last week recovered another penalty of £20 and costs under the Apothecaries' Act, from a person who was practising without legal qualification at the east-end of London. As in the two recent cases in which similar penalties were recovered, so in the present instance, registered medical men are said to have endeavoured to protect the defendant.

An Exhibition of £50 per annum, tenable for three years, granted by the Clothworkers' Company, will be awarded at the University of Cambridge on the 13th of January next. The examination will embrace certain selected branches of physical science. Further information may be obtained on application to the Rev. R. B. Somerset, censor.

The Lords of the Admiralty have recently issued an order to the effect that no boys are to be employed in cleaning or working in the double-bottoms of ironclad ships. The unhealthy character of the work has been repeatedly alluded to in various reports by the medical officers attached to the Royal dockyards.

On Monday, November 15th, at 4 p.m., Sir Henry Thompson will commence a short course of Lectures on the Surgical Diseases of the Urinary Organs, at University College Hospital. The lectures are open to all students and practitioners of medicine.

We are requested to state that the Medical Society of London will henceforth meet on Mondays, at 8.30 instead of 8 o'clock.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The earnestness and thoroughness with which Sir James Paget conducts everything he takes in hand are beginning to make themselves manifest in the transactions of the Council of the College of Surgeons. The short time that has elapsed since the inauguration of his presidency has seen the consummation of some useful reforms, and the dawning of several others. Many of the old traditions of the College have been entirely broken through, and some things previously undreamt of have been realised. The Professorship of Surgery has been given to a gentleman who is professedly an ophthalmic surgeon, with the distinct understanding that he shall deliver a course of lectures on ophthalmic medicine and surgery. Mr. Erichsen was recently elected to the Court of Examiners on the assumed condition that the examiners in anatomy and physiology should be distinct from those in surgery; and the nature of the business conducted at an extraordinary meeting of the Council last Monday clearly showed that Sir James Paget is determined that his colleagues shall not at present rest on their oars.

On Monday last the report of the committee appointed in March last to consider and report to the Council on the best means of giving effect to the new bye-laws ordained by the Council on the 10th of December last, relating to the examiners and examinations in anatomy and physiology, was read and accepted. The report refers to four important subjects—the mode of appointment of the Board of Examiners in Anatomy and Physiology; the mode of payment of the members of the Board of Examiners in Anatomy and Physiology, and of the members of the Court of Examiners for the membership; similar regulations respecting the examiners for the fellowship; and, lastly, the consideration of the degrees, diplomas, licences, and certificates to be recognised as exempting candidates from examinations in anatomy and physiology for the membership and the fellowship.

The recommendations of the committee were as follows:—The Board of Examiners in Anatomy and Physiology should consist of nine members, to be appointed by the Council annually from the Fellows of the College, and to hold office not longer than five years at a time, at least one member of the Board, who shall act as chairman of the Board, being a member of the Court of Examiners. A committee of three members of Council, Messrs. Hilton, Hancock, and Marshall, together with the President and two Vice-presidents, were appointed as "the Committee on Examinations in Anatomy and Physiology," it having been decided that at least two of the members of the committee shall have been members of the Court of Examiners. The duties of this committee, the members of which are ineligible for the office of examiners in anatomy and physiology, are to consider the applications from candidates for the office of examiner in anatomy and physiology, and to report thereon to the Council, and recommend the candidates they deem fittest for election, and to be visitors of the examinations in anatomy and physiology. The notice of election to the Board of Examiners will be advertised in the medical journals not less than six weeks prior to the election, the candidates having to send in their applications to the secretary not less than one month prior to the election.

The mode of payment for the members of the Board of Examiners for the membership has been so arranged that each member shall receive a capitation fee of £2 for the membership and £3 for the fellowship, while the members of the Court of Examiners each receive £4 4*s.* for each candidate for the membership and £12 12*s.* for the fellowship over and above one guinea which each member of the Court receives for each attendance at a meeting. It is calculated that by this arrangement each member of the Board will receive £140 per annum for the membership and about £30 per annum for the fellowship, while the members of the Court will each receive about £200 per annum for the membership and about £45 per annum for the fellowship. But considering the small amount now received from candidates for the fellowship, and the inadequate payment to the examiners, the committee recommend an increase in the fee for the fellowship, and that immediate steps be taken to obtain a new bye-law enabling the College, in accordance with the provisions of Section 7 of the Charter of 7th Victoria, to require that a candidate for the fellowship by examination shall pay a fee not exceeding thirty guineas, over and above any stamp duty, on his admittance or diploma. Whether increasing the fees of admittance to an examination, in order to remunerate more liberally the examiners, will prove to be a wise policy remains to be seen. The Council of the College should remember that its fees are already much higher than those of any other examining board, and that raising the fees of admittance so that only the rich can pay them is not exactly the same thing as enhancing the value of the fellowship, or raising the status of the fellows. No doubt the duties of the examiners are arduous and irksome, but £200 per annum is not poor remuneration for what is done.

Nothing has yet been settled respecting the regulation of the qualifications that exempt candidates for the College diplomas from examination in anatomy and physiology.

At the same meeting of the Council, Sir James Paget read a letter on the Conjoint Scheme, inviting the various co-operating bodies to an early conference, to take into consideration again the question of the Conjoint Scheme, each body having been requested to appoint two of its members as delegates to the conference. The representatives of the College of Physicians and the College of Surgeons have already been appointed.

MEDICAL SUPERVISION OF PUBLIC SCHOOLS.

WITHIN the last three months we have had to record three serious outbreaks of enteric fever occurring in three different schools or institutions. The first was the outbreak at Müller's Orphanage Asylum, near Bristol, where, out of 2000 inmates, no less than 500 were attacked, and 12 died; the cause in this case being the casual use of water from a stream running through a valley in which the children sometimes played, and which had become contaminated by the drainage of houses situate higher up the valley. Then we have the outbreak on board the *Cornwall* school-ship, the proximate cause of the outbreak being clearly due to very distinct water contamination. And now we have the outbreak at Uppingham School, with 30 cases and 4 deaths. The investigation into the causes which led to this outbreak has to be completed, though, as we showed last week, there is strong evidence pointing towards water contamination and defective sanitary arrangements.

The head master of Uppingham, we understand, has issued a manifesto or statement in which he explains the policy adopted by himself during the epidemic. We have seen a copy of the document in question, and perused it with interest, hoping to learn from it the nature of the sanitary arrangements of the school, and the means employed to check the epidemic. But we were disappointed. It is evident the head master has, or had when he wrote the paper in question, no idea of the nature of the disease then invading the school, still less of the means by which the progress of the disease might be checked. The manifesto refers almost entirely to points of discipline, and an appeal to the moral courage of the boys during this trying period. He states, however, incidentally, that since he has been head master other epidemics have visited the school, and we would now ask him what practical lessons he has learnt from these previous outbreaks. What means are employed to prevent the introduction of infectious diseases into the school? Are the boys obliged to bring a certificate on their return from home stating that they are in good health, and have not been recently exposed to infection—i.e., not been residing in any neighbourhood where zymotic disease is prevalent? Are they examined on their return by the school medical attendant to see that they are free from disease? Are boys who fall out of school obliged to report themselves *immediately* to the medical attendant, so that if they show signs of infectious disease they are at once isolated? What precautions are taken to prevent the water-supply becoming contaminated, and what are the arrangements for cutting off and obtaining a fresh supply if cases of enteric fever occur? Have the school premises been inspected by a health officer since the last epidemic, and have all his recommendations been strictly carried out? Is the medical attendant of the school obliged to furnish half-yearly, or even yearly, a report to the head master or the authorities stating that the sanitary arrangements are complete in detail, and in perfect working order? These are questions that urgently demand an answer, and we think the public should be satisfied that every precaution has been taken before they can be asked to accept the axiom that among a large assemblage of boys it is impossible to prevent the occasional introduction of infectious disease. The experience gained by our Commission on the Sanitary Condition of Public Schools has shown that the freedom of schools from outbreaks of zymotic disease depends entirely on the excellence and thoroughness of the medical supervision, and the responsibility thrown on the medical officer of the school. Jealously guard every possible channel by which infection may be conveyed. Make the parents responsible for returning any boy in an unsafe condition to school. Treat every case of illness, however trivial, as if it were infectious, by isolation, till it has declared itself. And, lastly, frequently consult the medical officer of health of the district as to the health of the neighbourhood, the nature of the prevailing epidemics, and the special precautions to be taken in the time of danger. If these details are rigidly carried out, we maintain that school is as safe a place as home for boys, where there are no appliances or machinery for enforcing such precautions. We are anxious to learn what steps the authorities at Uppingham took to protect the boys committed to their care from the possible introduction of infectious disease, and the means employed to prevent its spread. We are the more anxious because it appears that similar outbreaks have not been infrequent in the school within the last few years.

THE FATAL OUTBREAK AT UPPINGHAM SCHOOL.

AT a meeting of the Sanitary Authorities held on Wednesday, November 3rd, at the Board Room, Uppingham, notices were ordered to be served on the head and other masters to at once remove the nuisances occasioned by the cesspits. A resolution was unanimously carried to the effect that serious blame attaches to the masters in whose houses enteric fever originated. The medical officer of the school was also blamed for not investigating the causes of the disease and not reporting the fact of the outbreak to the sanitary inspector. The Board likewise censured the medical attendant for not attending a meeting of medical practitioners in the town, convened by the medical officer of health, for the purpose of obtaining from them every information on the cause and history of the outbreak. This fact the Committee consider should be laid before the trustees of the school and the parents of all boys who had suffered. It was also resolved that a sanitary engineer be employed to report on the drainage of Uppingham, public and private, in order that steps be taken to render this as perfect as possible. Mr. Roger Field, C.E., of Wesminster, the engineer appointed, will at once proceed to Uppingham and commence his investigations in conjunction with Mr. Haviland, the medical officer of health for the district. Lastly, the medical officer of health, finding that the healthy boys were liable to be sent to the infected houses to take their meals, on his own responsibility wrote to the head master prohibiting the practice. On the following day a meeting of the trustees took place and it was resolved to close the school. The boys left on Tuesday, the 2nd inst. The sanitary authority have acted with spirit and determination, and the censures they have administered will serve as a useful warning to other offenders. With respect to the conduct of the medical attendant of the school, we should like to learn if his reticence was due to pressure put upon him by the school authorities. No fresh cases are reported, and all the boys, with one exception, are doing well. The number attacked amounted to thirty, and up to the present date there have been four deaths.

UNIVERSITY OF CAMBRIDGE.

First Annual Report to the Senate of the Syndicate appointed to superintend the Examinations in State Medicine.

The First Examination in State Medicine under the regulations confirmed by grace of the Senate, Feb. 4, 1875, was held on Oct. 5 and three following days. Twenty-eight candidates entered, of whom 26 presented themselves for examination. Four offered themselves in Part I. only, of whom one was approved. The remaining 22 were examined in both parts, and 19 of them were approved.

Two days were devoted to each part of the examination. Part I. comprised Physics and Chemistry, and their applications to sanitary matters. Part II. comprised the remaining subjects specified in the regulations—viz., the causes and prevention of epidemic and infectious diseases, the circumstances and conditions of life which are injurious to health and the laws of the realm which relate to public health. In each part two papers of questions, each of which had been submitted to all four Examiners, were set, to which written answers were required; in each part the candidates were also questioned orally by two of the Examiners sitting together, and in each part the candidates were tested by practical work.

The Examiners report that the answering was generally good, some of it excellent, more especially in questions relating immediately to the actual duties of Officers of Health. This remark applies emphatically to the reports on the sanitary condition of some of the small courts and other places in Cambridge, which the candidates were directed to visit for the purpose of inspection, each candidate having a different locality assigned to him.

The Examiners are of opinion that the number and character of the candidates are evidence that the examination supplies a public want, and may be of real service in the advancement of sanitary improvements. Such a knowledge of Sanitary Science as has been shown by the successful candidates proves them to be entitled to some trustworthy voucher for their acquirements. The University Certificate, granted after a careful and thorough examination, will be such, and may serve to assist the judgment of those Public Bodies in which the choice of Officers of Health has been invested by the law.

Every candidate was required to pay a fee of four guineas before admission to each part of the examination, and it has been found that this has been sufficient to defray all the expenses incident to the examination. The certificate is granted to those who have passed both parts of the examination without further fee.

The Syndicate considers it convenient that the holders of the certificate should be designated in a uniform manner, and recommends that their designation be "Holders of the Certificate in Sanitary Science," or abbreviated "S. Sc. Cert. Camb."

The Syndicate has arranged that the next examination shall begin on June 13, 1876, and considers it desirable to hold a second examination next year at the beginning of October. These times seem as convenient as any for the University, and are likely to suit medical men engaged in the practice of their profession. Whether it will be advisable to hold two examinations in any future year must be decided by the experience gained as to the probable number of candidates, and by other considerations.

H. W. COOKSON. P. W. LATHAM.
G. E. PAGET. G. D. LIVEING.
G. M. HUMPHRY.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE usual general meeting of this Society was held on the evening of Friday, the 29th ult., by the liberality of the Royal Medical and Chirurgical Society in their library. Sir George Burrows, Bart., president, took the chair punctually at half-past 8 o'clock. The attendance was very limited. Out of more than four hundred members only ten were present to support the president, and four of the ten were officers of the Society. Although it may be very complimentary to the officers, as showing how satisfied the members are with the management, still it would be more gratifying to them if the members would attend at the general meeting and manifest an interest in the working of the Society.

From the half-yearly statement of accounts read, it appeared that, during the last half-year 58 widows and 20 children had received grants amounting in the aggregate to £1236 10*s.*; the expenses had been £130 11*s.* 5*d.*, which sum included the cost of the circular in the beginning of the year to all members of the profession eligible to become members of the Society. The total receipts of the half-year available for payments had been £1598 10*s.*, and the payments £1367 1*s.*, leaving a balance of over £200. A legacy of £1500, less duty, had been received from the executors of Alexander Barker, Esq., and a legacy of £100, less duty, from the executors of T. F. Chilver, Esq., a member of the Society, and another legacy was reported of £1000, duty free, from the Rev. H. C. Morgan.

Sir Thomas Watson and Dr. Billing were elected vice-presidents in the places of Dr. Latham and Sir Charles Locock, both deceased; and Mr. Streatfeild was elected a director in place of the late Mr. Sercombe.

It was announced at the meeting that the directors intended, out of the balance in hand, to make a present at Christmas of £4 to each widow, £1 10*s.* to each child, and £2 to each of the recipients from the Copeland Fund.

Correspondence.

"Audi alteram partem."

THE CAUSATION OF DICROTISM.

To the Editor of THE LANCET.

SIR,—In his valuable lectures on the Pulse recently published in THE LANCET, Dr. Broadbent has touched upon a question which has long been a vexed subject of controversy—namely, the Causation of Dicrotism. The point at issue does not indeed affect the practical inferences from the pulse-curve with regard to arterial tension and distensibility which he has so lucidly set forth. A correct explanation of dicrotism must, however, conduce to a clear comprehension of the different varieties of pulse, and I therefore regret that so high a sanction should be given to a theory which I believe to be not only mechanically impossible, but directly contradicted by observation.

Dr. Broadbent explains the second expansion in the pulse as caused simply by the elastic recoil or contraction of the aorta when relieved from the pressure of the blood, so that in the aorta itself no second expansion or dicrotic wave occurs at all. It is an explanation which was, I believe, first put forward by Dr. Mahomed. In all theories of dicrotism, the elasticity of the arteries is, of course, regarded as a necessary condition for its production, but, according to this view, we must suppose that, as we trace the pulse-wave downwards towards the legs, there is a point—namely, the bifurcation of the aorta—above which no second expansion takes place, while below it there is a second expansion due to the elastic contraction of the aorta above. Reasoning based upon the principles of mechanics is apt not to be universally understood or appreciated, and therefore it is a fortunate circumstance that, in this case, the theory can be put to the direct test of observation, whether or not a second expansion does occur in the aorta. We know that in the femoral arteries the dicrotic wave is well marked, and it is not unfrequently possible to obtain a tracing from the abdominal aorta when it has undergone aneurismal dilatation, or pulsates excessively from nervous causes. The dicrotic wave is always found in the trace, and in the latter case the form of the pulse-curve is not very different from that of the femoral artery. Again, pulsation is occasionally produced in the upper intercostal spaces by a condition which is found after death to be not an actual aneurism but a general aneurismal dilatation of the arch of the aorta. The tracing then obtained from the point of pulsation may be expected not to differ widely from the normal aortic tracing. In more than one instance of this kind I have found the curve to resemble closely that obtained from the radial pulse when the arteries are very atheromatous, and to show a distinct second expansion. Lastly, similar evidence may be obtained from experiments on animals. Marey has published* a curve, obtained by means of the polygraph, representing the pressure within the aorta of a horse, and the dicrotic wave is here seen, and shown to be synchronous with the closure of the aortic valves, although in this instance it is comparatively small. In this and in all other aortic tracings the dicrotic wave differs from that seen in the radial pulse, just as the latter in its turn differs from the dicrotic wave in a more distant artery, such as the dorsalis pedis, by the fact that its ascent is more abrupt, and its maximum is reached much earlier. I think that the evidence thus afforded of the occurrence of a second expansion in the aorta itself is sufficient to narrow the question of the causation of dicrotism by the exclusion of the theory adopted by Dr. Broadbent.

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* Physiologie Médicale de la Circulation du Sang, p. 189.

I am, Sir, your obedient servant,
St. Thomas-street, Oct. 27th, 1875. A. L. Galabin.

DR. HARDWICKE.

To the Editor of The Lancet.

Sir,—With reference to a paragraph which has recently appeared in the daily press headed "Contempt of a Coroner's Court," I wish to make the real facts of the case known.

1st. I received no notification, either verbal or written, that the inquest was going to be held.

2nd.—I know perfectly well that no fee is allowed in such cases, as I have given evidence before.

3rd.—I have never heard any complaint with reference to fees from any member of the resident staff.

Apologising for troubling, I enclose my card, and am, Sir,
Your obedient servant,
The House-Surgeon.
University College Hospital, Nov. 4th, 1875.

*** As we expected, our correspondent has triumphantly vindicated himself and his colleagues. It will be seen that we have dealt with the matter in another place.—Ed. L.

BIRMINGHAM.

(*From our own Correspondent.*)

The Queen's Hospital is to be congratulated on having achieved two great successes this week. "Hospital Sunday" bids fair to equal, if not to surpass, any of its predecessors, the amount already announced, as collected yesterday, being upwards of £4000; but the greater and more important achievement is the adoption of the "free system," which was carried to-day by a large majority at one of the largest meetings of governors ever held. The subject was discussed by the governors on the 9th of July last, in consequence of the report of a sub-committee specially appointed to inquire into the best means of improving the financial state of the institution, and an adjournment took place till Nov. 1st in order that the governors might have the fullest information before instituting any fundamental change in the admission of patients. The report of the sub-committee, which was to-day adopted, abolishes every vestige of the privilege system, and leaves the committee and medical staff free to admit what patients are most suitable; establishes a registration fee of one shilling for each patient, such fee to be remitted in cases of accident or extreme indigence; and ensures the fullest inquiry by competent officers into the social fitness of all applicants for hospital relief. When one considers that, out of 5170 in-patients and 42,304 out-patients who have been attended to at the Queen Hospital during the last three years, 4000 in- and 16,000 out-patients were admitted without tickets, as accidents or urgent medical cases, one is not surprised to find the governors have seen the uselessness of perpetuating the privilege system, and that they have by their present action decided that in future there shall, between the hospital and the sick and suffering poor of Birmingham, be no barrier in the shape of any ticket of admission. Great credit is due to the committee for so energetically pursuing a course which at one time was regarded with hostility by some few of the governors, and by some representatives of the working class, and for carrying it to so successful an issue, and it is to be hoped their example will be followed by the committees of many other medical charities which at present groan under the disadvantages of the privilege system.

At their last meeting the corporation unanimously decided to purchase the property of the waterworks company, and thus to control the water-supply of the town and adjacent neighbourhood. This property, which might have been purchased in 1851 for £250,000, will now cost the town £1,360,000—a vast sum truly, but probably not too much for the great outlay of capital involved in the supply of water to a population of 500,000 people, and certainly public money can be spent in no better way than in providing an ample supply of the purest water that can possibly be obtained. The corporation also decided to expend £1000 in planting trees in some of the public streets, on the ground that such trees would not only improve the appearance of the thoroughfares, but would also be useful in a sanitary point of view.

The annual meeting of the Governors of Queen's College was devoid of special interest, except for the attempt of the Mayor to reopen the question of the admission of female students, which, however, was of no avail, as the council had decided to abide by their former resolution, and therefore the Mayor, with some warmth, withdrew his proposition for reconsideration of the subject.

The report of the Orthopædic Hospital is satisfactory. 759 cases have been treated during the year at a cost of £443. A suitable building has not yet been found, but probably the funds are better expended in instruments and drugs than they would be in keeping up a costly in-patient department.

The thirtieth annual meeting of the Dudley Dispensary was recently held, when the report of the Committee showed that the institution was flourishing, 3804 patients having received medical aid during the year, and the funds having proved ample for their wants.

Birmingham, Nov. 1st, 1875.

PARIS.

(*From our own Correspondent.*)

ANNUAL MEETING OF THE FIVE ACADEMIES.

The annual meeting of the five Academies constituting the Institute of France took place on the 25th ultimo, at the Palais Mazarin. The meeting was this year presided over, according to rotation, by a member of the Academy of Fine Arts, but the great biennial prize given away every year by one of the Academies "to the work or discovery most highly calculated to honour or serve the country," belonged this year in turn to the Academy of Sciences. It has been given, with the necessary consent of all the other Academies, to Dr. Paul Bert, Professor of Physiology at the Sorbonne, and a deputy in the National Assembly, for his labours and published work "On the Influence of Barometric Pressure on the Phenomena of Life."

The President, in mentioning Dr. Bert's name, accompanied it with the following flattering remarks, which show in what high estimation he is held here:—"In giving such a reward to the varied and ingenious experiments of M. Paul Bert, to his long and useful researches carried on during several years under difficult circumstances, you have, gentlemen, to speak like the Academy of Sciences represented by one of its most illustrious members—Claude Bernard,—you have, I say, highly manifested the interest which you attach to the progress of pure science, to *true scientific discoveries.* They are always fertile, but it is for time to develop and ripen their consequences. The discoveries of M. Paul Bert bear that eminently scientific character of severity and precision which, even at present, places them in the first rank amongst the greatest physiological discoveries of our epoch."

PROFESSOR LORAIN.

Many touching and interesting anecdotes are related of Professor Lorain, whose sudden death has been the universal subject of conversation and regret during the last few days. The circumstances under which he died were most unfortunate, whilst they showed his devotion to the duties of humanity. He was busy in his study preparing his first lecture on the History of Medicine, which he was to deliver in a few days (to-morrow, Wednesday), when a patient called to ask him to attend a child. The servant had received orders to say, "Not at home," but the poor father insisting, she let him in, and Dr. Lorain, notwithstanding his wife's reminder that he was not well, went out, took an open carriage, and climbed the six flights of stairs which led to the sick child. He had scarcely reached the room when he begged to be laid on a bed, and asked that his wife should be sent for. Two medical men came in and found him blue in the face and convulsed, and in about twenty minutes he was no more.

As a proof of the extraordinary effects which sometimes attend severe regulations it is related that Dr. Grancher (one of the medical men who attended the unfortunate Professor) went to the "bureau" of St. Antoine Hospital to get a stretcher whereupon to take the body to his home. The official of the bureau sternly refused to let a stretcher be taken out of the hospital, the regulations being formal on the subject, and though Professor Lorain had been ten years physician to the hospital and was at the time physician to La Pitié, his friends had to apply to another establishment to get the necessary stretcher.

Lorain is most deeply and sincerely regretted here, and his death is considered a veritable loss to science. From college life to his high post as Professor, throughout all his *concours* and in all the posts which he occupied, Lorain made himself loved and esteemed. All who knew him liked him for his amiable, frank, loving character, and esteemed him for his upright and noble mind.

Amongst the anecdotes which are related of him I cannot resist the satisfaction of mentioning the two following.

During the Commune Lorain had been affected, at his small country-place of Azay le Rideau, with symptoms of intestinal strangulation. Having returned to Paris too soon afterwards, partial peritonitis supervened. Lorain kept quiet at home and did not dare to expose himself to the jolting of a carriage-drive. It was under these circumstances that his friend Sainte-Claire Deville, the celebrated Professor at the Museum, got a telegram one day informing him that his son was dangerously ill at Nantes. He had no time to lose, and he despatched a friend to Lorain to show him the telegram and ask his advice. The next morning, Lorain, forgetting his own sufferings and the danger he exposed himself to, was in Nantes at the bedside of his friend's child, whom he was really the means of saving by the measures which he ordered.

In 1868 Lorain, who was known to M. Duruy, the Minister of Public Instruction, was inscribed on the list of savants who were to receive the Cross of the Legion of Honour. He heard of this, and at once went to Sainte-Claire Deville and entreated him to use all his influence with the Minister so as to get the name of an elder colleague of his substituted for his own. This was done, and Lorain had to wait seven years before receiving the wished-for Cross for himself, as he obtained it only in August, 1875.

Paris, 2nd Nov., 1875.

Obituary.

JOHN HAMILTON, F.R.C.S.I.,

SURGEON-IN-ORDINARY TO THE QUEEN IN IRELAND.

With great regret we announce the death of this member of the profession, which occurred at his residence in Merrion-square, Dublin, on the 2nd inst., aged 66. Mr. Hamilton suffered, we understand, from malignant disease of the rectum, with a communication between the bowel and the bladder; and Mr. Curling performed the operation of colotomy on Sunday, the 10th ult. The deceased was a pupil of the late Sir Philip Crampton, and shortly after obtaining his diploma was appointed surgeon to the Richmond Hospital, which post he held until within the last few months. During this year he was selected as surgeon in ordinary to Her Majesty, and Vice-president to the Royal College of Surgeons. He was surgeon to St. Patrick's Hospital for Lunatics and Imbeciles, Medical Examiner to the Customs, and was a member of various scientific and medical societies, including the honorary membership of the Paris Chirurgical Society, Corresponding Member of the National Institute, Washington, and Consulting Surgeon to St. Mark's Ophthalmic and the Richmond Hospitals. Mr. Hamilton was a very skilful surgeon, and held a high position in Dublin, being esteemed for his goodness of heart and benevolence of character, which were accompanied by professional abilities of no mean order.

WM. RALEIGH BAXTER, LL.D., L.K.Q.C.P.I.

We have to record the death of the above-named gentleman, which took place suddenly at Emsworth on the 11th ultimo, from syncope consequent on an attack of diabetes mellitus, from which he had been suffering for more than twelve months. As a medical man he stood high in the profession; he was an able and skilful practitioner, and his abilities were testified to not only at home but abroad by the number of honorary distinctions conferred upon him. He held the LL.D. (honoris causâ) from King's College, Aberdeen, and also diplomas from the Imperial Society of Medicine, Constantinople, and other kindred societies. For many years he was the editor of the *Medical Record*, and was also the author of "A Treatise on Certain Abnormal Sounds of the Heart," "Handbook of Chemistry," &c. Previous to settling in Emsworth, where he practised with a short interval for thirty-three years, he was a lecturer in the Dublin and London schools on Materia Medica; and his testimonials from distinguished members of the profession, some of whom are still living, bear ample evidence of the zeal and ability which he displayed as a teacher. On the outbreak of the Crimean war, Dr. Baxter formed one of the band of volunteers who sacrificed the comforts of home and remunerative practice to follow the fortunes of our army in the East. He was attached to the Osmanli Horse Artillery, and the manner in which he performed the arduous duties of senior regimental surgeon to that corps drew forth the praises of his senior officer, Surgeon Major R. R. Alderson. At the conclusion of the war he resumed his practice at Emsworth, which in his absence had been carried on by his brother, and which he continued until death put an end to his earthly career. In addition to his professional duties, Dr. Baxter found time to write for many of our leading lay journals. His death will be much felt in Emsworth and the surrounding neighbourhood, where he was always doing good.

PROFESSOR LORAIN.

One of the most brilliant and distinguished professors of the Paris Faculty, Dr. Paul Lorain, has just suddenly ended this life. On the morning of October 25th he felt rather unwell, when one of his poor patients, inhabiting a sixth storey in the Faubourg St. Antoine, prayed him to call and see a member of his family. Dr. Lorain hesitated, but on his sister's pressing him he consented. On going up the poor man's stairs he felt sadly uncomfortable, and on reaching the landing-place he sighed, lost consciousness, and in a few seconds was no more. He was a strongly built man, of florid complexion, and for years already had been obliged to follow a severe regimen, excluding wine, and taking a great deal of walking exercise.

Dr. Lorain was only forty-eight years of age, and was appointed three years ago to the chair of History of Medicine, left vacant by the death of Daremberg. He was most extraordinarily intellectual, and highly gifted, and was successful in whatever branch of medicine he took up, or took to, according to circumstances. Thus, he was one of the most earnest and brilliant representatives of the physiological or scientific school of medicine, and formed one of the group of admirers who surrounded Marey, and applied his useful inventions to the investigation of disease.

Lorain's works on the pulse &c., containing researches carried on with the sphygmograph, the thermometer, the hæmodynamometer, and other scientific means of diagnosis and prognosis, are most valuable clinical studies; and, indeed, Lorain, who was physician to the Pitié Hospital, was generally quoted as an accomplished clinical investigator and teacher. His reports on various questions of forensic medicine when he happened to be nominated an expert are most remarkable for acuteness of observation, soundness of judgment, and elegance of style. He was equally eminent in his theoretic teaching at the Faculty, and his lectures were amongst the best attended.

Lorain was most popular amongst the profession, the public at large, and especially the quarter of the town which he inhabited, and in which he was so much liked on account of his kindness and liberality to the poor. His warmth of heart, cheerfulness of spirit, and refined artistic mind endeared him to all who knew him, and his rapid success excited no jealousy, as he was amongst the most ardent and laborious workers of his day.

MICHAEL HARRIS, M.B. Lond.

On Sept. 28th died, at Manchester, Michael Harris, M.B. Lond., assistant-physician to the Children's Hospital, Pendlebury, in the twenty-seventh year of his age. By his early death a career of much promise has terminated. After a period of studentship, marked by industry and ability, at Guy's Hospital, where he held the offices of house-surgeon and house-physician, he graduated M.B. in the University of London in 1872, obtaining honours in Midwifery and the first place and the gold medal in Medical Jurisprudence. Subsequently he was appointed Demonstrator of Anatomy in the Liverpool School of Medicine, and discharged his duties zealously and successfully. Lately he removed to Manchester, and had been appointed assistant-physician to the Children's Hospital only a few days before his decease. His upright character and kind and genial disposition endeared him to a large circle of friends in the profession.

Medical News.

Royal College of Physicians of London. — At a meeting of the College on Oct. 28th the following gentlemen were admitted Fellows:—

Adey, Charles Augustus, M.D. Edin., St. Leonard's.
Burder, George Foster, M.D. Aberd., Clifton.
Corfield, William Henry, M.D. Oxford, Bolton-row.
Falls, William Stewart, M.D. St. And., Bournemouth.
Fearnside, Henry, M.B. Lond., Preston.
Matterson, William, M.D. St. And., York.
Mounckton, Stephen, M.D. Lond., Maidstone.
Montgomery, James Barclay, M.D. Glasg., Penzance.
Ord, William Miller, M.B. Lond., Brook-street.
Semple, Robert Hunter, M.D. St. And., Torrington-square.
Shepherd, Augustus Burke, M.B. Oxford, Seymour-street.
Thorne, Richard Thorne, M.B. Lond., Inverness-terrace.
Tuke, Daniel Hack Tuke, M.D. Heidelberg, Falmouth.

At the same meeting the following gentlemen were admitted Members:—

Herman, George Ernest, Bethnal-green Infirmary.
Leech, Daniel John, M.B. Lond., Manchester.

Also, the following were admitted Licentiates:—

Chapman, Paul Morgan, Camden-park-road.
Dyte, David Hyman, Bury-street.
Gibb, Robert Charles, Guy's Hospital.
Harvey, Thomas Prickard, Pyrland-road.
Herman, George Ernest, Bethnal-green Infirmary.
Hobson, John Morrison, Guy's Hospital.
Lancaster, Henry Francis, Amersham-park Villas.
Randle, James Mayne, Guilford-street.
Rawlings, Alfred, Newlands, Sherborne.
Taylor, Henry Cumberland, Guy's Hospital,
Weakley, Samuel Joseph John, Upton, Essex.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 28th:—

Bark, John, Royal Infirmary, Liverpool.
Harvey, Henry Frederick, Gower-street.
Morcom, Augustus, Coniston, Lancashire.
Taylor, James, Stokes Croft, Bristol.
Williams, William Venables, Easingwold, Yorkshire.

The following gentleman passed the Primary Professional Examination on the same day:—

Capon, Herbert James, St. Bartholomew's Hospital.

An outbreak of scarlatina is reported to have occurred at Acomb Colliery.

H. T. Harvey Mead, M.R.C.S., &c., has been elected Mayor of Christchurch for the ensuing year.

The total number of students entered up to this date at the Liverpool Royal Infirmary School of Medicine is 103; of these 23 are first year's men.

Mr. George Stevens, of Norton, Bury St. Edmunds, F.F.P.S. Glasgow, is a candidate for the vacant coronership of the county of Suffolk.

The Entrance Scholarships of Guy's Hospital Medical School have been awarded as follows:—L. C. Wooldridge, £60; W. H. White, £30; J. T. J. Morrison, Honorary Certificate.

Surgical Society of Ireland.—The following office-bearers have been appointed for the ensuing year:—President: Edward Hamilton. Vice-President: John Hamilton. Council: John Barker, E. H. Bennett, Charles Benson, Philip Bevan, Richard G. H. Butcher, William Colles, A. H. Corley, Henry Gray Croly, J. Stannus Hughes, Rawdon Macnamara, Edward Dillon Mapother, Benjamin Francis M'Dowell, John Morgan, George H. Porter, Michael Harry Stapleton, William Stokes, Joliffe Tufnell, Albert J. Walsh, James H. Wharton. Honorary Secretaries: B. Wills Richardson, Humphrey Minchin.

The visiting justices of the County Gaol, Bedford, have recommended that a superannuation allowance of £86 13*s.* 4*d.*, being two-thirds of his salary, be granted to Mr. Robert Couchman on his resigning the office of surgeon.

George Walker, Esq., M.R.C.S. Eng., L.S.A., Raithby, near Spilsby, and William H. Eddie, Esq., M.R.C.S. Eng., L.S.A., Barton-on-Humber, have been placed in the Commission of the Peace by the Lord Lieutenant of Lincolnshire.

Health of Dublin. — From the Report of the Registrar-General for Ireland for the September quarter, we learn that the registered births amounted to 2246, or at the rate of 29 in every 1000, and the deaths to 1705, affording an annual ratio of 1 in 46 or 22 in every 1000 of the population. The principal causes of death were as follows:—Phthisis caused 207 deaths; convulsions, 155; diarrhœa, 140; bronchitis, 105; heart-disease, 85; fever 51; cancer, 47; pneumonia, 47; whooping-cough, 45; apoplexy, 41; paralysis, 40; measles, 38; mesenteric diseases, 36; hydrocephalus, 34; liver disease, 34; whilst 39 deaths resulted from accidental causes, 1 was homicidal, and 3 suicidal. The mean weekly temperature for the quarter was 58·9°, and the rainfall during the thirteen weeks measured 8·532 inches.

Richmond Water-supply.—At a special meeting of the Richmond Select Vestry, on Wednesday morning, a letter was read from the Local Government Board, sanctioning the borrowing of £28,000, for the purpose of obtaining a local water-supply. It was proposed by Dr. T. F. Giles, and seconded by Dr. Kenny, that application be immediately made to the Public Works Loan Commissioners for the required sum, at 3½ per cent., repayable in thirty years. On a division, the motion was carried almost unanimously. It is intended to sink a deep well into the chalk and to have a large covered reservoir in Richmond-park. The Crown authorities have already sanctioned the construction of the reservoir, and Mr. Hawkesley, C.E., Mr. Prestwich, and other gentlemen have given it as their opinion that an abundant supply of water will be obtained from the chalk basin underlying Richmond.

Medical Appointments.

Archer, R. K., M.R.C.S.E., L.S.A.L., has been appointed House-Physician to the Westminster Hospital, vice Basham, resigned.

Blythman, C. S., M.B., C.M., M.R.C.S.E., has been appointed Medical Officer of Health for the Swinton Urban Sanitary District.

Cheadle, W. B., M.D., F.R.C.P.L, has been appointed Physician to the Hospital for Sick Children, Great Ormond-street.

Clarke, T. F., M.D., M.R.C.S.E., has been appointed Medical Officer for the Bradninch District of the Tiverton Union.

Devany, P. C., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the No. 2 Division of the Sligo Dispensary District, Sligo Union, vice Tucker, deceased.

Finlay, D. W., M.D., C.M., has been appointed a Resident Physician's Assistant at the Middlesex Hospital, vice Lucas, whose appointment has expired.

Garbutt, J. G., M.A., has been appointed Demonstrator of Anatomy at St. Mary's Hospital.

Hepburn, W. J., F.R.C.S.Ed., L.R.C.P.Ed., L.K.Q.C.P.I., has been appointed Medical Officer for the South City District of the Irish Mercantile Clerks' Association, Dublin.

Holthouse, C, F.R.C.S.E., has been appointed a Consulting Surgeon to the Westminster Hospital, on resigning as Surgeon.

Johnson, H., M.D., Ext. L.R.C.P.L., has been appointed Visitor of Houses licensed for the reception of Lunatics in the County of Salop.

Kenny, E. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the North City District of the Irish Mercantile Clerks' Association, Dublin.

Lawrie, J. D., M.R.C.S.E., has been appointed a Surgeon to the Infirmary and Dispensary, Bradford, Yorkshire, vice M'Gee, resigned.

Lees, D. B., M.B., has been appointed an Assistant-Physician to the Hospital for Sick Children, Great Ormond-street.

Lovett, S. R., L.R.C.P.Ed., L.M., has been appointed Medical Officer of Health for the St. Giles and St. George District, vice Ross, deceased: £150 per annum.

Macnamara, C. N., F.R.C.S.E., has been appointed a Surgeon to the Westminster Hospital, vice Holthouse.

Madeley, E., M.R.C.S.E., has been appointed House-Surgeon and Dispenser to the Provincial Hospital at Port Elizabeth, Cape of Good Hope.

Markby, T., M.R.C.S.E., has been appointed Medical Officer for the No. 5 District of the Royston Union, vice Balding, resigned.

Mason, J. W. B., M.R.C.S.E., has been appointed Resident Obstetric Assistant at the Middlesex Hospital, vice Beaumont, whose appointment has expired.

North, J. C., M.B., C.M., has been appointed Medical Officer (*pro tem.*) to the Brecknock Union Workhouse.

Richardson, R. I., M.B., C.M., has been appointed a Resident Surgeon at the Maternity Hospital, St. John-street, Edinburgh.

Russell, V. W, L.K.Q.C.P.I., L.R.C.S.I., L.M., has been appointed Surgeon to the County Tipperary Infirmary, Cashel, vice R. F. Russell, M.B., L.R.C.S.I., resigned.

Sargent, A. F., M.R.C.S.E., has been appointed Junior House-Surgeon to the Tunbridge Wells Infirmary.

Saville, J. G., L.R.C.P.Ed., L.M., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Radcliffe District of the Bury Union, Lancashire, vice Sellers, resigned.

Scott, T. H., L.R.C.P.Ed., L M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballina Dispensary District of the Ballina Union, Co. Mayo, vice Macnamara, resigned.

Snell, E. G. C., L.S.A.L., has been appointed Medical Officer to the Permanent Life Assurance Company (Eastern District).

Strugnell, F. W., M.R.C.S.E., has been appointed House-Surgeon to Queen Charlotte's Lying-in Hospital.

Sutcliff, E., M.D., L.R.C.P.L., M.R.C.S.E., Medical Officer for the Peters-Marland District of the Torrington Union, has been appointed also Public Vaccinator.

Thomson, W. A., F.R.C.S.I., L.K.Q.C.P.I., has been appointed Second Assistant Medical Officer to the Surrey Lunatic Asylum, Brookwood.

Valentine, E. W., M.R.C.S.E., L.M., has been appointed Medical Officer for the 2nd Division of No. 4 District of the Shepton-Mallet Union, Somersetshire, vice Macdonald, resigned: £20 per annum and fees.

Walker, T. O., M.R C.S.E., has been reappointed Medical Officer and Public Vaccinator for the Crick District of the Rugby Union.

Williams, W. E., M.R.C.S.E., has been appointed Medical Officer of Health for the Bedwellty Rural Sanitary District: £40 for one year.

Wyllie, J., M.D., F.R.C.S.E., M.R.C.S.E., has been appointed Pathologist to the Royal Infirmary, Edinburgh, vice Pettigrew, appointed Professor of Medicine at the University of St. Andrews.

Births, Marriages, and Deaths.

BIRTHS.

Barwell.—On the 25th ult., at George-street, Hanover-square, the wife of Richard Barwell, F.R.C.S.E., of a son and a daughter.

Biddle.—On the 28th ult., at Kingston-on-Thames, the wife of Daniel Biddle, M.R.C.S.E., of a daughter.

Bushell.—On the 8th ult., at the British Legation, Pekin, the wife of S. W. Bushell, M.D., of a son.

Maffey.—On the 27th ult., at Clarendon, Bradford, Yorkshire, the wife of John Maffey, L.R.C.P.Ed., of a daughter.

Mercer.—On the 26th ult., at Tudor Lodge, Brixton, the widow of John T. Mercer, M.B., of a daughter.

Ridge.—On the 31st ult., at Carlton House, Enfield, the wife of John Jas. Ridge, M.D., of a son.

Titley.—On the 27th ult., at Brigg, the wife of James Titley, M.D., of a daughter.

MARRIAGES.

Bateson—Johnson.—On the 7th ult., at St. John's, Ellel, near Lancaster, Robert Sander Bateson, M.R C.S.E., Surgeon-Major Indian Army, to Elizabeth, daughter of Dr. Johnson.

Duke—Mellersh.—On the 27th ult., at St. George's, Hanover-square, Stephen Duke, M.D., M.R.C.S., L.S.A. (second surviving son of the late Henry Duke, Esq., of Earnley House, Chichester), to Harriet Elizabeth (Lilly), only surviving child of the late Thomas and the late Harriet Sophia Mellersh.—No Cards.

Wegg—Rickards.—On the 28th ult., at St. James's, Westminster, William Wegg, M.D., to Mary Ann, daughter of the late Samuel Rickards, Esq.

DEATHS.

Allarton.—On the 29th ult., at South Molton, Geo. Allarton, M.R.C.S.E., aged 62.

Badger.—On the 23rd ult., at Sydenham, Wildsmith Badger, L.S.A.L., formerly of Gutter-lane, Cheapside.

Bennett.—On the 30th ult., at Oxford-street, W., Thos. Tyrwhitt W. Bennett, Surgeon, aged 56.

Cross.—On the 26th ult., at Caledonia-place, Clifton, Wm. Cross, F.R.C.S.E., aged 65.

Green.—On the 29th ult., at Parliament House, Peckham, Dr. Marryat H. Green, aged 22.

Hamilton.—On the 2nd inst., John Hamilton, F.R.C.S.I., of Merrion-square North, Dublin.

Smart.—On the 25th ult., at the residence of her father, Celia Elizabeth, wife of Bath Charles Smart, M.D., of Great Ducie-street, Strangeways, Manchester, and daughter of Daniel Gurteen, Esq., J.P., of Haverhill, Suffolk, aged 36.

Steel.—On the 20th ult., at Northgate, Baildon, Yorkshire, James Steel, M.R.C.S.E., aged 64.

Stuart.—On the 21st ult., Dr. Robt. Stuart (son of Dr. Stuart, of Woolwich), aged 30.

Wilby.—On the 28th ult., at Leicester, J. B. Wilby, L.R.C.P.L., aged 38.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques.
Transactions of the Medical Society of New York.
Professor Lommel on Optics and Light.
Mr. Craig: Milne's Materia Medica.
Professor Darwin: Climbing Plants.
Mr. Bancroft: The Native Races of the Pacific States of N. America.
Medicinal Plants. Part II.
Dr. Engelmann: Mucous Membrane of the Uterus.
Mr. Domville: A Manual of Hospital Nurses.
Professor Maxwell: The Theory of Heat.
Mr. Smee: Milk in Health and Disease.

Notes, Short Comments, and Answers to Correspondents.

THE SCHOOL OF MEDICINE OF PARIS.

THIS school is not yet supplied with a Dean. The difficulties mentioned in a recent letter of our Paris correspondent still subsist, on account of the reluctance of the various professors to assume the responsibilities and irksome duties of the post. Professors Gosselin, Depaul, and Vulpian have already refused. Meanwhile the present (ex-) Dean, who sent in his resignation several months ago, is most anxious to get away, and remains in office only because he is most warmly solicited by the Minister of Public Instruction. M. Wallon (the Minister), making the most of the interregnum which is thus established, has sent in to the professors various plans of reform in connexion with the Deanship. Some of these measures had been suggested by the present (ex-) Dean, M. Wurtz. A Commission has been appointed by the professors to consider them, and report to the Minister. If adopted, they will have the excellent effect of lessening the numerous and absorbing duties of the Dean, or rather of dividing them between that officer and his two assessors, who until now had only the office of representing the Dean during his absence, but who in future would have really active administrative and academical duties to perform. The increasing number of students (now amounting to about 4800) renders some such measure of reform absolutely necessary. At present it is calculated that not less than 5000 to 6000 "affairs," or "pieces of business," annually pass through the hands of the Dean. Various other measures of reform in connexion with the teaching of the school are also being examined by the professors.

Mr. Hugh Barton should make his complaint to the Commissioners in Lunacy.

PURPURA HÆMORRHAGICA.

To the Editor of THE LANCET.

SIR,—Seeing a case of purpura hæmorrhagica reported in your journal of Oct. 16th, I think perhaps you may consider it worth while to publish the notes of the following somewhat similar case.

Mary M——, aged twenty-one, a domestic servant, was admitted into the hospital on June 3rd, 1875, under the care of Dr. Elliott. She states that prior to ten months ago she was a healthy girl, but that about that time she began to suffer from "ulceration of the nose." Since then she has never been well, but has suffered much from languor and weakness. In March last she first began to have attacks of epistaxis, at first only slight and at long intervals; but lately they have much increased in severity, and these constantly recurring attacks of epistaxis were the cause of her applying here for treatment. There is no family history of purpura or any other kind of hæmorrhage.

State on admission.—Fairly nourished; very anæmic; gums spongy, and often bleed; faint anæmic murmur over base of heart; one or two purpurous spots on legs; other viscera healthy; menstruation natural. She was ordered ten minims of tincture of perchloride of iron and ten minims of tincture of ergot three times a day. During the first two or three days she had only very slight hæmorrhage; but on June 9th very severe epistaxis came on, and the posterior nares on the right side was then plugged. The plug was removed on the third day, and she had no return of the epistaxis. Still, however, there was occasional oozing of blood from the gums. She was discharged on June 20th in a much improved state of health.

The patient again took a situation as domestic servant, and continued there until July 30th, when she was readmitted here on account of a recurrence of the epistaxis. She was in a very feeble condition, having had a furious attack of epistaxis the day previous. The gums were pale, and constantly oozing; the conjunctivæ were bloodless, but there were no purpurous spots on her limbs. She was ordered ten minims of solution of pernitrate of iron with fifteen minims of tincture of ergot in water, and liberal diet. After her second admission she had no severe attack of epistaxis.

Aug. 8th.—As the gums were constantly oozing blood, she was ordered a wash of borax and myrrh.

14th.—A lotion of glycerine and tannic acid was ordered for the mouth.

18th.—A severe attack of menorrhagia occurred, and she was ordered in consequence ten minims of sulphuric acid, ten grains of gallic acid, with infusion of roses: one drachm to be taken every four hours. This for a short time restrained the hæmorrhage; but it recurred on the 23rd, and she was consequently ordered half a drachm of bromide of potassium and twenty minims of tincture of ergot in water every three hours.

24th.—At eight P.M., the hæmorrhage being very severe, the vagina was plugged, and a hypodermic injection of solution of ergotine (six minims) was administered.

27th.—The plug was removed, and, an hour or two after, the hæmorrhage recommenced. A speculum was introduced, and as blood was seen to be issuing from the os uteri, it was plugged with a pledget of lint dipped in strong perchloride of iron, the injections of ergotine being continued twice a day.

During all this time she had been gradually getting weaker, and the blood had become very watery in character.

29th.—Plug removed, vagina syringed out with a lotion of Condy's fluid, and the plug reintroduced.

Sept. 1st.—Diarrhœa came on, and lasted until she died on Sept. 4th.

No post-mortem was allowed.

I remain, Sir, yours &c.,
HENRY THOMPSON, House-Surgeon.
Hull General Infirmary, Oct. 26th, 1875.

Juvenis.—It would seem desirable that a mutual understanding with regard to such patients should be arrived at. The distance is so considerable between the two places that our correspondent would in the eyes of most men be justified in attending when called upon to do so.

Mr. H. B. Hewetson is thanked for his offer.

THE SCHOOL BOARD AND INFECTION.

THE circumstance that the School Board in the metropolis compels poor parents to send their children to its schools, and enforces obedience to its commands with a pertinacity little short of tyrannous cruelty, should induce the officers of this inquisitorial Board to bestow some care on its victims. A case which came before the coroner for Central Middlesex on Monday does not certainly convey the impression that the Board is properly alive to this part of its public duty. A child, with suppressed scarlet fever, was proved to have been in attendance among hundreds of little ones congregated under the ferule of the law, up to the day before its death. It is not a pleasant reflection that probably this poor child infected others. The feeling rapidly growing among the poor—who are in no way averse to having their children instructed if that can be accomplished in mercy as well as "charity"—is not one of gratitude. The sternness of too many of the Board officials, and the curt justice of justices, are sufficiently irritating. If the Board schools are to be left wholly without medical inspection, and allowed to become hot-beds and centres of disease, the net gain to civilisation will scarcely prove a recompense for all the toil and expenditure lavished on national education.

Mr. C. R. Priestley shall receive an answer next week.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—It may be interesting to some of your student readers who intend becoming candidates for the Indian medical service to know what is the real state of affairs out here before they do so, as the prospectus supplied from the India Office gives a very erroneous idea of it, and when we get out to this country we are greatly disappointed.

Instead of giving the full pay laid down in the schedule, when we pass the required examination in Hindustani and get charge of a native regiment, they keep us moving from place to place, drawing unemployed pay a great part of the time, and paying our own expenses by rail or road. When we take up an active appointment, we hold it such a short time that the half allowances which we draw are often insufficient to cover the expense incurred in taking it up. As a rule we do not draw full pay until we have served three and a half or four years; and when our furlough becomes due we can scarcely afford to take it, as we only get half-pay while on leave, and have to find our own passage home and out again. If we be put in charge of a wing of a native regiment, it is still worse: we only get 75 r. a month in addition to our unemployed pay. There is quite as much work and responsibility when we act as when we hold a permanent appointment; but, as the pay is much less, they carefully avoid mention of such in the schedule. When ordered to take up one of these wretched billets from unemployed pay, we have to pay our expenses, as we are supposed to be bettering ourselves, and they take good care that we are on unemployed pay, lest they should have to pay our railway fare.

The pensions are miserably small, and there is nothing good to be looked forward to in this service at present. The pension of £220 a year is not sufficient to support a bachelor in moderate comfort, and we have to serve seventeen years for it. Even the largest pension which a surgeon-major can obtain after thirty years' service and upwards is a very poor reward for the life of toil, self-denial, and discomfort he is obliged to lead here. A deputy surgeon-general of more than four years' service in that grade may also have to retire on the same—viz., £550 per annum—on account of illness or age.

There is favouritism carried on in some places; and one often finds a native or half-caste, who has been educated at one of the Colleges by the Government, put into a good appointment, when a more senior and more deserving man should have got it.

It is easy for some of those who retired lately to speak highly of the service, as they lived here when things were cheap and money could be made; the rupee was worth considerably more than 2*s.*, and it is now value for 1*s.* 9½*d.* They had the advantages of the pension fund, and could retire on nearly twice as much as those entering now have offered to them.

The other medical services have been improved, while the Indian has been steadily degenerating, and living on the good name it formerly obtained. Everything has been cut down to the lowest figure by the authorities, and there is very little prospect of amends being made; but it would not be so bad if we had known what was before us.

Your obedient servant,

India, September, 1875. A BIRD CAUGHT WITH CHAFF.

CARIOUS TEETH.

DR. LARDIER advises, in *L'Union Médicale*, to drop some collodion into carious teeth, after the latter have been cleaned and dried. The liquid collodion exactly fills the cavity of the tooth; the ether evaporates, and narcotises the nervous twigs. By solidifying, the collodion protects the tooth from the contact of the air. Dr. Lardier states that he has thus succeeded in relieving many patients.

Mr. Domville, (Exeter.)—Our correspondent's communication has been received, with the manual to which he refers.

SANITARY CONDITION OF MORTLAKE.

To the Editor of THE LANCET.

SIR,—In your abstract of my report of the Richmond Rural District, you do not mention that it was the report for the year 1874. The natural conclusion on reading the abstract is that the report refers to the present time, and that the condition of things in Mortlake mentioned there still exist. I am pleased to be able to assure you that such is not the case. The outbreak of sickness referred to occurred at the end of 1873 and in January, 1874. Directly the state of matters was brought to the notice of the authority, active remedial measures were adopted, and the result is that Mortlake is now as healthy as any other part of the district, and I believe entirely free from diphtheria. The deaths for the past three quarters have been at the rate of 15·7 per 1000 per annum, so that the heading of the page on which you have printed the abstract is likely to mislead and cause unnecessary alarm.

Yours obediently,

Barnes, Oct. 30th, 1875. J. ADAMS.

SELLING DEGREES OR DIPLOMAS.

OUR readers will be glad to observe that the Minister for the United States has called attention to the systematic fraud which has been perpetrated by persons in this country engaged in selling degrees or diplomas purporting to be conferred by certain American Colleges and Universities. Being satisfied that these distinctions and honours were pretended and spurious, General Schenck made the imposture a subject of correspondence with his Government. Inquiry having been especially made in relation to the Philadelphia University of Medicine and Surgery, and the Livingston University of America, institutions so called, of which there are professed agencies in London and elsewhere, the Governors of Pennsylvania and New Jersey, the States in which these Universities are respectively described as being situated, have forwarded communications to the United States Minister in London, which demonstrate that a fraud is being perpetrated by those engaged in this traffic of degrees and diplomas. We sympathise with the American Minister in his desire that the individuals in question should be exposed and, if possible, punished.

NORTH CAMBS COTTAGE HOSPITAL.

THE letter of the *Rev. Alfred J. Perry* has been received, and shall be published in our next impression.

UNQUALIFIED PRACTICE AND QUALIFIED PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—A medical man, living four miles from this place, has held the appointment of surgeon to a club (of Foresters) for many years; but, unable to do the work latterly (the club having increased, the majority of the members living here, and still further away from his residence), has now a house in this village, with his name on the door, and an unqualified substitute residing therein. He calls the latter his assistant, and takes all responsibility upon himself, notwithstanding the distance, and, as a necessary result, the "assistant" has uncontrolled charge of most of the cases. The "assistant," however, repudiates this title; says he is one of the firm, receives the title of doctor, and is considered as one by the unenlightened public; and if club members are dissatisfied and apply to the surgeon proper, the assistant tells them he is their club doctor; that his "patron" has made over the club to him. They can have the services of their surgeon if the assistant calls him in as a consultant; but if they prefer to send for their surgeon, or should put themselves to the inconvenience of walking to his house, they are asked why they have not gone to the substitute he has provided for them.

Inconvenience occasionally results from this state of things. Certificates to entitle a member to his sick allowance, formerly signed by this young man with his initials placed above the name of the surgeon, are now, by an order of the High Court, not received, and have to be signed in full by the surgeon, who ought to see the patient before doing so. This can be, and is doubtless easily, arranged; for the patron not unfrequently goes away for a time, leaving the "assistant" in entire charge of both practices, the parent and the branch.

You have said in your journal lately that Friendly Societies have the remedy in their own hands; but it not unfrequently happens that these Societies are ruled by a few; and as this person has so far qualified himself for the office of deputy-surgeon by becoming an ordinary (or financial) member of the club, he is enabled to attend all the meetings, and has thus managed to get the support of some of those in office, to the great dissatisfaction of many of the members, who naturally object to the services of a servant, when they ought to have the master, and when there are qualified and competent medical men at hand.

In this unqualified practice (going beyond the area of the club) death certificates *have* been signed by the principal in cases where he has never seen the patient. He now, whenever it can be managed, sees the patient at least once, to legitimise the certificate, or make good the debt—i. e., recoverable. A good many deaths, however, are returned by the registrar as "not certified." This official has a very simple method with certificates that are written out on blank paper, and signed by the unqualified one. He asks the friends if they are satisfied that the patient died of the cause alleged, and if they are satisfied, he is; and the coroner of this district, advanced in years, and paid by salary, and that a small one, declines "as usual," quoting the words of a local paper, to hold inquests, even in a case of death from chloroform where none were present but the surgeon and his unqualified assistant, and this, too, in a case where the friends of the deceased greatly desired it.

I am, yours &c.,

ONE WHOSE QUALIFICATIONS AFFORD NO PROTECTION.

October, 1875.

*** The case described by our correspondent is a very bad one. It is a striking instance of a qualified practitioner abetting unqualified practice. We do not envy the feelings of the practitioner who can lend himself and his name to an arrangement which operates fraudulently towards the public, and very unfairly towards other practitioners. The profession has great reason to be dissatisfied with the Registrar-General for practically accepting certificates from the unqualified. While such apathy is shown by registrars and coroners as to the evidence of causes of death, we shall have unreliable returns and a very demoralising disregard of human life.—ED. L.

THE PERSISTENCE OF SYPHILIS.

SOME physicians exaggerate this persistence, although it is well known that persons who had formerly suffered from lues venerea have reached a ripe old age without having experienced a relapse. Among these pessimist physicians must be placed Dr. Zeissl, of Vienna. *L'Union Médicale* quotes a passage from one of his lectures delivered a short time ago:—"Some people think that when a patient has for a while shown no signs of syphilis he is quite cured; but I can tell you, gentlemen, that when a human being contracts syphilis he will die syphilitic, and at the day of judgment he will"..............We refrain from translating the professor's concluding words.

Female Medical Missionaries.

We understand that female medical missionaries are now labouring very successfully in various parts of India. The Maharajah of Vezianagram has engaged an American lady to open a dispensary at Benares, exclusively for the benefit of native women; while the enlightened Sir Salar Jung has done the same thing in Hyderabad. Altogether the medical ladies appear to have more work on their hands than they can well do. The Hindoos are credited with being much more susceptible to European influences than the less tractable Mahomedan population, who view with equal horror the missionary and the doctor.

Mr. Maurice S. Duke will have seen that we inserted Mr. Palmer's letter last week, which is to the same effect as his own.

A Monstrosity.

To the Editor of The Lancet.

Sir,—A case of malformed fœtus which has lately come under my care presents features so remarkable that I desire to place it before your numerous readers.

I was called to attend a midwifery case a few weeks ago, and on examining the woman per vaginam I failed to diagnose the presentation. Labour rapidly proceeded, and she soon gave birth to the monster a photograph of which I enclose. The general appearance of the face assumes more that of a pig or a dog. On carefully examining it, you will find that it consists chiefly of a leg, the left. The thigh and buttock are perfectly developed; even the folds of the nates are distinctly marked; but the foot is deformed, and the toes are rudimentary. At the upper end of the thigh, and in the normal direction, extends what seems to be the lower and left half of the abdomen, from which anteriorly there protrude some folds of intestine, enclosed by a covering, partly of skin, partly of membrane. At right angles to the abdomen is joined what seems to be the left side of the thorax, containing, presumably, some lung substance; for, strange to say, the *movements of respiration were carried on for fifteen minutes after delivery.* At the angle of junction between the thorax and abdomen is the distorted left arm, bearing a hand with thumb and two fingers; while occupying the position of the right side of the thorax and abdomen is the head, the face looking backwards. The apex of the head is a membranous bag, containing a little fluid, and occupies the position of the right buttock.

The woman soon after gave birth to a second fœtus, which only lived fifteen minutes.

I am not one of those who believe in maternal impressions; but I may say that the mother does not know to this day that she has given birth to anything abnormal, and, wishing to lead her to suppose that I was seeking for information, she has since told me that soon after finding herself in the pregnant state she was frightened by the screams of a pig and a dog, the latter in a rabid condition worrying the pig to death.

I am, Sir, yours truly,
The Poplars, Barnsley, Oct. 23rd, 1875. Joseph Morris, M.D.

Ignotus.—The fact that some African tribes protect themselves from the fatal effects of the bites of serpents by chewing a particular root rests, we believe, principally upon the testimony of Bruce, the traveller. A story is told somewhere of a gentleman, living at Santa Fé, who was accustomed to seize the most venomous serpents, from the poison of whose bite he protected himself by drinking some of the juice of the "*quaco-withy*," and injecting a portion of it into punctures made in the hands, breast, and feet. The name of the plant is said to be derived from the Indian designation of the serpent hawk, which was observed, before attacking the reptiles on which it feeds, to suck the above-mentioned juice.

The Expedition up the Congo River.

We have received the following letter from our correspondent, giving an account of the measures adopted during the late Congo expedition:—

The squadron comprising H.M. ships, *Active, Encounter, Spiteful,* with gunboats *Merlin, Foam,* and *Ariel,* and storeship *Supply,* were engaged in the active operations of the expedition from the 31st of August to the 11th of September. The larger ships proceeded as far as possible up the river, acting as bases of support for the gunboats, steam launches, and smaller craft, which, with landing parties, proceeded daily up the narrow and difficult creeks, attacking and destroying villages and property. One of the best features in the sanitary regulations was the order necessitating all those landed sleeping on board one of the vessels at night, thereby avoiding the danger from fever incurred by sleeping in the bush. Another plan adopted was to give occasional days off to officers and men, to enable them to recruit after, say, thirteen or fourteen hours' heavy work in boats and bush under a hot sea. The lower decks of vessels up the river were only allowed to be wetted once a week, and then only with warm water, and the deck had to be dried with hanging stoves. No river water was allowed to be drunk, distilled water being exclusively used. An extra ration of meat and vegetables was served out in the evening. Four grains of quina were issued daily to all hands. Cholera belts were also issued, and wicker helmets to the marines landed. Occasional extra issues of coffee and chocolate were made, and a small extra allowance of spirit. This latter was very acceptable after the day's work, when men were completely exhausted; the quantity was so small it could not have done harm, and the excellent moral effect, evidenced by the renewed vivacity and altered temper of men wearied by marching through mangrove swamps under a hot sun, or pulling for many hours in an open boat, was very marked. Many other minor sanitary rules were also observed, and they all seemed to have worked for good, for few cases of fever have appeared, although we have now been over three weeks in the river.

The operations having been concluded, much to Commodore Sir W. Hewett's satisfaction, great loss having been inflicted on the enemy as regards property &c., and very small loss being sustained by us, the squadron is in daily expectation of being dispersed. Our total losses were two drowned, one killed, and five wounded (all with slugs); three of the wounds severe, two slight. The armour plates of the launches and open boats saved many from being hit, and the fact of the enemy firing too high was a fortunate circumstance for those landed.

P.S.—Of course the selection of the dry season must be considered when speaking of sanitary measures adopted; this fact, and also the almost unlimited issue of lime-juice, I omitted to mention in the body of this letter.

Life Governorships to Hospitals.

In each of the years 1873 and 1874 an Association at the East-end of London has, by means of a festival or entertainment, succeeded in raising money sufficient to purchase six life governorships to hospitals in the metropolis. The third entertainment for the same purpose has just come off, and is expected to be at least equally productive. Whilst sympathising with the promoters of this movement in their desire to aid hospitals, we cannot altogether withhold concurrence in the objection that it is a somewhat roundabout way of augmenting the means of relieving the sick poor. In Birmingham at the present time hospital philanthropy appears to be taking an opposite direction. In that town preference is now given to the "free system," which, as it is proposed to be carried out there, will probably be found to work much more satisfactorily than the old and objectionable plan of governors' tickets.

What goes through the Post-office.

It is stated in the recently published report of the Postmaster-General that among the articles posted contrary to the regulations of the department, and sent to the returned letter office, were a horned frog alive, a stag beetle alive, white mice alive, snails alive, an owl, a kingfisher, a rat, carving knives and forks, gun-cotton, and cartridges. Gun-cotton seems a particularly nice article to send through the post.

Jumna has a claim, but scarcely one that we should recommend him to take into a County Court.

"Cheap Doctors."

To the Editor of The Lancet.

Sir,—As you still hold, in common with the medical men in this neighbourhood, that it is unbecoming in me to dispense charity to the poor by means of low charges, which charges have had the effect, not of remunerating me, but of taking off my shoulders a vast amount of vexatious and unnecessary work, I bow to your opinion, and therefore from the present time I shall abandon a system that has brought down such an amount of unexpected censure upon me. At the same time by so doing I shall be obliged, I fear, to give gratuitous advice to those I may think worthy of it, which is a course, in my opinion, more likely to be detrimental to the interests of my medical brethren around me than my system of low charging was ever likely to prove.

Before closing this subject, permit me to add a few words in justification of the handbills, which seem to have been the exciting cause of the movement against me. My position was this: either I must have engaged a ninth assistant, and have run the chance of his proving trustworthy, or relinquished my clubs at a very short notice. I chose the latter course, and had handbills printed to save the kind friends who collected the payments for me the trouble of explanations, which, when given verbally, would, when passed from mouth to mouth, have given rise to mistakes, which would most likely have taken months to rectify. They were only intended for private circulation, and not as public advertisements.

You will be doing me a great favour if you will give this letter a place in your next issue, that it may relieve the minds of those of my medical brethren around me who were afraid my system of low charges was doing them an injury.

Yours faithfully,
Nayland, Colchester, Nov. 1st, 1875. H. D. Palmer.

The following is another phase of the system of medicine on cheap terms. It is a handbill. We believe Dr. Griffith is a graduate of St. Andrews:—

> "City of London People's Independent Dispensary (established 1866), 5, Circus-place, Finsbury-circus, E.C. (private door, 101, London-wall, E.C.) Terms of subscription, 1*s.* 6*d.* a week, charged during sickness only, and including the physician's advice; bottle of medicine and assistant's advice, 6*d.* only. Physician's hours, 11 A.M. till 5 P.M.; Monday and Thursday, 11 A.M. till 8 P.M. Physician, S. C. Griffith, Esq., M.D., of 35, Finsbury-square, E.C.; Assistant, Mr. Canning; Junior Assistant, Mr. Edwards; Dispenser, Mr. Williams. Mr. Edwards resides on the premises, and will give medicine and advice at any hour of the day or night......Dr. Griffith can be had at any time for sudden or dangerous cases of illness."

New Schools of Medicine in France.

In addition to the various schools of medicine which it is said the Catholic party are preparing to establish in competition with the present State Faculties, a sixth Government school will soon be erected at Lille, so as to satisfy the wants of the northern districts. There are already five schools in existence, three of which are in full work—Paris, Montpellier, and Nancy,—while the other two are preparing to open—namely, Bordeaux and Lyons. As to the immediate result of this sudden and considerable increase in the number of Faculties, few in Paris, even amongst the most competent, are able to form an opinion. Some expect much good from this radical measure, whilst others lament the change.

Mr. James Thomson, (Clifton.)—The places under the Acts are, we believe, as follows:—Devonport and Plymouth, Portsmouth, Chatham and Sheerness, Woolwich, Aldershot, Shorncliffe, Colchester, Winchester, Dover, Canterbury, Maidstone, Cork, the Curragh, and Windsor.

Life Insurance Medical Fees.

The following is the reply of an Insurance Office to an application for a fee for filling up a certificate:—

"London Life Association, 81, King William-street,
"London, E.C., Oct. 29th, 1875.

"Dear Sir,—This being a mutual Assurance Society, and not a trading Corporation, it requires every person desiring to be admitted to its advantages to furnish evidence that he is in good health, without expense to the Society. If he cannot do this he cannot be admitted.

"Mr. ——, therefore, and not this Society, made application to you for a report, and the form in which that might be conveniently given was supplied to him to save trouble. Your application for a fee should, therefore, be made to him.

"I am, dear Sir, your obedient servant,
"Edw. Docker, Secretary."

A Warm Swimming Bath.

Bath is, we believe, the only town which heretofore has been able to boast of the possession of a public warm swimming bath. This advantage will, we hear, thanks to the enterprise of the conductors of the Thames floating bath moored off Charing-cross pier, now be enjoyed during the winter months by Londoners.

The Flexible Stethoscope.

To the Editor of The Lancet.

Sir,—Like your correspondent, Dr. R. S. Hutchinson, I have had in constant use for nearly forty years a flexible stethoscope, *exactly* that delineated in Arnold and Sons' advertisement as a novelty. I have tested carefully most kinds of stethoscopes, and much prefer the flexible to any other for clearness of sounds and ease both to patient and manipulator in auscultation. In fever cases its superiority is at once obvious. To me, at least, the ear-piece is a decided advantage, having tried to dispense with it. The trumpet end, also, I consider improved by having a thin membrane—a piece of bladder—stretched over it. If I mistake not, this sort of stethoscope was that mostly used by the late Dr. Golding Bird. My stethoscope was presented to me by the late Mr. Shaw, Surgeon, of Attercliffe, in this neighbourhood, uncle to the present practitioner there of that name. Only two or three years ago it required a new tube.—Yours &c.,

November, 1875. J. Balbiernie, M.A., M.D.

Suppression of a Grave Nuisance.

Mr. W. H. Kempster, medical officer of health for Eastern Battersea, lately reported to the District Board of Works the existence of the following nuisance:—

> "On a small plot of ground in Brougham-street, a depôt for lint, tow, and other *débris* from the hospital wards of the metropolis was discovered. These materials were saturated with human blood, pus, and other animal discharges of an offensive character, smelling most abominably, and dangerous to health from the character of the deposit. It was found that the lint was washed, prepared, and sold again; and, still more horrible, the tow was washed and made into ordinary twine in a contiguous railway arch. Considerable difficulty was found in suppressing this disgusting trade, which was at last only effected by putting strong pressure on the officials of the several hospitals to induce them to destroy these matters on their own premises by means of fire, They are now consumed in the furnaces of the respective hospitals instead of being mixed with ashes and other refuse as formerly."

Communications, Letters, &c., have been received from—Prof. Humphry, Cambridge; Dr. George Johnson, London; Dr. Sedgwick, London; Dr. Wiltshire, London; Mr. J. Adams, Barnes; Mr. Keyworth, Birmingham; Dr. Inglis, Cheltenham; Staff Surgeon Mulvany; Mr. J. N. Stone; Mr. West Walker; Mr. Kearney, Much Wenlock; Surgeon J. C. Lucas, Deesa, India; Mr. Cowell, London; Mr. Parker, Liverpool; Dr. Wemyss, St. Andrews; Mr. Anderson, Richmond; Messrs. Kinmond and Co., Leamington; Mr. Ogden, Manchester; Mr. Stevens, Norton; Mr. Duke, Stratford St. Mary; Mr. Sargent, Tunbridge Wells; Mr. Strugnell, London; Dr. Wilson, Worthing; Dr. Charteris, Glasgow; Mr. J. Brown, London; Mr. Brumell, London; Dr. Burgess, Streatham; Mr. Taylor, Grantham; Dr. Duke, Aberdovey; Mr. Loder, London; Mr. Collingwood, London; Dr. Strange, Worcester; Dr. Domville, Exeter; Mr. Watkins, Worcester; Mr. Lowe, Lincoln; Mr. Baker, London; Mr. Snell, London; Mr Mead, Christchurch; Dr. Meldon, Dublin; Rev. R. B. Somerset, Cambridge; Dr. Mapleton, Netley; Mr. Archer, London; Mr. Hodgkins, Oxford; Mr. Caldicott, Epworth; Mr. Fox, Manchester; Mr. Pennell, Liverpool; Mr. Taylor, London; Dr. Balbirnie, Sheffield; Dr. Frodsham, Streatham; Dr. Drew, Sheffield; Mr. German Reed, London; Mr. Legge, Winchester; Mr. Palmer, Nayland; Mr. Hayes, Hexham; Mr. Barton, Brighton; Rev. A. J. Perry, Wisbeach; Mr. C. E. Priestley; M.D., Newcastle; The Registrar of the Royal College of Physicians; A Subscriber; Natus non Sepultus; The President of the Statistical Society; E. M. W.; A Poor-law Doctor for Forty Years; The Secretary of the Medical Society of London; The Registrar-General of Edinburgh; Society for the Relief of Widows and Orphans of Medical Men; Juvenis; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Mr. M'Knight, Blackburn; Messrs. Bennett, Salisbury; Dr. Crowther, Luddenden; Dr. Hall, Swadlincote; Mr. Chandler, Tewkesbury; Mr. Farrar, Bradford; Mr. Arnott, Beverley; Mr. Holmes, Madras; Mr. Glasier, Lynn; Mr. Griffith, Walton-under-Edge; Mr. Williams, London; Dr. Waldo, Clifton; Dr. Bond, Gloucester; Mr. Fox, Bristol; Rev. A. J. D'Orsey, London; Mr. Walker, Spondon; Mr. Ramsden, Chester; Mr. Elwen, Dover; Dr. Fox, Broughton; Dr. O'Connor, London; Mr. Theobald, Leicester; Mr. Hine, Kingston, Jamaica; Mr. Sergeant, London; Mr. Croxton, London; Mr. Simpson, London; Mr. Evans, Seaford; Dr. Thomas, Sheffield; Mr. Fletcher, Manchester; Mr. Richardson, Edinburgh; Dr. Smart, Manchester; Dr. Powell, London; Dr. Martin, Walkden; Mr. Fox, London; Mr. Dix; M.D., Blackburn; B. C. O., Kington; A. C., Blackburn; Ixion; M.D., Ripley; F. P., Stockwell; J. A. F., London; S. W. R., London; Argus; A., Peckham; Chemicus; Dispenser; A. M. D.; D. C. Y., Harrogate; A. B., New Wandsworth; L.R.C.P., Wakefield; Medicus, Sherborne; A. L.; P. G., Darlaston; Medical, Woolwich; L.R.C.P., Ventnor; Surgeon, Hurstpierpoint; R. E., Grimsby; Medicus, Exeter; Delta, Derby; B. M., Coventry; Medicus, Newcastle; B. A., Marlborough; A. B., Greenwich; M. E. C., Bristol.

Newcastle Chronicle, Welshman, Rock, Western Morning News, Colonies, Bell's Weekly Messenger, Liverpool Post, Birmingham Morning News, Leeds Mercury, Metropolitan, East London Observer, Cork Constitution, Manchester Guardian, Western Gazette, Macclesfield Chronicle, Lincoln Gazette, Wrexham Guardian, Record, and *Eastern Post* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Nov. 4th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 a.m.
Oct. 29	30·08	N.	44	47	...	49	44	...	Foggy
„ 30	30·02	N.E.	40	44	...	47	42	...	Overcast
„ 31	29·98	N.W.	39	43	...	48	39	...	Foggy
Nov. 1	29·91	E.	43	45	...	48	41	...	Overcast
„ 2	29·88	S.E.	40	44	...	51	42	...	Overcast
„ 3	29·85	S.E.	49	51	...	54	43	...	Overcast
„ 4	29·85	W.	50	52	...	55	50	0·04	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 8.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Medical Society of London.—8½ p.m. Mr. Jabez Hogg, "On Spinal Concussion." — Messrs. Carr Jackson and Spencer Watson will exhibit a Patient on whom Excision of the Astragalus was performed for Complicated Injury to the Foot and Ankle.

Tuesday, Nov. 9.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Royal Medical and Chirurgical Society.—8½ p.m. Dr. Semple, "On Diphtheria and its relations to (so called) Croup."

Wednesday, Nov. 10.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1¼ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Hunterian Society.—7½ p.m. Council Meeting.—8 p.m. Mr. J. E. Adams will exhibit a Case of Plastic Operation on the Face for Rodent Ulcer, and will read "Notes on a Case of Iodide of Potassium Poisoning."—Dr. Peacock, "On a Case of Aortic Disease originating in Malformation," and will exhibit Specimens of Malformation as a Cause of Valvular Disease.

Epidemiological Society.—8 p.m. Inaugural Address by the President, Mr. Netten Radcliffe.

Thursday, Nov. 11.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, Nov. 12.

St. George's Hospital.—Ophthalmic Operations, 1¼ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Clinical Society of London.—8½ p.m. — Mr. T. Holmes, "On a Case of Ligature of Femoral Artery with Carbolised Catgut."—Mr. W. Haward, "On a Case of Lymphadenoma."—Dr. Murchison, "On a Case of Acute Cancer of the Liver, with Pyrexia, in a Man aged twenty-four"; "On two Fatal Cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhœa."

Saturday, Nov. 13.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

NOTICE.

In consequence of The Lancet being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

TERMS FOR ADVERTISING IN THE LANCET.

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N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—

Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

Clinical Lecture

ON A CASE OF

ECCHYMOSIS OF THE SCROTUM.

Delivered at St. Bartholomew's Hospital,

BY WILLIAM S. SAVORY, F.R.S.,

LECTURER ON SURGERY AND SURGEON TO THE HOSPITAL.

GENTLEMEN,—I bring this case under your notice chiefly because it affords me an opportunity of fixing for a while your attention on an important feature of the affection commonly called Pyæmia, or often now Septicæmia, but which I prefer to speak of more simply, yet more comprehensively, as blood-poisoning: chiefly on account of this, yet also because it illustrates some other very interesting facts in pathology and practice.

G. L——, aged thirty-one, a carman, was admitted into the hospital on the 10th of last December. During the dense fog which then prevailed he missed his way, and drove into the West India Dock. A considerable quantity of blood was extravasated into the scrotum, penis, and perineum. All these parts were black and blue, distended, and tense; but into the cellular tissue of the scrotum, especially on the right side, a very considerable quantity of blood was infiltrated. It was larger than one's two fists put together, and the skin over it was very black and tightly stretched. The state of the integument and its direct relation to the mass of blood beneath, which could be felt to be fluid immediately under it, and in evident continuity with that in the penis and perineum, showed plainly that the blood had escaped into the cellular tissue of the scrotum. There was no evidence of any hæmatocele—of hæmorrhage into the sac of the tunica vaginalis.

Now, when a part has been severely bruised, so as to rupture some of its vessels, the amount of blood which will escape depends on—(1) the vascularity of the part, and (2) the laxity of the structure. Hence hæmorrhage into the eyelids and scrotum is especially apt to be extensive. (3) The idiosyncrasy of the person—his tendency to bleed—the state of his tissues. Every one knows how widely persons differ in this respect. Some people, especially fat women advanced in life, are bruised by a mere touch; nay, sometimes the degenerate vessels will give way without direct violence of any kind. I may mention here a remarkable example of this.

A very fat elderly woman was brought to the admission room of the hospital on account of some sprain or other injury to the back. She was ordered into Stanley ward, and as the porters were carrying her in the sedan chair up two or three steps they gave her a sudden jerk. She started from fear of being upset, but it was quite clear that she was not struck anywhere. Shortly after she had been placed in bed, however, it was noticed with surprise that the poor woman had a pair of very large black eyes. We all were sure that there was nothing of this when she came to the hospital, and she could in no way account for the change. There was no suspicion of any direct violence, and there can be no doubt that some of the vessels of the eyelids had given way from the severe shake. This led, of course, to a careful examination of the heart, the first sound of which was very unsatisfactory; but there was no evidence, in her respiration or elsewhere, of any material embarrassment of the circulation. But what was anticipated happened shortly after. She died suddenly in her bed.

Finally, the extent to which bleeding proceeds is largely influenced by the conditions to which the injured part is subsequently subjected.

Now what was to be done in the case of the carman? Clearly nothing in the way of active interference. We had to rely on rest and time, watching meanwhile to meet any untoward symptoms, should they arise.

What may happen, then, when blood is extravasated into the cellular tissue without breach of surface? The surrounding tissues become stained, and if the effusion be subcutaneous we have the familiar characters of a bruise or ecchymosis. The integuments are discoloured; they present a livid red, or dusky blue tint, over an area which gradually extends and becomes lighter at the margin. The tint, when recent, varies from dark purple to crimson, being, no doubt, chiefly determined by the degree of exposure to the air. Thus blood effused into the conjunctiva even acquires rapidly, as is well known, a bright scarlet hue. Then, as the blood disappears, various shades of violet and olive-brown are intermingled. By and by the part becomes greenish, then at length yellow, and this slowly fades through pale lemon until the skin regains its natural colour.

The most favourable result of an ecchymosis is that the effused blood is absorbed. At first, supposing previous coagulation, the liquid portion or serum disappears with more or less of the colouring matter dissolved in it; then the colouring matter, set free by the disintegration of the cells, is taken up, and finally the fibrine, which previously undergoes a kind of fatty degeneration. It may be a question, however, whether all the fibrine which is formed under these circumstances is absorbed so frequently as it is supposed to be. Certainly sometimes, and perhaps more often than is usually believed, a tough mass of fibrine remains, it may be in layers, which either hardens and contracts into an imperfect form of fibrous tissue or false membrane, or, more rarely, becomes penetrated by earthy salts and calcifies.

In large circumscribed extravasations which have coagulated there is, after a while, especially towards the centre of the clot, sometimes evidence of fatty degeneration. More rarely crystals of hæmatoidin are met with. But it is perhaps in the smaller and more diffuse ecchymoses that the colouring matter of the blood is thus transformed.

Reabsorption is of course the most desirable, and, fortunately, under favourable circumstances, it is the most frequent, result. More frequent in diffused than in circumscribed hæmorrhage; for as blood coagulates in circumscribed effusions the fibrine is deposited at the circumference, and so separates the more fluid portion of the blood from the surrounding healthy vessels.

But everyone knows how blood thus let loose among the textures and excluded from air will sometimes remain for weeks, or even months, without apparently undergoing any material change. Its bulk does not visibly vary, and, when handled, it still gives the impression of being fluid. And when let out under these circumstances, even after a considerable period, it will spontaneously coagulate more or less perfectly. It seems clear, therefore, that while shut in among the tissues coagulation has been delayed. We know, in fact, that the coagulation of the blood is long delayed under these conditions. But again, when blood, so extravasated, is evacuated after a lengthened period, it sometimes still escapes in a fluid form, but now no longer with the power of coagulation under exposure, and having lost the characters of recent blood. It appears as a thick black fluid, like treacle somewhat diluted; and the microscope shows that the cells have, for the most part, broken up. Such collections, remaining for months, have been described as sanguineous tumours, and dignified with the name of Hæmatoma. Now, what previous changes have led to such a state as this? Has the act of coagulation been altogether prevented in blood thus dead, and perhaps putrid? Perhaps so, in some cases; yet here again it has, to say the least, been rendered highly probable, by the facts and elaborate arguments which Morrant Baker has brought forward, that there has been some degree of coagulation and a subsequent breaking down of the clot.

As a rule, no doubt the structural elements of blood thus effused gradually undergo disintegration—as a rule, the exceptions to which are perhaps not so numerous as they may at first sight appear to be. For, under the circumstances in which blood is usually extravasated, it is probable that slight hæmorrhage may recur at intervals for a long time, and this, with the addition of serum continually oozing from the walls of the cavity and simultaneous absorption, may account for the recent characters presented by some of the blood which has thus been long pent up.

Blood effused may become what is called "encysted." This form of expression is an unfortunate one, for the term "encysted" is liable to mislead. The so-called cyst wall is, as Prescott Hewett long ago showed in his admirable paper, nothing more than the outermost layer of the blood-clot, which, being closest to or in actual contact with healthy structures, most speedily and completely undergoes those changes which lead to its organisation and conversion into membrane. The boundaries of the space, however, in which the blood lies at the same time usually become more consolidated and defined, so that indeed sometimes the cyst-wall seems to be formed partly of the peripheral portion of the blood-clot and partly of the circumjacent tissue. The serum which usually constitutes the contents of the so-called cyst varies in tint according to age. The colour, at first deepened by cruorine, gradually disappears, until the fluid may become either pale and clear or only slightly clouded by fat-molecules. Sometimes, however, clots of fibrine or of blood of various hues are found in the cavity; or, again, sometimes the cavity appears as a mere slit, the walls of the cyst being in contact. In this way is usually formed the well-known apoplectic cyst.

Not only may extravasated blood in exceptional instances become organised, acquiring ultimately the characters of fibrous or connective tissue, but it may become vascular. This is particularly well shown, as Prescott Hewett pointed out, in the blood-cysts sometimes found in the cavity of the arachnoid. As he says: "After a certain period the membranes forming these cysts become thoroughly supplied with bloodvessels, which may be seen in countless numbers permeating their whole structure; in severe cases it has been noticed that a minute network of vessels, most beautifully injected, is found at the margin of the new tissue, thus marking the point of union between the original and the false membranes."

Suppuration may occur during the process of disintegration, pus forming around and mingling with the effused blood; and this, next to absorption, is perhaps the most frequent event of extravasation. This process is, of course, preceded and accompanied by inflammation, the signs of which are usually obvious. There is increase of the swelling; more pain, tenderness, heat, and perhaps fever. The skin over it becomes red, and the integument grows thinner, especially at the focus, which is at length perforated.

But above all, and especially for our present purpose, it is important to understand that, in the process which leads to suppuration, a new layer is quickly developed—in fact, a wall of granulation-tissue is formed, which intervenes between the fluid and the surrounding vessels.

Lastly, there may be rapid decomposition of the effused blood; but this, happily, is rare, for it is apt to be followed by poisoning of the system.

Whether there shall be reabsorption, suppuration, or putrefaction depends very much on the degree of damage which the surrounding tissues have sustained. If these can recover, reabsorption may follow; but if these are so injured as to break down and decompose, suppuration or decomposition of the blood must inevitably occur.

It is clear, then, that even for the most favourable issue—absorption—a long time must at least be spent. Cannot this time be shortened? In a word, Why not at once let out the extravasated blood, and so bring to an abrupt close a course which is otherwise so tedious and uncertain? Why not! Because so long as blood is thus shut up in a close cavity, even when not absorbed, it may remain for an almost indefinite period without decomposition, or at all events without such decomposition as may lead to mischief. But when such a cavity is opened and air admitted, active changes begin at once, and then soon follow inflammation and suppuration and great danger of blood-poisoning. Hence surgeons are very reasonably shy of any interference of this sort, and usually prefer to wait, however long, in the absence of inflammation, suppuration, or other evidence of decomposition.

Then, as a rule, to which there must be very few exceptions, you are not to think of opening a cavity into which blood has been recently extravasated.

Probably, however, some of you may be aware that this exceptional practice is adopted in "certain circles" as a time-honoured custom; though here, no doubt, more in obedience to the exigencies of the hour than upon any calculation of the result. Prize-fighters are very apt to get black eyes; and, as the swelling rapidly increases, the lids become closed. Now, as the odds must be heavy against a blind champion, his friends and patrons secure for him temporary vision by puncturing the bruised eyelid, and then forcibly squeezing out its contents. That such a practice must occasionally lead to graver mischief I suppose there can be no doubt, although I should imagine that if such a proceeding be adopted at all it might be done with far less hazard immediately after the escape, while the blood is quite fresh, and therefore would take longer time to decompose.

But, short of this rough-and-ready method, can the surgeon do absolutely nothing for an ecchymosis but wait and watch? Yes; he may, in the first instance, do something to check further effusion by the adoption of means calculated, under the circumstances, to restrain hæmorrhage—by rest, position, judicious pressure, and the cautious application of cold. The old popular plan of at once pressing the handle of a spoon or some other convenient instrument on the part of a child's head which has been struck is a remarkably good one. The pressure not only tends to restrain further hæmorrhage, but it diffuses the blood which has already escaped into the surrounding tissue, and so perhaps hastens its subsequent absorption. Then, when the chance of further hæmorrhage has passed by, there are numerous applications one or other of which has found favour at different hands—lotions of vinegar or of acetate of lead or of arnica, for examples. The tincture of arnica, more or less diluted, is an immense favourite with some. It certainly has, in some instances, a remarkable power of allaying the severe pain sometimes associated with a recent bruise, and it is believed to promote absorption. But there is this objection to its use. The tincture of arnica, even when much diluted, is very apt in some persons to produce irritation and inflammation of the skin. After its application for a day or two, erythema or eczema is prone to appear, and hence annoyance and distress; so when you use it be on the look out for this. Then, further on in the case, various stimulating liniments and iodine may be had recourse to, or another very popular remedy with pugilists—a poultice made of the scraped root of the black briony; there is, however, the same objection to this as to arnica—that it is apt to irritate and inflame the skin. When the amount of blood which has escaped is not very considerable, and there is much stiffness and tenderness of the injured parts, warmth and moisture are often very grateful in the form of water-dressing, fomentation, or even poultice. But the latter application is usually reserved for the occurrence of inflammation and suppuration, when, in spite of the prejudice with which many regard it, it often gives, I think, more relief than anything else.

To return to our case. The man lay at rest in bed, therefore, for about three weeks, in which time the blood disappeared from the penis and perineum, and almost the whole of it from the left side of the scrotum; but there was little or no reduction of the right side. At the end of this time there was here not only no promise of absorption, but there were signs of commencing decomposition; a blush appeared on the surface, and the integuments became infiltrated; there were heat and some pain. So, not without deliberation, I concluded that by evacuation of the blood I should not only save time, but, what was far more important, lessen the ultimate risk; for it seemed no longer possible that decomposition of the blood could be averted.

Yet I confess I did not decide on this measure without grave apprehension. Let me explain. I feared that the rapid decomposition which would follow the admission of air to the cavity would lead to blood-poisoning. But why should this occur? Almost every day we see putrid fluids shut up, even under heavy pressure, in cavities among the tissues, and yet no poisoning of the blood supervenes. Why not? Here one might suppose are the very conditions for the production of pyæmia: a putrid fluid—animal matter in a state of active decomposition kept in constant contact, and this too under heavy pressure, with a raw surface. Many, indeed, write and talk as if such conditions were the only ones needed to induce pyæmia. They ignore the fact, which is nevertheless so familiar, that these conditions are continually present without the occurrence of pyæmia. I submit that the explanation of this is to be found in the fact that these cavities thus filled are bounded everywhere by a layer of new structure which is, or has the characters of, granulation tissue; and that this limitary membrane, when sound and unbroken, resists the passage of such fluids through its substance into the blood. They cannot penetrate it, or, at all events, they do not pass through it in sufficient quantity or in such a state as to poison the blood. This, observe, is not a matter of mere theory. Actual experiment, in the hands of Billroth and others, has shown that granulation tissue, when healthy, has this power of resistance; and clinical observation, when directed to this question, leads to the conviction that when such tissue is deficient or unhealthy, or presents accidental breaches, decomposing fluids bathing wounds find an entrance to the blood. Further than this, at present, we cannot go. We know nothing of detail concerning the relation in which granulations stand to the act of absorption. But this great fact—for I believe it to be one—seems for the present almost enough. We may, however, bear in mind some of the facts relative to the influence of animal membranes on the act of absorption. The transmission of fluids through membranes is not the simple process it was formerly supposed to be. Not only is it much modified by the nature and surface of the tissue, but also by the character and composition of the fluid. It is now well known that the constituents of a fluid, apparently uniform, may be thus separated by a membrane through which one can and the other cannot pass; and that in this there is a means of analysis more subtle than chemistry can command.

Now this limitary membrane of granulation tissue or allied structure is found only under certain conditions. We are familiar with it as the superficial layer of healthy wounds, and we know that the wall of an ordinary abscess is similarly constructed. But the growth of such a structure requires time, and is the result of processes which need at least a certain measure of local health; and the formation of healthy pus is an associated act. But when extravasated blood collects in a cavity no such bounding tissue can of course at first exist. Time at least must intervene, and, at any rate for a while, such collections of blood can be circumscribed only by the tissues amidst which they lie. Whether such a wall shall be afterwards built depends on the kind of action which is set up in the surrounding tissues. The signs of this are usually those of inflammation and suppuration, such as we commonly recognise in the formation of an abscess.

In the case before us I saw no evidence that such a state of the part had been brought about, and therefore I was apprehensive that, when this cavity was laid open, any putrid matter that might form would gain an entrance to the blood. "Then," you will say, "why not have waited longer? Why did you interfere with such a prospect of doing mischief? Couldn't you have left it alone?" My answer is that it appeared to me to be a choice only of evils. I apprehended danger from exposure of the cavity; but I anticipated danger, too, from the decomposition of the blood as it was, and I hoped that by evacuating the fluid as completely as possible, and afterwards freely washing out the cavity with an antiseptic fluid, my patient might escape altogether from the danger.

Well, the cavity was laid open by a free incision, a large quantity of blood, changed into a thick black fluid like treacle, with broken clots, was evacuated, and the cavity was at once washed out thoroughly but gently with water and Condy's fluid.

And, now, mark what followed. This was done on the 2nd of January, and for two days there was no observation of importance; but on the 5th the report says: He has had two or three rigors, and has been sick. Complains of severe frontal headache and thirst; no appetite; skin moderately moist. Temperature 102·4°; pulse 106. On the following day (the 6th) the temperature was 102°; pulse 95. Headache and aspect better. He complains of slight tenderness along the left spermatic cord and above the pubes.—7th: Temperature 101·4°; pulse 96. Slight headache continues. In the afternoon it became severe, and there was recurrence of rigors and sickness, followed by profuse perspiration.—8th: Temperature 100·4°; pulse 88; and he was altogether much less distressed.—9th: Temperature normal; pulse 68. Declares that he feels well. On washing out the cavity in the scrotum there was for the first time an escape of pus.—10th: Again slight headache. Complains of severe pain in the left testis, and upward along the cord.—12th: Temperature 104°; pulse 100. Rigors, vomiting, and severe headache; much pain; and now swelling of the left cord.—13th: Temperature 104°; pulse 96.—14th: Temperature 100·3°; pulse 80.—15th: Temperature 101·2°; pulse 80.—16th: Temperature 100·4°; pulse 80. Acute tenderness along the left cord; and now a sense of fluctuation there.—19th: Temperature 100°; pulse 80. Since the last report the pain along the left cord has been severe, and fluctuation is now distinct. A free incision was made, and a quantity of laudable pus let out. No rigor or other disturbance followed. Mark this.—20th: Temperature normal; pulse 80. Altogether better.—21st: Feels quite well. Appetite returning. From this date he rapidly recovered, and soon left the hospital.

Now, really, it might almost seem as if such a case as this were given for our learning. In striking contrast to the collection of blood on one side we have on the other a collection of pus—an extravasation and an abscess. On the one hand fluid liable to decompose lies in contact with naked tissue, and when it does decompose the poison is absorbed into the blood. On the other hand, fluid liable to decompose is separated from the surrounding tissues by a new wall, which has been previously built up, so when it decomposes there is no absorption and no blood-poisoning, for I need hardly tell you that pus when exposed to the air will decompose. I said it was healthy pus—not putrid—when let out. But, of course, and especially in such a cavity as that which in this case remained, some pus must be retained, and must under these circumstances rapidly change. And we know very well, as I have already said, and will repeat once more, putrid pus and other fluids are frequently seen in cavities and on wounds without the signs of poisoning of the blood. For my own part, I confess I cannot account for the contrast without having recourse to the wall of the abscess.

The great lesson taught by this case was never more needful than now, when, as during late years, in researches on blood-poisoning, attention has been called from the study of causes operating within, and has been directed wholly to those operating from without. Was this a case of "hospitalism," think you? Do you imagine that the determining cause of the mischief was in the ward, or the bed, or anywhere but in the condition of the injured part? The air with its germs was equally admitted to both sides—to the ecchymosis and to the abscess; and will not pus decompose as well as blood? Whence, then, the difference, oftentimes as great as that between life and death, which in this striking instance is forced upon the attention of everyone?

STEALING AS A SYMPTOM OF GENERAL PARALYSIS.

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THERE can be no doubt that no little popular suspicion meets the allegation of insanity when it is made in defence of a person who is on his trial for the perpetration of some crime. Nor can it be said that the suspicion is entirely unwarranted by the use, or misuse, which is sometimes made of this mode of defence. It is too often had resort to by lawyers merely as a last resource, when all other means of defence fail, and when there is no real justification for setting it up. Moreover, there is a popular feeling, which judges commonly share, that it does not require any special knowledge in order to settle whether a man is mad or not, and that those who have made a special study of the subject of insanity are sure to discover symptoms of the disease wherever they look earnestly for it. Of a great many cases of insanity it is quite true that the public can judge almost as well as the doctors; the wayfaring man, though a fool, is not likely to make a mistake concerning them. In respect of a certain proportion of cases it may be admitted that doubts and differences of opinion are justified; belonging to the borderland between insanity and crime, they may be reckoned insane or criminal according to the standpoint from which they are looked at. But there are not a few cases in which the symptoms, though positive and definite, are not recognised and rightly interpreted by anyone who has not, by close observation of the manifold varieties of mental derangement and practical experience in dealing with them, acquired an intimate knowledge of what they betoken. If he describes them to the lawyers or to the public, and expounds their meaning, he is thought to be making much ado about nothing by detecting evidence of madness in innocent trifles, if he is not met outright with ridicule and scorn. It is not difficult for ignorance, appealing to the prejudices of ignorance, to raise an empty laugh against a truth of which there is not the least comprehension.

Among these cases of mental derangement which are apt to be overlooked or misunderstood are cases of general paralysis of the insane in their early stages. No form of insanity has been more studied or is better known than this. Its symptoms are, though slight at first, definite and characteristic from the beginning; its course is wonderfully uniform; and its mode of termination and the time thereof may be predicted with considerable accuracy. Moreover, unlike other forms of insanity, it presents motor as well as mental symptoms from the commencement; wherefore it might be said to exact attention and to claim recognition from those who have not made a study of mental diseases. Nevertheless, the most grievous mistakes are often made concerning this disease in its early stages, not by lawyers and juries only, but by medical practitioners; and so it happens that patients struck with fatal organic disease of the brain, declaring itself by symptoms which could hardly speak more plainly than they do, are tried, sentenced, and punished as common-place criminals.

It is well known to those who know anything of insanity that a propensity to steal is a striking symptom in the early stages of some cases of general paralysis. A person whose character has been irreproachable in all the relations of life, and whom no one would ever have suspected of an inclination to break the eighth commandment, after surprising and distressing his friends by irregularities of conduct at variance with the respectable uniformity of his former life, seems to lose the consciousness of the difference between what is his and what belongs to another, and in the quietest way, as if he were doing nothing extraordinary, appropriates what strikes his fancy at the moment, and what he has, perhaps, no use for, and, when he has got it, makes no use of. The stealing is often done in a stupid way, without any adequate motive or without the outlook of any gain thereby, apparently in obedience to an impulse to possess springing up in a mind in which the sense of right and wrong has been weakened or extinguished. In some cases the patient makes no attempt at concealment; but in other cases there lingers a remnant of the sense of right and wrong which, too feeble to contend with the stealing impulse, leads to bungling attempts to hide the petty larceny.

In the *Journal of Mental Science* for January, 1873, Dr. Wilkie Burman relates the particulars of six well-marked cases of general paralysis admitted into the West Riding Asylum at Wakefield, *after having undergone the whole or the greater part of their punishment in gaol* for larceny; and, in regard to these cases, he expresses his conviction that the disease might easily have been diagnosed at the time of imprisonment, without any very prolonged examination, "by any medical man who had even the most rudimentary knowledge of the symptoms of general paralysis." Indeed, in one of these cases the disease was actually recognised by a barrister who was present in court when the man was tried, and yet this unfortunate man remained in gaol for five months before being sent to the asylum; he underwent the punishment of a criminal for five months after a hopeless disease of the brain had begun to make its fatal progress. Another person suffering from general paralysis was sentenced to six months' imprisonment for stealing two wheelbarrows and twelve hundredweight of coals in open daylight, without any attempt at concealment, and without being in want of them, as he was in comfortable circumstances. He was kept in prison for four months, having been in the hospital occasionally during that time on account, it was said, of "some slight bodily ailment." However, this slight bodily ailment did not fail eventually to culminate in such violence and excitement as necessitated the patient being restrained by a strait-jacket and confined in a padded room during the last three weeks of his imprisonment, after which he was sent to the asylum, where his disease made rapid progress. Another person was sent to gaol for twelve months for stealing some wine-glasses from an hotel. A fortnight after his discharge from prison he was admitted into the asylum in an advanced state of general paralysis, and he died about three weeks after his admission. These cases presented on admission into the asylum the usual exalted ideas of general paralysis, as well as the distinctive bodily symptoms. They and the other three cases which Dr. Burman mentions were admitted into the West Riding Asylum within a comparatively short time, and had presumably undergone their punishment in the gaol of the West Riding at Wakefield.

I will now give the particulars of a case that occurred in my practice, which illustrates the same lesson and excites the same painful reflections as Dr. Burman's cases. H. J. P—— was brought to see me in the early part of September, 1874. He had recently failed in his business, and his changed character and peculiar manner had for some time occasioned anxiety to his friends. It was a question of the propriety of endeavouring to get him admitted into Bethlehem Hospital. When I saw him, his symptoms were such as led me to think that he was struck with general paralysis, and to say that he would probably not live two years. There was a slowness of conception, with a certain vacancy of look, which gave the appearance of some degree of stupidity; there was also exhibited at times a slight uncertainty, hardly amounting to tremulousness, in the action of the muscles around the mouth; and there was a remarkable incapacity to realise that there was anything the matter with him, or that his failure in business at all affected his future prospects. He seemed to think that it would be easy for him to go on as before, and that he would have no difficulty in getting advances of stores from the houses which had suffered by his failure. At the same time, when it was pointed out to him how unlikely this was, he assented in a placid and indifferent way, but evidently without sincerely realising what he assented to or being convinced by what was said. At the urgent desire of his wife, who could not be persuaded how seriously ill he was, and who was naturally unwilling to send him to an asylum, he was allowed to go with her to the seaside, she having been warned to never lose sight of him. While resting there he seemed to improve; but one day, having obtained some money from her, under I know not what pretext, he disappeared. The next thing that was heard of him was that he was in custody at Doncaster for stealing a watch. He had gone directly from his wife and taken the mail train to the north on the night of Sept. 24th, 1874, and at Peterborough had got into a carriage in which was another passenger. This person went to sleep, and when he awoke his gold watch and his fellow-passenger were gone. When the train was searched, H. J. P—— was found in another carriage, and the stolen watch was underneath the seat on which he was sitting. When taken to the police-office, he remarked to the constable, in reference to the handcuffs which had been put on him: "You should not have put these things on me. Oh, what a disgrace!" Knowing the condition of disease in which he was, I was not greatly surprised when told by his friends what he had done, and at their request I willingly gave them a certificate that he was in my opinion a person of unsound mind, being in the first stage of general paralysis, and that arrangements had been in contemplation for placing him in an asylum. However, this view of his state did not commend itself to the surgeon of Wakefield Gaol, who could find nothing the matter with him, and had no hesitation in declaring him to be quite sound. Feeling that, under these circumstances, a great injustice was likely to be done to a man who was afflicted with hopeless organic disease of the brain, I wrote to Dr. Crichton Browne, the well-known superintendent of the West Riding Asylum, begging him kindly to examine the man, and, if he found him really afflicted, to do what he could to help him. Dr. Browne readily consented to do so, and, having carefully examined him, came to the same conclusion as I had done, that he was labouring under general paralysis and was not responsible for his actions. Moreover, Dr. Browne was so good as to attend at the man's trial and to give decisive evidence to that effect. Dr. Watts, who had been his ordinary medical attendant in London, was also present at the trial, and gave similar evidence. But it was all in vain. Dr. Wood, the surgeon of the gaol, stated emphatically that he had watched the prisoner carefully for a month, and that he was "sound in body and mind," and the evidence in his favour was received with open incredulity. "I shall not easily forget," Dr. Browne wrote to me, "the smiles of incredulity which pervaded the Doncaster Court-house, from the Recorder downwards, when I described the inequality of the pupils, slight tremor of the tongue, and other *little* symptoms which enabled me to recognise the justice of your diagnosis of general paralysis. I shall not easily forget the derision with which my prediction that the robust, healthy-looking man standing at the dock would not live above eighteen months was received on all hands. The Recorder, taking into consideration the good character which the prisoner had previously borne, sentenced him to two months' imprisonment with hard labour. The poor man thus got the benefit of his previous good character, though he did not get the benefit of the disease which had produced the sad change in his character.

His friends very properly refused to let the matter remain so, and at once made such representations to the proper quarter, supported by affidavits, as led in a short time to the remission of the sentence. A few days after his discharge, on November 27th, I saw H. J. P—— again, and questioned him about the theft, and the motives of it, and as to where he was going by the train. His account was that he thought he would go to Scotland, though he could give no satisfactory reason why he should go there, and would stop at York on the way, in order to see the cathedral; that the idea of taking the watch came into his mind when he saw his fellow-passenger asleep; and that, having taken it, he got out of the carriage, and made his way to another carriage. He was quite insensible to any feeling of shame on account of what he had done, and seemed unable to realise its criminal nature; nor did he evince any sense of disgrace on account of having been in prison, talking of it in fact as freely and unconcernedly as he might have done of a friend's house in which he had been staying for his health's sake. I recommended that he should be taken to Dr. Watts for the purpose of obtaining a certificate of his insanity, agreeing to sign the second certificate myself, and that he should be sent to an asylum; enjoining upon his friends that he should meanwhile be closely watched, as it seemed certain that he would do something extraordinary if he were not under control. Divided family counsels prevented his being put immediately under restraint, and the next news which I had of him was contained in the following paragraph which appeared in the newspapers :—

"*Extraordinary Capture of a Thief.*—Soon after midnight on Thursday, when the mail train for London had passed the Tuxford station, a man covered with blood went to the signalman's box and stated that he had fallen from one of their carriages. His face, head, and hands were very badly cut and bruised, but the railway official had his suspicions aroused and telegraphed to Retford, the next station, for the train to be examined on its arrival there. In a minute or two he received directions, in answer to his telegram, to detain the man, as a robbery had been committed. The man, not knowing that the officials had telegraphed to Retford, asked that he might be sent back to London to his friends by the next train, as his injuries were so severe that he did not feel able to continue his journey to Manchester, for which place he had taken a ticket at King's-cross station. A doctor was sent for, and, after he had dressed his wounds, Sergeant Hallam, of the Notts police, stepped in and apprehended him. On searching him a false beard and moustache were found in one of his pockets, and in another a dagger nine inches long—a most formidable weapon, as sharp as a razor. Two watches were found upon him. It appears that the prisoner had been riding in the same compartment with Mr. Robinson, a Manchester horse-dealer, and one other person. All save the prisoner went to sleep after leaving Peterborough, and did not wake again until they were aroused at Retford to find their companion, the prisoner, gone, and one of their watches also. It is supposed that the prisoner, after stealing the watch from one of the sleeping travellers, left the compartment, and tried to get into another. As the mail was running along at the rate of sixty miles an hour, he, failing to find a compartment which he might enter unobserved, either jumped off or fell from the train. He is a clean-shaved, thick-set, powerful man, and has given the name of Henry James Price. He is now detained in the Retford Police-station, and will be brought up to-day."

Here was a nearly exact repetition of his former performance. He had been again going to the north without any apparent reason, and on his way had again stolen the watch of a sleeping passenger, but this time he had evidently gone with evil design, else why should he have provided himself with the false beard and moustache, and the formidable dagger? The result of the adventure was that he was on Dec. 7th committed to the county gaol at Nottingham to take his trial, but he had not been there long before incontestable symptoms of insanity manifested themselves. Thereupon he was removed, on Jan. 14th, 1875, to the county asylum. On Feb. 24th he had three severe fits of an epileptic character; similar fits recurred from time to time during the following month; his mind became more and more enfeebled, and his bodily strength declined; furious mania supervened, and he died from exhaustion on August 31st, after being raving mad for eight weeks.

Comment upon this case is unnecessary. It will be enough to express regret that the unhappy sufferer should not have found in medical help the protection and treatment which his sad and hopeless disease demanded, and a conviction that the time has come when it is the duty of medical corporations to exact some knowledge of mental diseases from those upon whom they confer their licences.

Hanover-square, W.

A USEFUL METHOD OF EXCISION OF THE ELBOW-JOINT.

By C. F. MAUNDER, F.R.C.S.,
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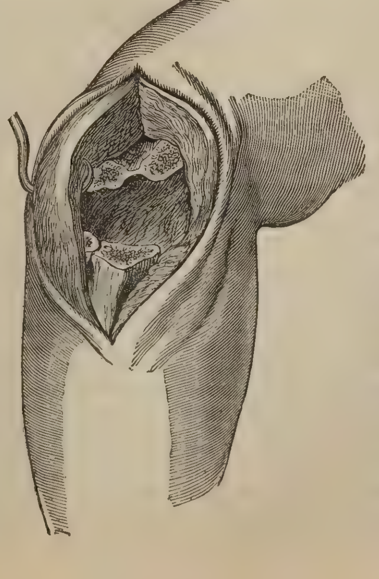
It is scarcely necessary to suggest that, in performing an operation, the local consequences should be kept prominently in view. To know the result of an operation some years subsequent to its performance is the best way of appreciating its merits, and must be my excuse for publishing extracts from a letter which I have just received from New Zealand, from a gentleman whose right elbow-joint I excised about six years ago.

"*From J. N——, Hereford street, Christchurch, New Zealand, August 5th,* 1875.

"Dear Maunder,—You will be glad to learn that my arm has won the champion billiard cue in the late match here; also that I took second honours in quoits. I send you a paper per post.......I have left a clause in my small will that my arm shall be preserved and sent to you for examination and dissection after my death. I believe it to be the finest arm in the world without a joint.—Yours truly, J. N."

The case was one of very severe compound comminuted fracture of the ends of the bones forming the right elbow-joint, and to which I was called by Dr. Floyer, of Bishopsgate. I performed excision on a method which I suggested to the profession as a *certain* means of securing active extension by the triceps—a desideratum hitherto only rarely, and then accidentally, attained. Briefly put, my object is arrived at by avoiding all transverse section of the soft parts lying between the point of the olecranon and the external condyle of the humerus. In this way the continuity of muscular and aponeurotic structures passing from the arm to the forearm is not destroyed.

Fig. 1.



I have exhibited, from time to time,

at meetings of societies, patients submitted to operation by this method of mine,* and all who saw them were surprised by the amount of the power of extension which was thus secured. Mr. Steele, of the Bristol Infirmary, has both practised and published his approval of the method.

Fig. 1 shows a left arm immediately after the performance of the operation; the hook sustaining the structures which are to be carefully preserved.

FIG. 2.

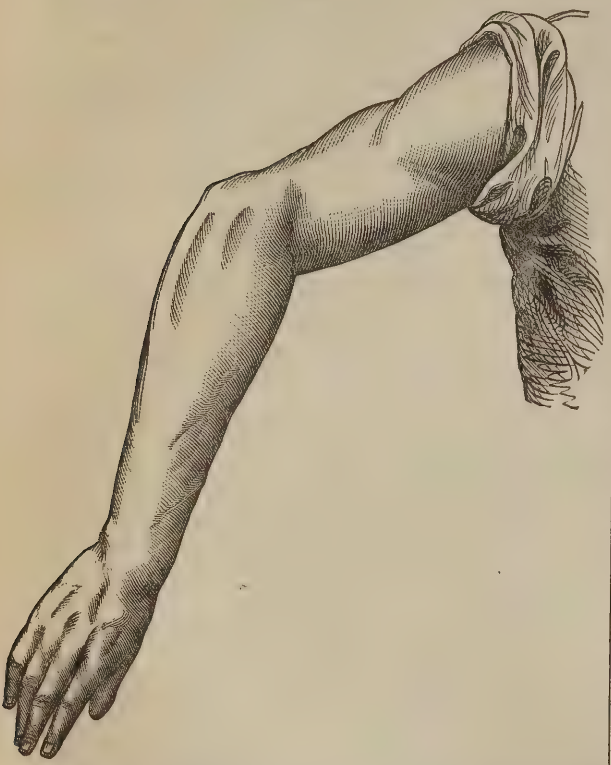


Fig. 2 is a sketch of the arm of J. N——, taken three years ago, and three years subsequent to operation. The forearm is in the position of active extension by the triceps. He could then play billiards, quoits, and use "the gloves" with facility.

Queen Anne-street, W.

ON

FIFTY CASES OF HÆMOPTYSIS TREATED WITH ERGOT.

By JAMES M. WILLIAMSON, M.D. EDIN.,

RESIDENT MEDICAL OFFICER ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR, ISLE OF WIGHT.

ABOUT eighteen months ago, after reading the papers written on the subject by Dr. Anstie in the *Practitioner*, I commenced making a fair trial of the value of ergot in the treatment of hæmoptysis. The success which followed its administration was so encouraging that I gave the drug in every case of hæmoptysis which I was called upon to treat, and I now propose to state briefly the results of its use in fifty cases.

The fifty patients were suffering from phthisis in different stages, and the amount of the hæmorrhage varied from abundant bright streaks on the sputa to the expectoration of several ounces of blood. As the cases all occurred in hospital practice, very little time was lost between the advent of the hæmoptysis and the exhibition of the remedy. The ergot was invariably given by the mouth and in the form of the liquid extract. Much has been said about the success of the subcutaneous injection of ergotin and its superiority to this plan, but since there was no difficulty in any of the cases in administering a draught, and as the drug acted in most instances with a promptitude which was sufficiently satisfactory, the hypodermic method was not employed. Forty-minim doses of the liquid extract may be given twice within the first hour, and, guided by the results, at least every two hours afterwards, the dose being diminished and given less frequently as the hæmorrhage subsides. I have never observed any disagreeable effect follow even upon the administration of large quantities within short periods, but, as a general rule, if four or five full doses make no distinct impression upon the hæmorrhage, the remedy should be abandoned for another. Care should be taken to use a fresh and sound preparation of the ergot.

Out of the 50 cases, the drug rapidly checked all bleeding in 44 instances. Of these 16 were women and 28 men, and in at least one-fourth of the number the hæmoptysis merited the term profuse. In 40 of the 44 cases it was the first and only remedy given; in 2 others it was successful after a mixture containing gallic acid, alum, and dilute sulphuric acid failed; in another it was effectual after acetate of lead with opium proved useless; while in the remaining instance it repressed the bleeding after both of these plans were unavailing. The ergot was ineffectual in 6 cases, and of these it may be well to give some particulars. Case 1 was that of a middle-aged widow, who had had several violent hæmorrhages. On this occasion it was very copious, and repeated doses of ergot, given in rapid succession, produced no perceptible abatement; gallic acid was then substituted, but just as it was making a decided impression it gave rise to such griping pains in the abdomen that it had to be given up; ergot was resumed, and the hæmorrhage rapidly ceased. Case 2 was that of a young man in whom the hæmoptysis was moderate; it was unaffected by ergot, but yielded to gallic acid. It is only right to add that in this case there was some doubt as to the goodness of the sample of ergot used. Cases 3 and 4 were two examples of a slight, but very chronic and obstinate hæmoptysis, in which the sputa had a uniform pink tinge. In one of the men, gallic acid succeeded after ergot proved a failure; in the other, gallic acid, ergot, acetate of lead with opium, perchloride of iron, ammonio-sulphate of iron, the mineral acids, and oil of turpentine, were all successively tried without avail. Case 5 was that of an unmarried woman, aged twenty-five. She had had many previous attacks. Ergot proved ineffectual, and was replaced with success by acetate of lead and opium. Case 6 was that of an unmarried woman, aged twenty-three, who had also had frequent previous hæmorrhages. On this occasion the bleeding was profuse, and resisted both ergot and gallic acid; oil of turpentine eventually subdued it.

The cases in which ergot failed have been stated somewhat fully, partly to show that, in at all events three of the number, it shared the failure in common with gallic acid, the remedy which is probably most frequently employed in the treatment of hæmoptysis. Over gallic acid ergot has the distinct advantages of never causing griping or constipation, and more especially of not interfering with a liberal use of milk. The large proportion—equivalent to 88 per cent.—of the cases in which ergot succeeded, not only testifies to its great value and claims for it our confidence, but also strongly justifies the recommendation that it should be the first drug tried in all cases of hæmoptysis.

Ventnor, I.W.

CASE OF

COMPOUND FRACTURE OF THE PATELLA.

By ARTHUR B. EWEN, M.R.C.S., &c.

THE case of Wound of the Knee-joint treated Antiseptically brought before the Clinical Society by Mr. Pick, and reported in THE LANCET of Oct. 16th, reminds me of a somewhat similar case in my own practice, treated on a different principle. I am not about to dispute the value of the antiseptic mode of treatment; I would merely urge that its great superiority over other and simpler methods is, as yet, not proven. Certainly, as far as the practice of surgery in country districts is concerned, where we have the immense advantage of a constant supply of pure air in our favour, we can challenge comparison with all the recorded results of antiseptic treatment. The treatment by means of fresh air and cleanliness will always commend itself to the surgeon on account of its extreme simplicity, until the results of the more complicated and troublesome system are shown by the most unequivocal statistics to possess the decided superiority claimed for it by its advocates.

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* Maunder's Operative Surgery, second edition, p. 120.

On Aug. 27th, 1866, Jane B——, aged sixty-four, the wife of an agricultural labourer, while feeding a threshing machine, slipped from the stage and fell into the drum, sustaining severe injuries of the right arm and left knee-joint. She was a healthy, active woman, slightly built, and of spare habit, had had a large family, and was accustomed to field work. On examination I found the forearm and elbow-joint crushed and lacerated so extensively that it was necessary to amputate the arm at the upper third; this I did under chloroform, and then, on examination of the knee-joint, I found severe bruising of the integuments, two extensive lacerations into the joint, and the patella divided into three larger and several very small fragments. I removed five or six small loose pieces of bone from the wound. At first I thought, considering the severity of the damage to the joint, that the best plan to adopt would be to amputate at once; but I feared that, as she had lost so much blood before my arrival—an hour after the accident,—and as she had just undergone the amputation of the arm, I should most likely kill her outright if I removed the leg. I therefore decided to put the leg on a straight splint, and give her a chance of recovery with an anchylosed joint. All the loose fragments of bone and one or two pieces of straw which had got into the wound being removed, I brought the edges together with two silk sutures, and covered the knee with lint saturated with cold water, which dressing I directed to be frequently changed. Twelve hours after the accident she had a pulse of 120, and there was considerable effusion into the joint. The constitutional disturbance gradually and quietly subsided. There was a moderate discharge of healthy pus from the wounds; no burrowing of matter. A small portion of integument, two inches long and half an inch wide, from the upper part of the wound, which extended across the front of the joint, sloughed away, having been severely bruised at the time of the accident. This somewhat delayed the healing process. After the first fortnight she gained strength rapidly, and five weeks after the accident the wounds were healed and all discharge had ceased. On Nov. 10th, seventy-five days after the accident, the patient walked up to my house, a distance of three miles, and expressed herself as being delighted with the very fairly useful limb she now possessed.

One great element in her rapid recovery was the beautiful autumnal weather, which enabled her to enjoy the benefit of constant fresh air. She had her cottage door, which was just opposite her bed, open from sunrise to sunset. She was also of a very cheerful disposition, and from the first seemed to have made up her mind that she should get well. She lived four years after the accident, and died in 1871 of cancer of the breast.

Long Sutton.

NOTES OF FIVE CASES OF ARROW-WOUNDS (RECEIVED IN THE SOUTH SEA ISLANDS), TWO FOLLOWED BY TETANUS AND DEATH.

By SURGEON ALFRED CORRIE, R.N.

(*Concluded from* p. 660.)

CASE 3.—Thomas S——, aged thirty, cook. This man, when on shore (August 12th, 1875) at Santa Cruz Island, received a wound (punctured) of the right side, over the crest of the ilium, not very deep. The arrow was at once removed; the wound, some fifteen minutes after the accident, was sucked and enlarged, and nitrate of silver applied freely. He felt a little giddy and sick at the time. A stimulant was given in the shape of some brandy and water.

Aug. 13th.—Slept a little; rather restless during the night. Pain and tenderness around the wound, extending down the thigh; slight headache; tongue moist and clean; no chills; bowels irregular. Temperature 99°; pulse 80. Ordered cathartic mixture, an ounce and a half; water-dressing to wound.—8 P.M.: Taken food fairly; less pain about wound; still a slight headache; bowels confined. Temperature 99°; pulse 88.

14th.—Slept well during the night. Less pain about the wound; no sicknesss or headache; bowels confined. Water-dressing to wound; cathartic mixture, two ounces. Temperature 98·4°; pulse 80.—8 P.M.: Felt a little sick this morning. Bowels have been opened freely; felt better after it. Is taking food well; wound less painful and looking healthy. Temperature 98·6°; pulse 80.

15th.—Passed a good night. Wound progressing favourably; but little pain or tenderness about it now. Temperature 99·2°; pulse 80.

20th.—For the last five days the patient has been going on well; wound looking very healthy and healing fast. He takes food well; bowels regular. Temperature generally normal; pulse between 75 and 80.

25th.—Wound not quite healed yet, but going on well; patient does not complain of anything, and appears in excellent health. Continue water-dressing.

29th.—The wound having healed without one bad symptom, and the patient appearing in robust health, he was discharged to duty the seventeenth day after the accident. He is at present (Sept. 3rd) working about the ship and going on well.

CASE 4.—Allen J——, aged twenty-seven, seaman. This man received (August 12th, 1875) at the Island of Santa Cruz, a punctured wound, about two inches above the pubis, from an arrow supposed to be poisoned with some animal poison. The arrow was immediately pulled out. It went in about half an inch. Wound sucked fifteen minutes after the accident, enlarged, thoroughly examined, and nitrate of silver applied. Complained of nothing in particular at the time of the accident.

13th.—Slept fairly; felt pain during the night at lower part of the abdomen; no sickness, headache, or chills; tongue a little coated; bowels regular; water-dressing applied to wound. Temperature 98·4°; pulse 66.—8 P.M.: Felt during the day wandering pains all over the abdomen, extending down both thighs; enlargement of glands in groins; had a feeling of sickness during the day, but has not vomited at all; very giddy; fell on deck on one occasion; no headache. Temperature 99·2°; pulse 80. Ordered half a drachm of solution of hydrochlorate of morphia, and wound dressed.

14th.—Slept tolerably well; not so much pain about abdomen and thighs; no sickness or giddiness; wound looking healthy; bowels confined. Temperature 98·4°; pulse 72. Ordered two ounces of cathartic mixture, and wound redressed.—8 P.M.: Taken food well; bowels freely open; pain much less in abdomen. Temperature 98·4°; pulse 76.

15th.—Wound healing; patient going on well; water-dressing applied to the wound. Temperature 98·4°; pulse 64.

20th.—During the last five days patient has been progressing favourably. Temperature normal; pulse generally 70 or 75.

29th.—Wound healed; complaining of nothing; not a bad symptom during the last twelve days. Discharged to duty seventeenth day after the accident, patient working about the ship and going on well.

CASE 5.—Thomas J——, thirty-three, seaman. This man, going on shore at the Island of Santa Cruz, Aug. 12th, 1875, received an arrow-wound of the right leg an inch above the internal condyle. The arrow passed in in an oblique direction some two or three inches. The arrow was quickly removed, the wound, which bled freely, was at once sucked by one of the seamen, and a bandage applied tightly around the leg. Some fifteen minutes after the accident he was seen on board by the medical officers; the wound was a little enlarged, and carbolic acid and glycerine injected. A few hours after the accident he complained of a little pain around the wound.

Aug. 13th.—Slept well; no sickness, headache, or rigors; feels some stiffness about the wound; tongue clean; bowels regular. Temperature 99°; pulse 78. Wound dressed with a solution of carbolic acid and glycerine.—8 P.M.: Temperature 100·4°; pulse 88. A feeling of sickness during the day; has not vomited; slight headache; taken a little food; rather thirsty; no rigors; pain in leg much the same as this morning; wound re-dressed.

14th.—Passed a tolerably good night; felt a little sick; much less pain in the wound; bowels confined; no headache. Temperature 99·6°; pulse 92. Ordered cathartic mixture two ounces; linseed-meal poultice.—8 P.M.: No change in patient. Temperature 99·8°; pulse 80.

15th.—Little or no pain in wound; some discharge coming from it; patient's general health good. Temperature 98·8°; pulse 80.

20th.—Wound healing fast; no bad symptoms; progressing favourably. Temperature generally normal; pulse about 75 or 80.

25th.—No great change; wound fast healing.

31st.—Wound healed; patient complaining of nothing. Discharged to duty on the nineteenth day after the accident.

Remarks.—The first question which suggested itself to me was—Had the animal poison which is stated (by men who have been much among the South Sea Islands) to be on the arrows of these natives anything to do with the result of two of the cases—namely, tetanus and death? I cannot help thinking myself that the arrows were not poisoned; if they were, the poison could have had no effect. Three of the men hardly experienced (although their wounds were nearly as severe as the wounds of those who died) from beginning to end one bad symptom, not even enlargement of neighbouring glands, or any of the signs of a common dissecting wound, which I take it ought to have been the result if the arrows were poisoned.

The two men who died suffered but little for the first four or five days, when suddenly tetanus set in, assuming a severe form, and running a rapid course to death.

I think the cases are interesting as showing the fatal results of punctured wounds in the tropics and perhaps the sad circumstances connected with them.

H.M.S. *Pearl*, Australian Station.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

LONDON HOSPITAL.

SEVERE CASE OF IODISM; TRACHEOTOMY.

(Under the care of Dr. Fenwick.)

This case of iodism, for the notes of which we are indebted to Mr. Roland Smith, resident medical officer, is one of the most remarkable hitherto recorded, and presents many points of interest. The patient was evidently unusually susceptible to the influence of the iodide of potassium, and suffered alarming symptoms from the effects of the drug, notwithstanding its combination with bicarbonate of potash, which, it has been stated, diminishes greatly the risk of iodism. The dose (ten grains) of the iodide was undoubtedly a large one to commence with, and is sufficient to give rise to disagreeable symptoms in most persons. It is the custom with many of those who are in the habit of using this drug largely to begin with small doses of three or four grains, gradually increased. By this means patients may often be made, in time, to take very large doses without any inconvenience whatever, although they showed at first an intolerance of the drug when given in full doses. Among the other circumstances worthy of note in this case was the absence of purpura or other cutaneous manifestations in the legs. In several cases that have come under our notice the walls of the hair and sebaceous follicles of the legs were the chief or only portions of the skin affected.

Frederick R——, aged thirty-five, was admitted to the hospital at 9.30 A.M. on the 9th of October in a semicomatose condition. His face was swollen and deeply congested, and the eyelids were puffy and red, as in an exaggerated case of facial erysipelas. The lips and tongue were extremely livid, the tongue being swollen and protruding from between the teeth. Very little air entered the lungs, and the epigastrium and intercostals sank in with each inspiration. There was croupy breathing, and on one occasion the cough was typically laryngeal. The pulse was scarcely perceptible. There was no dulness on percussion at the upper part of the sternum, no palpable interclavicular pulsation, and no bruit or other signs indicative of an aneurism pressing on either the trachea or the recurrent laryngeal nerves. Feeling certain that the obstruction was laryngeal, and noticing that the respiratory power was failing, Mr. Job, the house-surgeon, performed tracheotomy to prevent death, which seemed inevitable. The operation was not done a moment too soon, for breathing had ceased and the patient was pulseless for nearly a minute before the termination of the operation; but artificial respiration for a few seconds sufficed to restore life, and, before five minutes had elapsed, the patient expressed himself as much relieved. Colour returned to the lips and tongue, a good pulse was felt at the wrist, and the respiration seemed quiet and unimpeded. Without further examination at the time, the patient was sent into the ward.

At 12 o'clock, when seen by Mr. Smith, some pustules were observed on the face, and a papular eruption on the back of the hands and flexor aspect of forearms, the abdomen, chest, and lower extremities being exempt. At the back of the neck there were three pustules, and several on the ears. The patient was at this time breathing quietly. The temperature in the axilla was 99·4° Fahr.; pulse 100; respiration 36. There was no lividity of face, the eyelids were less swollen, no pustules on conjunctivæ, but very great chemosis. Owing to the umbilicated appearance of some of the pustules, the man was at once isolated. There had been no rigor, no pains in the loins, and no vomiting; but there was considerable headache.

The patient's previous history, as given by his wife, was as follows. Three years ago the patient had two similar attacks, and for each was treated in the London Hospital. On those occasions the breathing was not affected, but the throat was slightly sore. The eruption was confined to the nose, eyebrows, and forearms. Iodide of potassium was supposed to have been the cause of each, as that drug had been taken on both occasions. Excepting for rheumatism, he remained well until three months ago, when he became the subject of kidney disease (acute nephritis?). For the past month he has felt languid, and sometimes been obliged to give up work on that account. On Oct. 7th he woke up with rheumatism in his left wrist and a pain in the cardiac region. He got the following medicine from a medical man whom he consulted: "ten grains of iodide of potassium, ten drops of tincture of digitalis, fifteen grains of bicarbonate of potash in water, to be taken three times a day." Six doses only were given. After the fourth dose he thought he had caught a violent cold, and went to bed. He continued the medicine. At 1 o'clock on Saturday he woke up with a sensation of choking, called his wife, and tried to tell her he should choke; he could scarcely articulate. Poultices externally and inhalations of steam gave no relief. A neighbouring medical man was consulted at 9 o'clock, and his immediate removal to the hospital recommended. The patient was vaccinated when a child. Fifteen years ago he had small-pox; no history of syphilis could be obtained; family history was good; no similar illness or rash has occurred in anyone living in the street or neighbourhood where the patient resides.

Oct. 10th.—10 A.M.: Temperature 102·4° F.; pulse 130; respiration 21. 10 P.M.: Temperature 102·8°; pulse 136; respiration 24. On his face there were several pustules, some of them closely resembling variola of about the eighth to the tenth day. The eyelids were still swollen and œdematous, and there were spots also on his ear, hæmorrhagic-looking, and evidently containing bloody serum; others on his ears were much smaller, and did not contain pus, but were simply papules. There were three pustules on the back of the neck, none on the abdomen, chest, back, upper arms, or lower extremities, but a great number on the forearms, and in this situation the different varieties were very well marked. Some pustules were large and umbilicated, others not umbilicated, and varying in size so as in some places to resemble a simple papular eruption. The uvula was elongated, and the mucous membrane was somewhat swollen as if œdematous, but there was no eruption on the palate or pharynx. Urine copious in quantity, sp. gr. 1008, acid, albuminous, 1·4 per cent. of urea, and gave the characteristic reactions of iodide of potassium solution.

11th.—The tracheotomy tube was removed after forty-eight hours, as the patient could by that time breathe quietly through the natural passages. Soon after removal a quantity of adhesive mucus was expectorated through the wound and some by the mouth. Temperature 102·2°; pulse 104; respiration 24. The pustules on the face had commenced to scab; most on the forearms had a reddened areola, especially the umbilicated ones. Some of the papules were fading; nothing could be seen on palate or uvula. Laryngoscopic examination showed slight congestion of epiglottis and vocal cords. Urine still contained traces of iodine. Evening temperature 101°.

12th.—No fresh spots. The larger pustules had by this time commenced to dry up. The contents of the pustules seen microscopically consisted of squamous epidermic scales, pus-cells, and a great quantity of small spheroidal, transparent, non-nucleated cells, about the $\frac{1}{6000}$ or $\frac{1}{7000}$ inch in diameter. Although the urine was still albuminous, it did not contain any iodine. Morning temperature 100°; evening 99°.

13th.—Temperature normal. Rash almost disappeared, excepting one or two pustules which had burst and continued suppurating and discharging.

14th.—Patient convalescent. Urine still contained a trace of albumen.

Nov. 2nd.—Patient discharged quite well.

STANLEY HOSPITAL, LIVERPOOL.

SUCCESSFUL AMPUTATION AT THE HIP-JOINT.

(Under the care of Mr. RUSHTON PARKER.)

THE following case resembles in many respects those reported in the "Mirror of Hospital Practice" at page 591 of this volume, from the practice of Mr. Spence, of Edinburgh. The point to which special attention may be drawn is the fact, now established by abundant experience, that amputation at the hip-joint, in cases of disease in general, and in exhausting inflammation of joint and bone in particular, is by no means an operation of dangerous magnitude. Amputation at the hip-joint, and also high up in the thigh, in cases of accident, is performed under circumstances attended with a high mortality, and is a desperate undertaking. The influence of age was a second point in the patient's favour; but though the period of convalescence was very protracted, his safety seemed established by the third or fourth day after amputation.

In July, 1874, a boy six years of age was admitted suffering from inflammation of the right hip-joint of eighteen months' standing. There were sinuses, erosion of the head of the femur, real shortening to an extent of about two inches, much tenderness, little pain, and no emaciation.

Excision was performed on the 31st July, 1874, by a subperiosteal method very similar to that described by Sayre, and a double anterior splint of iron rod and iron wire was immediately applied. The acetabulum was found lined with granulations simply. During the after-treatment much purulent infiltration of the thigh took place, and by the month of November the patient was extremely emaciated and the discharges were very fetid. The application of a poultice of figs and milk (referred to by Billroth in the first page of his large work on Coccobacteria, from reading which the idea was derived) in a few days absolutely put an end to the fetor. But the boy was sinking, nevertheless, and it became evident that he must soon die if unrelieved from the extreme pain and tenderness. On 20th Nov. the consent of his parents to amputation was with difficulty obtained.

Amputation was performed on Nov. 21st, 1874, by transfixion of a long anterior and a shorter posterior flap. The blood of the diseased limb was previously returned into the rest of his body by elastic bandaging, and retained there by an india-rubber cord wound obliquely round the perineum and corner of the pelvis, over a pad laid on the external iliac artery. The cord was prevented from slipping down on the outer side by being looped over a bandage which was tightly wound round the pelvis transversely. The operation was almost bloodless, less than an ounce of blood being lost. Ligatures of carbolised catgut were used, and the child laid on his belly for the first few days after the operation, on account of a small sacral bedsore.

He lay in bed for three or four months, and was discharged on 24th April, just five months after the amputation. By that time he was fat and well, though a sinus or two remained. He was last seen about ten months after the amputation, and was quite well in general respects, though a single sinus still remained in the stump.

YORK COUNTY HOSPITAL.

OVARIAN TUMOUR; OVARIOTOMY; RECOVERY.

(Under the care of Mr. HORNBY.)

FOR the notes of the following instructive case we are indebted to Mr. S. Wreford, house-surgeon.

Sarah H——, aged thirty-six, a married woman and the mother of five children, was admitted on the 7th April, 1875, suffering from an ovarian tumour.

Three days after her admission Mr. Hornby tapped her, and drew off 408 oz. of dark-greenish viscid fluid.

On the 22nd April she was discharged, with the understanding that she was to return as soon as her abdomen became inconveniently distended.

After remaining at home for two months, she was readmitted on the 23rd June with her abdomen very much distended, measuring 44½ in. in circumference. Her general health being very good, Mr. Hornby decided to perform ovariotomy.

July 6th.—The patient being put under the influence of ether, and the bladder emptied with a catheter, an incision was made in the median line commencing just below the umbilicus, and extending downwards for about 5 in. When the peritoneum was reached it was at once seen to be intimately adherent to the sac, and in separating the adhesions in front a small opening was made into the sac. The aperture was immediately enlarged by an effort at vomiting, and through this opening some of the contents began to escape. The patient was immediately turned on to her side, and a small quantity of fluid having been allowed to escape, a ligature was placed round the opening to prevent, if possible, any further escape of fluid into the abdominal cavity. After breaking down some of the adhesions in front, the greater part of the fluid was allowed to escape by turning the patient again on to her side. The sac was intimately adherent to the peritoneum throughout its whole extent, and great difficulty was experienced in separating the connexions. Mr. Hornby, however, succeeded at length in breaking down all the adhesions with his fingers, but during this forcible detachment it was impossible to avoid tearing the sac here and there, and there was consequently a further escape of fluid. The cavity of the abdomen was well sponged out with tepid water, a clamp applied to the pedicle, and the edges of the wound accurately adjusted with wire sutures. During the operation, which lasted for about an hour and a quarter, the liver, uterus, and portions of the intestines were distinctly seen to be covered by peritoneum. Immediately after recovering from the effects of the ether, the patient complained of great pain in her abdomen, which was relieved by a hypodermic injection of a third of a grain of morphia. Vomited several times during the afternoon and evening. Evening temperature 101·4° F.

July 7th.—Had a comfortable night up to 5.45 A.M., when she began to vomit again. Complains to-day of a great deal of pain at the pit of the stomach, more especially after drinking. Ordered an enema of an ounce of brandy with an egg every four hours. Morning temperature 100·4; evening 103°.

8th.—Vomited very frequently during the night, but had no pain; slept for about four hours. Tongue clean and moist. Ordered to have nothing but ice and champagne by mouth, and to continue the nutrient enemata. Morning temperature 100·2°; evening 101 .

9th.—Has not had so good a night. Two of the enemata given during the night were not retained. Ordered to have thirty minims of tincture of opium with the next. Morning temperature 99°; evening 100 2°.

10th.—Slept soundly the greater part of the night. During the afternoon had some mutton broth twice at her own request, and it caused no vomiting. There is no abdominal pain or tenderness.

12th.—The enemata, not being retained, were ordered to be discontinued. Has had no vomiting since the 10th. Ordered six ounces of port wine daily, instead of champagne.

13th.—Clamp removed. Wound looks very healthy, there being scarcely any discharge. Not having had an action of the bowels since the operation, a castor-oil enema was administered, which acted freely.

From this time the patient progressed favourably without a bad symptom, and was discharged well on Sept. 1st. A letter received from the patient a month after her discharge stated that she was in perfect health, and had been so ever since.

Observations.—This case is instructive as showing how roughly, under certain conditions, the peritoneum may be handled without serious consequences resulting. The sac was, as before stated, adherent to the peritoneum throughout its whole extent; it was forcibly detached by the hand; some of the fluid contents of the sac escaped into the peritoneal cavity, and had to be washed out with a sponge; and yet the patient recovered without a bad symptom. In the process of adhesion the peritoneum had doubtless undergone some alteration which rendered it much less liable to take on inflammatory action.

ROYAL HANTS INFIRMARY.

CASE OF STRANGULATED INGUINAL HERNIA; OPERATION; RAPID RECOVERY.

(Under the care of Mr. LANGDON.)

C. J——, aged fifty-five years, a labourer, was admitted into the hospital at 11 P.M. on Sept. 4th, suffering from strangulated oblique inguinal hernia in the left groin. He had never worn a truss, and for thirty-six hours had suffered from the usual symptoms of strangulation. He had consulted his parish doctor, who had employed taxis after he had been placed in a bath. It was decided to operate at once, and, after the patient had been placed under the influence of chloroform, this operation was completed without opening the sac. There was very little hæmorrhage, and the edges of the wound were brought together with ordinary silk sutures. Carbolic oil, one in thirty, was applied, and the patient removed to bed.

Sept. 5th.—Patient slept well, and feels very comfortable; no sickness or pain. Pulse 84. Wound not dressed.

6th.—Feels quite well; bowels moved slightly. Wound was found quite healed. All the sutures were removed.

7th.—Patient allowed to get about the ward, wearing a truss. Bowels moved freely.

10th.—Discharged cured.

The diet consisted at first of slops, and was gradually increased.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 9th inst., the chair being taken by Mr. Chas. Brooke, V.P., and subsequently by Sir Wm. Jenner. The subject for the evening was that of Croup and Diphtheria, introduced in a paper by Dr. Semple. There was a large attendance of Fellows in anticipation of a lively debate; nor were they disappointed, for, although Dr. Semple's paper was almost entirely historical in nature, it was followed by a most admirable statement of the points at issue by Dr. West, Sir Wm. Jenner, and Dr. Dickinson. The meeting resolved, on the motion of Dr. West, to refer to the Council the question as to the expediency of appointing a committee of investigation into the relations between croup and diphtheria. At the close of the meeting Dr. Hughlings Jackson introduced a patient affected with spasmodic movements of hemiplegic distribution.

Owing to the length of Dr. SEMPLE's paper, "On Diphtheria and its relations to so-called Croup," it was read in abstract only. The author began by setting forth the reasons which induced him many years ago to regard as erroneous the doctrines formerly held in Great Britain on what was called "croup," and to propose a new nomenclature for the maladies which that term seemed to include. These reasons were based on his study of the French writings on what was called "diphtheria," together with his own clinical researches into the pathology of the disease so named by Bretonneau. That physician and other French authors regarded diphtheria when it attacked the trachea as synonymous with membranous croup. When the disease now called "diphtheria" broke out at Tours, Bretonneau had previously seen only two cases of croup (to use his own language); but when it showed itself as an epidemic, he studied it carefully in combination with his then pupils, Velpeau and Trousseau. They found a remarkable uniformity in the symptoms and post-mortem appearances, and from the constant presence of the false membrane, Bretonneau applied to the malady the name of "diphthérite." The physician of Tours, however, not only studied the actual features of the disease as it presented itself to his notice, but he endeavoured moreover to solve the important question whether any such epidemic as he then witnessed had ever presented itself before in the history of the world, and the result of his inquiries was to convince him that his "Diphthérite," although under different names, had existed from all antiquity, and had been described in the earlier medical writings. Dr. Semple, however, could not agree with Bretonneau on this point, for he had failed to find in the original Greek of Hippocrates or Aretæus, or in the Latin of Celsus, a description of the false membrane lining the trachéa, as in "diphthérite." But from researches into the writings of a more recent period, Dr. Semple is convinced that epidemics of the disease have been accurately described by Spanish, Italian, Sicilian, Swedish, and French physicians, including Herrera, Fontéda, Villa Real, Sgambati, Carnevale, Nola, Glisi, Cortesius Wilcke, Marteau de Grandvilliers, Bard, Starr, and Francis Hane, all of whose works, together with those of prize essayists in France at the commencement of the present century, Dr. Semple had carefully read. In the celebrated essays the authors evidently include under croup three distinct diseases. Soon after the publication of these essays Bretonneau began his researches, in which he confined the term "croup" to those cases in which there was a distinct false membrane in the windpipe, and this view was adopted by his successors of the French school, such as Trousseau, Guersant, Bouchut, Empis, Daviot, Valleix, Barthez and Rilliet. Passing to his own experience, Dr. Semple detailed a few cases of laryngeal diphtheria, and exhibited to the Society a preparation of the larynx and trachea, with the false membrane *in situ*, obtained from the most recent of them. He had compared this specimen with those described as "croup" in the museum of the Royal College of Surgeons, and found that they were exactly identical. He further showed that the German as well as the French pathologists hold the membrane of croup and tracheal diphtheria to be identical, but he deprecated the wide application of the term "diphtheritic" to hospital gangrene, dysentery, &c., as used by Virchow. The author of the paper had arrived at the following conclusions from his clinical and historical researches:—That the terms croup and diphtheria are not to be regarded as synonymous, but that the term croup, as generally employed, comprises at least three very different affections, namely—1, laryngismus stridulus; 2, infantile laryngitis; and 3, tracheal (or, rather, laryngo-tracheal) diphtheria. That diphtheria (although under many different names) has probably existed from all antiquity, and although its features have not been described with sufficient distinctness by the ancient Greek and Roman medical writers, its epidemics have been clearly indicated by Spanish, Italian, Sicilian, French, German, Swedish, American, and British authors from about the end of the 16th century to the present day. That diphtheria as an epidemic did not visit London until about the year 1858 or

1859, the last European epidemic being that present in Florence and its neighbourhood in 1869–70. But although diphtheria as an epidemic has prevailed only at fitful and irregular intervals in the history of the world, sporadic cases have always existed.

Dr. West said that he had hoped to hear Sir William Jenner speak on a subject to which he had given so much attention, but that as no one else had risen, he would like to say a few words. Although our best thanks are due to anyone who labours to throw light upon the question of the relations between croup and diphtheria, yet he doubted whether much benefit could be gained from archæological details, interesting as they are. For wonderfully accurate as were the older writers in their descriptions of disease, they looked only to the more striking and evident phenomena, and disregarded those minute details which are to us so essential in making an exact diagnosis between two conditions which may have a superficial resemblance. It was just the same with the older anatomists, who left untouched so many of the finer points, but gave full and accurate descriptions of the more evident. A parallel to this was to be found in the history of diphtheria in olden times. We know now that when the local disease has passed away the series of morbid manifestations still goes on, in a large number of cases, in the form of disorders of the nervous system. Yet even this striking fact had not received mention even by Bretonneau himself. Dr. West compared this oversight to the manner in which the eruption in typhoid fever, when he was a student, passed unnoticed; nor had he himself any note of paralytic symptoms supervening upon cases, which must have been diphtheria, that he had seen in his early days. The question, said Dr. West, is really this: "Croup," as described by Cheyne, a most keen observer—and as so many of us know it—sets in after catarrhal symptoms, with first some degree of hurried respiration, then a noisy cough, then dyspnœa, great anguish, and, if no relief be obtained, a rapid termination in death from suffocation; whilst, if the progress of the disease be towards recovery, this is rapid, and follows on the subsidence of the local manifestations. Cases such as these had been recorded, in which improvement had occurred under bleeding. Cheyne mentions some—one in particular, in which venesection was performed three times in rapid succession, with good result; and he himself (Dr. West) had once bled from the jugular, with recovery. He would ask, was not that a different disease from "diphtheria," where there was rarely any preliminary catarrh, where the child was taken ill with slight febrile disturbance, pain in swallowing, enlargement of the glands in the neck, with great prostration, where laryngeal symptoms *may* set in, but in a totally different manner from their mode of onset in croup? In the one disease there was exudation of membrane on the fauces, in the other it was wanting; in the one there was albumen in the urine, in the other this was nearly always absent; then in the one, when the symptoms had passed away, when venesection, if had recourse to, would inevitably kill the patient, there was frequently left a long train of disorders of the nervous system. Are these two diseases, or are they only different types of one and the same affection? Both are characterised by a deposit of false membrane, in one beginning in the fauces, in the other commencing in and remaining limited to the larynx. Are we to believe that both are communicable by contagion? He must admit that they did not differ from one another more than the simplest forms of scarlet fever did from the most malignant. Hitherto, however, his opinion had been that they were essentially distinct—the one being a local inflammatory disease of the larynx, the other being due to what might for want of a better name be termed a blood-disease—a constitutional affection. This belief he still held, although he must confess his belief was by degrees growing less positive than before. Dr. West concluded an admirable speech by pointing out that the question could not be settled satisfactorily by any one or more observers acting independently, and he urged the appointment of a committee to inquire into and report upon the subject. The points requiring settlement might be stated as follows:—1. Do the two affections prevail epidemically at the same time? 2. Do the two prevail at the same time, and in the same locality, or is their locality different? Thus, it is well known that croup is far more prevalent in rural than in urban districts—the proportion of cases met with, for example, in Sussex and Cumberland being to those in Liverpool as three to one. 3. Does it ever happen that of two members of a family attacked at the same time the one has "croup" and the other "diphtheria"? 4. Is the disease "croup," as described by Cheyne, ever accompanied by albuminuria, and if so to what extent? 5. Are both diseases followed by symptoms of disorder of the nervous system? Should a committee of the Society be appointed to investigate such and the like questions, he thought it might enable us to arrive at a decision alike satisfactory to individual workers and to the profession at large.

Sir William Jenner said that he had come to the meeting rather to listen than to speak, and that he had declined to come and preside on this occasion, because he had, to a certain extent, committed himself to one view of the question. He, like Dr. West, had held for a long time that croup and diphtheria were distinct diseases, and had published that opinion; but a larger experience, among all classes of persons, had compelled him to alter those views. It now seemed to him that the evidence is all but absolutely conclusive on the other side. He would hesitate to say it was proved, but the facts were strongly in favour of the doctrine of identity. The grounds which led him to change his opinion were as follows:—1st. Albuminuria, a symptom held to be characteristic of diphtheria, he had seen in genuine "croup"—croup coming on with catarrh, with no exudation in the pharynx. He had seen several times in such cases the urine loaded with albumen. 2nd. He had seen a surgeon in attendance on a case of diphtheria contract laryngo-tracheal membranous disease, and, moreover, in that case the paralytic sequelæ followed. 3rd. Then the *sthenic* character of croup was not distinctive, for some cases of membranous pharyngitis (diphtheria) presented as great force of febrile disturbance as he had ever seen; and, speaking generally, he could not believe that diphtheria was so asthenic as commonly taught. He thought it was quite an *a priori* view to assume that bleeding would be necessarily fatal in such cases, and, in spite of the great powers of observation of Cheyne, he (Sir William) submitted that that observer had confounded catarrhal with membranous laryngitis in those cases which he records as being relieved by venesection. Similar mistakes had occurred before, as in the epidemic of relapsing fever in Edinburgh in 1818, when the disease was mistaken for typhus, and large bleedings were practised, and this mode of treatment held up as of value in arresting typhus in its early stages. Then the fact that paralytic sequelæ never or rarely followed croup was easily explained, because as soon as diphtheria attacks the larynx recovery is infinitely rare. With respect to the distinction between croup and diphtheria as to *cause*, Sir William stated that he had met with cases of true diphtheria which undoubtedly came on from exposure to cold, and he quoted two instances of this. Finally, he could not see a single reason for believing in the non-identity of the two affections.

Dr. Dickinson said that he could not presume to put forward his opinions as of much weight, but from his long connexion with the Hospital for Sick Children, he had necessarily seen much of the diseases in question, and had been led to form some conclusions on the subject. From what he had seen, he felt bound to maintain the old view as to the two affections being wholly distinct from one another. The views expressed so ably by Sir Wm. Jenner seemed to him to amount to this: that there only existed *one* cause for membranous inflammation of the larynx, that cause being some zymotic poison. But he (Dr. Dickinson) submitted that the laryngeal mucous membrane, under any kind of irritation, tends to throw out membranous exudation, and he instanced such irritants as hot water, foreign bodies, &c. Exposure to cold acts in the same way, and so does the special poison of diphtheria. Assuming there to be two causes, a difference in the symptoms ensuing can be traced; for in the one there is tendency to prostration and death by asthenia, and in the other the disease runs a sthenic course, there is a limitation of the false membrane to the spot where it is formed, and there is a tendency to death by asphyxia. He would concur in Dr. West's suggestion, that the question should be referred to a committee.

Dr. Semple, in closing the debate, expressed his gratification in a long and animated speech, at the course in which opinion was tending, as confirmatory of much that he had long held and enunciated on other occasions—viz., that laryngeal diphtheria and membranous croup were identical, a view which he thought was fully borne out by the historical investigations that formed the basis of his paper.

It was then moved by Dr. WEST that it be referred to the Council to consider the expediency of appointing a committee to consider the relations existing between the diseases commonly known respectively as "membranous croup" and "diphtheria." The motion was seconded by Dr. DICKINSON, and was carried unanimously.

Dr. HUGHLINGS JACKSON then brought forward a patient suffering from a spasmodic affection of the right arm and leg. The arm was the more affected; it was constantly moving about, and had been a source of trouble to the patient for eighteen months, requiring constantly to be kept controlled; and even during sleep the man was obliged to lie upon his arm to prevent the movements. Dr. Jackson said that he had brought the case down in order to elicit opinions as to the advisability of division of the nerves of the arm. Division of the median had been suggested by Dr. Weir Mitchell, but on theoretical grounds Dr. Jackson was averse to cutting off too much of the nerve-supply of the upper limb, lest the leg should become more affected. The pathological condition at the root of the affection was very obscure, and all Dr. Jackson could say was that it pointed to disease of the left cerebral hemisphere. He had seen something similar to it, but to a far less marked extent, in children who had been hemiplegic in infancy. The history of the present case was to the effect that seven years ago the man was struck on the left side of the head, the blow being followed later by right hemiplegia; the spasmodic condition, however, was of eighteen months' duration. The movements cease under chloroform, but there remains persistent contraction of the pronator muscles. Woorara had been given with temporary relief, and (contrary to the opinion of anti-vivisectionists) with the production of greater anæsthesia. It was not the "athetosis" of Hammond, although it was similar in some respects to it. Dr. Jackson promised to bring the results of operative measures before the Society.

The meeting then adjourned.

Reviews and Notices of Books.

The Anatomy of the Lymphatic System. II. The Lung. By E. KLEIN, M.D. London: Smith, Elder, and Co.

PROF. KLEIN has followed up his admirable researches on the lymphatic system of the serous membranes by a complete and valuable series of investigations into the arrangement and distribution of the lymphatics of the pulmonary pleura and lung. He has studied them in the guinea-pig mainly, but also in the dog, cat, rat, rabbit, and man. The chief results to which the author has been led are, that there are three freely anastomosing systems of lymphatic vessels in the lung. The first system is found in the walls of the alveoli, and commences as irregular lacunæ and anastomosing canals, which soon form vessels with a special endothelial wall. The more superficial or subpleural lymphatics are arranged in a network from which efferent trunks proceed in the pulmonary ligaments to the root of the lung. The deeper set are perivascular, and are replaced in some parts by lymphatic spaces, lined by connective-tissue corpuscles. A network is formed around the large bloodvessels, and the trunks pass deeply to the root of the lung. The second system is peribronchial, and begins in the outer part of the mucous membrane, by similar lacunæ and anastomosing canals, lined also by connective-tissue corpuscles. After forming a plexus, the larger trunks join the perivascular lymphatics. The third system belongs to the pulmonary pleura, and begins in the same manner; but the canals are fewer, and each lacuna is lined by a connective-tissue cell-plate. These are in *direct* communication by stomata with the cavity of the pleura, and their efferent trunks discharge their contents into the subpleural lymphatics. The communication of the peribronchial and perivascular radicles with the free surface of the bronchial mucous membrane and the alveolar cavities is *indirect*, by means of what the author calls "pseudo-stomatous" tissue. This is a cellular tissue placed between the true endothelial cells. It is composed of a branched and nucleated body, one process of which is turned towards the free surface, and the other towards the deep part of the mucous membrane, where it is continuous with the connective-tissue corpuscles lying in the lymph spaces of the mucosa. When distended it forms a free communication between the surface and the lymphatics; and as Mr. Watney has found analogous structures in the alimentary canal, we seem to be advancing to a clearer conception of normal and pathological absorption. In guinea-pigs unstriped muscular tissue is found beneath the pleura as a definite layer, and lymph spaces exist between the fasciculi. Lymph follicles are contained in the wall of the peribronchial lymphatics of these animals and of rabbits.

The anatomical details are supplemented by some interesting pathological observations on septic pleuritis and on the relations of the lymphatic system to the processes of artificial tuberculosis in guinea-pigs, and of acute miliary tuberculosis in the human subject. The changes in the endothelium covering the inflamed pleura are exactly similar to those found on the serous surfaces in peritonitis. The endothelial cells around the stomata are found in a germinative condition—i. e., they become granular, polyhedral, and their nuclei show more or less distinct constrictions. In addition, the matrix is thickened by an infiltration of lymphoid cells succeeded by an increase in the connective tissue, the lymphatic spaces are filled with lymphoid cells, and in the guinea-pig the subpleural muscular layer hypertrophies. In chronic pyæmia and artificial tuberculosis induced from the pleural cavity, nodular or patch-like growths exist in great numbers in the superficial parts of the lung. These are the alveoli, at first lined with changed epithelial cells, and then with cells much resembling lymphoid cells. They finally undergo central caseation.

Dr. Klein's account of artificial tuberculosis in guinea-pigs differs materially from the observations of Sanderson and Wilson Fox. The latter regards all granulations permeating the lung as analogous in appearance and structure, being all semi-transparent and composed of lymphatic tissue. Sanderson did not distinguish between the perivascular and peribronchial position of the nodules, as did Wilson Fox, but he separated the peribronchial granulations (hyperplastic normal adenoid tissue) from the semi-transparent miliary nodules (blocks of lobular catarrhal pneumonia). To these two kinds of granulations the author adds a third—viz., semi-transparent, cord-like structures, situated in the adventitia of the minor branches of the pulmonary bloodvessels. These perivascular cords are composed of fibres forming a network in which lymphoid corpuscles abound. Their formation is due to two processes—(*a*) an emigration of colourless blood-corpuscles into the perivascular lymphatics with the subsequent development of a stroma, and (*b*) a growth of a network of fibres between a collection of lymph-corpuscles lying outside a lymphatic vessel. The former is endolymphangeal, the latter is perilymphangeal. These perivascular cords were the only abnormal elements present in some lungs studded with miliary granulations, and he therefore considers their appearance as the earliest symptom of the process of artificial tuberculosis. He agrees with Sanderson that many granulations are composed of trabeculæ representing the thickened alveolar septa, and of spaces which are the alveoli filled with products of the alveolar epithelium. These products are epithelial cells more or less enlarged, and the so-called “giant cells.” Lymphoid cells are very scarce, and the appearances are evidently due to a catarrhal pneumonia in intimate connexion with the perivascular cords. These are the only nodules that undergo caseation, and are especially abundant in the more superficial portions of the lung.

The author accepts Buhl’s description of a miliary tubercle in man. Young tubercles possess a matrix of peripheral connective tissue arranged circularly, and a homogeneous reticulum without nuclei, enclosing cells smaller than lymph-corpuscles, multinucleated giant cells, and epithelial cells. Buhl considers that all cases of acute miliary tuberculosis are caused by a disseminated catarrhal pneumonia, and that this process differs from genuine desquamative pneumonia only in the presence of giant cells among the germinating epithelium of the alveoli. From an examination of the lungs of seven children who died from undoubted acute miliary tuberculosis, Klein has come to the conclusion that these cases have *at the beginning only* the character of desquamative pneumonia. In the earliest stages the nodules correspond to groups of alveoli and infundibula, distended by a fibrinous material containing granules and small cells. This exudation disappears, and is succeeded by groups of cells, or by one multinuclear giant cell, both derived from the alveolar epithelium. The interalveolar tissue is thickened and transformed into a retiform tissue, which contains lymphoid corpuscles. The giant cells give rise to nucleated cells, which increase the retiform tissue, and also to cells resembling lymphoid corpuscles lying in the meshes of that tissue. Commencing from the centre of the tubercle, the giant cell, as well as the surrounding tissue (after conversion into a dense fibrillar substance) degenerates, and becomes a hard, firm, and débris-like mass. After these necrotic changes have begun, the bloodvessels are surrounded with a true adenoid tissue analogous to the perivascular cords above described, and spherical collections of lymphatic tissue appear in the adventitia of the bronchi.

Thus it would seem from these investigations that in acute miliary tuberculosis the pneumonic process precedes the increase in the adenoid elements, whereas in the artificial form induced in guinea-pigs the formation of a lymphatic structure (perivascular cords) is the primary change, and the blocking up of the alveoli with epithelial derivatives is of secondary occurrence.

We cannot conclude without expressing our very high opinion of the value of Dr. Klein’s work. The numerous plates, for the execution of which the Government Grant Committee of the Royal Society have found the means, are models in clearness and delicacy of outline.

A Practical Treatise on the Medical and Surgical Uses of Electricity. By George M. Beard, A.M., M.D.; and A. D. Rockwell, A.M., M.D. Second Edition. London: H. K. Lewis. New York: W. Wood and Co. 1875.

An immense amount of labour has been spent upon this work, a second edition of which has just been issued. The book contains a great mass of information, and nearly all the more important facts bearing upon the employment of electricity for the relief of suffering, which have been established of late years, are herein recorded. The first hundred pages are devoted to “Electro-physics,” and in them the subject of electricity in general will be found treated of nearly as fully as in works which are entirely devoted to physical subjects. Electro-physiology occupies the next hundred pages, and in them much that is certain will be found diluted by a mass of assertions which the profession at large are not, we believe, inclined to accept. Take, for example, the statement at page 155, that “when the *galvanic* current is applied to a living and healthy motor nerve in a healthy man, contraction takes place only *on closing the circuit*. This fact is constant with either pole, and any direction of the current.” If the authors will place the anode over the ulnar nerve of the first available man, use a current of moderate power and *open* the circuit, contraction of muscles supplied by the ulnar will assuredly follow. A mistake such as this is certainly a curious phenomenon in so pretentious a book.

Brenner’s investigations on the reactions of the acoustic nerve to electric stimulation are given at great length. He asserts, and of the general truth of the assertion there can be little doubt, that on placing the cathode in the ear and *closing* the circuit a rumbling or sharp ringing noise is produced, and on placing the anode in the ear and *opening* the circuit a noise of different character is produced. These are facts which anyone who is not afraid of a little pain or annoyance may roughly verify on himself. The authors’ description of the mode of performing the experiment, however, is a little terrible.

> “The operator should proceed calmly and with self-command. After the patient is in position, with his head inclined on the back of the chair or lounge, and one of the electrodes fastened to or held in the hand opposite the ear to be experimented on, a little warm salt water should be dropped in, which can be very conveniently done by squeezing the small quantity necessary to fill the external auditory canal from a small sponge or funnel-shaped glass; and the other electrode firmly pressed on the tongue. It is well to begin with a small number of elements, and gradually increase until a reaction is obtained. The reaction will usually appear when the current is strong enough to produce a contraction of the facial muscles. The patient should at all times be continually and repeatedly questioned, especially if he is unaccustomed to the treatment; for, at first, he may be so distracted *by the flashes of light before his eyes, the contractions of the facial muscles, the nausea, the metallic taste, and the noise of the water in the ear*, and especially by the *pain*, that he may be unable at first to distinguish the true character of the reaction.”

The above extract is a fair sample of the literary style of the authors. The slight pomposity of the first sentence, the almost needless details in the parenthesis, the double adverbs qualifying “questioned,” the capricious use of italics, and the ungrammatical repetition of the words “at first,” are the kinds of blemishes that are abundant on every page.

The next 200 pages are devoted mainly to descriptions of apparatus and the methods of using them, and this perhaps is the most reliable part of the book. What may be called the clinical chapters are comprised in the remaining half of the volume, and we are bound to say that the 250 cases, taken mainly from the authors’ practice, are singularly barren in those facts which serve to increase our knowledge of the pathology or diagnosis of disease, and in this respect the volume before us forms a marked contrast to the classical, original, and thoughtful work of Duchenne. There are assertions, too, in this portion of the work which, if not due to carelessness, show a surprising ignorance. At p. 519 we find:—“The fact that in facial paralysis of central origin the electro-muscular contractility is unimpaired, while if the nerve itself is the seat of the injury, the muscles *refuse to respond to either current*, materially aids us in diagnosis.’ Again, at p. 536:—“In cases of progressive muscular atrophy the electro-muscular contractility is either diminished or destroyed.” If a student had written the chapter on “locomotor ataxia,” in answer to an examination question, he must assuredly have been plucked, so much is the description of the disease there given at variance with the generally received description. The work, in short, is one which we should be sorry to see in the hands of any student; and, although it will increase the fame of its authors as electricians, it will scarcely improve their reputation as physicians. There is in it, however, a great deal of information of a practical kind which will be welcome to those who are working at the subject of electricity, and, when another edition is required, if the authors will content themselves with simply erasing about half of the present volume there is no reason why the remainder should not be a convenient, reliable, and most valuable treatise on the subject to which it is devoted.

A Dictionary of Science, Literature, and Art. Edited by W. T. Brande, D.C.L., F.R.S.L. & E., late of Her Majesty's Mint; and the Rev. George W. Cox, M.A., author of a "History of Greece," "The Mythology of the Aryan Nations," &c. New Edition, revised. London: Longmans and Co. 1875.

We recently noticed the new edition of Ure's valuable dictionary. We have now before us another edition of the equally well-known work of Brande. The wider plan of Brande's dictionary, while it confers upon it a more extended usefulness, renders it of necessity a less complete book. Even the three bulky volumes are insufficient for completeness, and while very much that is important is included, it is not surprising to find that much of equal importance has been omitted. It seems almost like ingratitude to write thus of a book which to every student is so useful, and we have no wish to find fault with an editor for defects which he would be almost more than mortal if he avoided. But the truth is a book of this kind is always to some extent disappointing. Everything is to be found in it except just the small fact you want: that is absent.

The scientific revision which ten years had rendered so necessary has been effected fairly well, though not so well as it should have been. The new notation in chemistry has been adopted generally, but not always (*vide* "Clay"), and the formulæ are for the most part correct. Many new discoveries are introduced, but many—as, for instance, the synthesis of alizarin and of tartaric acid—are omitted. In physics we miss many of the modern phrases, such as "Ohm," "Farad," &c., which have become important, and there are similar deficiencies in physiology. Hoppe-Seyler's discoveries, for example, are not noticed under the heading "Blood," and glycogen is omitted altogether. Dozens of other defects of the kind might be pointed out, many of them glaring ones, and we hope that another new edition will not be attempted without a more stringent revision. But, after all, the labour requisite for a new edition of such a work is great, and we are glad to admit that in spite of some defects, Brande's dictionary is still a valuable and, in the main, trustworthy work of reference.

New Preparations.

QUINETUM: THE PURE ALKALOIDS OF EAST INDIA RED BARK.

(THOMAS WHIFFEN, BATTERSEA.)

The increasing cultivation in India of the *chinchona succirubra*, which, as our readers are aware, yields a large proportion of alkaloids other than quinine, renders it a matter of great importance to introduce these alkaloids as far as possible into medical practice. From the evidence of Broughton, De Vrij, and other well-known authorities, it appears clear that they are little behind quinine in medicinal value. Somewhat larger doses are required than when pure quinine is used; but the results obtained with the mixed alkaloids in India, where, as Mr. Broughton states, pure quinine is now seldom made, are highly satisfactory. It is, indeed, not improbable that some patients who are unable to take pure quinine would not find the same difficulty with the mixed alkaloids. However this may be, it is evident that economical reasons, which with so expensive a drug are of no little importance, should induce medical men to give a fair trial to the preparation.

We have analysed samples of the so-called quinetum and its sulphate, and find that they are exactly what they profess to be.

RICHARDSON'S COD-LIVER OIL EMULSIONS.

We have analysed three preparations bearing the above title, all made by Messrs. John Richardson and Co., Leicester. One is the simple emulsion, another contains quinine, and the third phosphorus. They are, therefore, correctly described. The emulsions are well prepared, have little smell, and are free from rancid taste. They are, in our judgment, more easy to take and less liable to cause nausea than the pure oil, and are, therefore, likely to prove valuable, as they certainly are elegant remedies.

MAGNESILYNE, OR MAGNESIUM CITRATE.

(KINMOND AND CO., LEAMINGTON.)

This preparation, which effervesces freely with water, contains magnesium carbonate and citric acid. We have therefore now a "granular effervescing citrate of magnesia" in fact as well as in name. The application of the title to the common preparation is, in our opinion, thoroughly misleading, and should at once be discontinued.

DR. OSCAR LIEBREICH'S PEPSIN-ESSENZ.

(CORBYN AND CO.)

This preparation, made by a well-known Berlin manufacturer, and introduced by the famous name of Dr. Liebreich, is a solution containing some alcohol, though not enough, it is said, to hinder the activity of the pepsin. The trials we have made with it do not convince us of its superiority over other preparations, and without further evidence we hesitate to recommend it.

D. D. ENCORE WHISKY, DOUBLE DISTILLED.

(BERNARD AND CO., LEITH.)

This new competitor for public favour is pale yellow in colour, mild in flavour, and has but little smokiness, though it has the usual pleasant peaty smell characteristic of Scotch whisky. It is very faintly acid, and analysis proves that it is remarkably free from the fusel oil with which new whisky is generally contaminated, and to which much of the injurious effects of spirit-drinking are with some reason ascribed. The "D. D." is therefore more wholesome and pleasanter, except to a vitiated palate, than the fiery spirit so often sold. On the other hand, however, we cannot admit that it is equal in flavour to that fine mellow fluid which we are sometimes fortunate enough to meet with, from which fire and rawness have alike been removed, not by rectification, but by the subtle chemistry of time.

JOHNSTON'S PATENT CORN FLOUR.

(J. AND G. JOHNSTON, PAISLEY.)

The sample we analysed was well made and quite free from adulteration. Although we always regret that the term flour has been applied to an article which everyone knows to be, like arrowroot, a nearly pure starch, there would now be great difficulty in changing the name, and the article itself has become a necessity. The new "brand" is decidedly superior to one or two others with which we compared it, though we do not assert that it is superior to all.

brated flight in the opposite direction, in which the flier, also speeding

> "With hop'd success,
> Threw his steep flight in many an airy wheel."

Not the least instructive portions of Mr. Radcliffe's address were those in which he showed how the fallacies which had so long hampered English epidemiological research still largely hampered like research in India, where the difficulties under which it is pursued are peculiar, and he might, perhaps, have added, yet imperfectly understood by those chiefly concerned in knowing them.

Through the report that we published last week and the notice that appeared in our advertisement columns, it will have become fully known that the Council of the College of Surgeons has at last determined to appoint a set of Examiners in Anatomy and Physiology, separate and distinct from those in Surgery and Surgical Pathology. The former will consist of nine members, to be elected from the Fellows of the College, and will be known as the Board of Examiners, as distinguished from the Court of Examiners or the Examiners in Surgery. The election of members of the Board will be made by the Council some time during the next month, all Fellows of the College desirous of becoming candidates for the office having been invited to send in a written application to the Secretary on or before Saturday, the 20th inst. The members of the Board will be elected annually, and no Examiner will be allowed to hold office for more than five consecutive years, but after an interval of one or more years he will again be eligible for election.

It must be confessed that the ensuing election is to be looked forward to with some degree of anxiety, for the constitution and quality of the successive Boards will be greatly influenced by the nature of the first. The task that the "Committee on Examinations in Anatomy and Physiology" will be called upon to perform, when it has recommended to the Council the candidates deemed fittest for election, will be both difficult and delicate; but the nice discrimination and good sense of the Committee—which consists of Sir James Paget, Messrs. Prescott Hewett, John Birkett, Hilton, Hancock, and Marshall—may be trusted to bring matters to a satisfactory issue. One serious difficulty that the Committee will have to contend with will be to distinguish between candidates who are qualified by previous training and experience to undertake the duties of examinership, and those whose only qualification for the post is the ambition to become members of the Board; in other words, the Committee may not find it an easy matter to make their selection. As to the principle of election, also, there will be some difficulty. Seniority in the Fellowship should of course be looked upon as an extra claim by those who are otherwise competent for the office; but it is to be hoped that seniority alone will not outweigh other more important qualifications. Among the junior surgeons in London there are many who are eligible for the office, so that, if the Committee make its recommendations regardless of the seniority of the candidates, great good will result as far as the examinations in Anatomy are concerned. But the case is different as regards Physiology. Few of the teachers of Anatomy in the metropolitan schools are reputed to have made a special study of Physiology, and the Council may find that, in order to ensure a sufficiently high standard in the examinations in Physiology, it will be necessary to appoint at least two or three professed physiologists. This should be done, even if these Examiners shall have to confine themselves to Physiology; and it is rumoured that such a selection will actually be made.

The new arrangements will, we believe, be completed in time for the January examinations, the results of which will afford some indication of the influence likely to be wrought upon the system of teaching Anatomy that has hitherto obtained in the medical schools of the United Kingdom. If the selection of Examiners be wisely made, and the principles of the examinations be properly carried out, the faulty places in the anatomical and physiological teaching will be speedily detected, and a healthy stimulus will thereby be given to all schools, but especially to those which have lagged behind.

Annotations.

"Ne quid nimis."

CRIMINALITY AND INSANITY.

We publish this week an original communication from Dr. Maudsley in which he gives the details of a case which lately came under his notice. The case seems to us to be one of such unusual importance that we wish specially to direct the attention of our readers to it, and we wish we could insure that every member of the legal and medical professions should master the few simple facts which Dr. Maudsley sets forth. These facts are briefly as follows.

In September, 1874, Dr. Maudsley was consulted on behalf of a patient in whom he detected symptoms of general paralysis. At the urgent desire of the patient's wife, who could not easily be persuaded as to her husband's very serious condition, he was allowed to go to the seaside under her charge. Having obtained money under some pretext, he suddenly disappeared, and was next heard of at Doncaster, where he had been given in charge for stealing a watch. It appears that he had suddenly conceived the insane notion of going to Scotland, but, finding himself alone in a carriage with a sleeping fellow traveller, he was seized with an impulse to appropriate his watch. For his defence Dr. Maudsley furnished a certificate of insanity, and Dr. Crichton Browne gave evidence at the trial to the same effect. His ordinary medical attendant also gave similar evidence. "But it was all in vain. The surgeon of the gaol stated emphatically that he was sound in body and mind, and the evidence in his favour was received with open incredulity." In consequence, however, of the poor man's previous good character, he was sentenced only to two months' imprisonment with hard labour; and, by the representations of his friends, his discharge was obtained before the completion of the sentence. Owing, however, to divided family counsels, he was not, as he should have been, placed under legal restraint. He again escaped from the custody of his friends, and for the second time stole the watch of a passenger in a train. This time, however, there were found upon him a false beard and moustache and other evidence that he had had a design of committing robbery. On the 7th of December he was sent to the county gaol at Nottingham to await his trial, but, incontestable symptoms of insanity showing themselves, he was removed to the county asylum, where he died on August 31st of this year, nearly twelve months after Dr. Maudsley had diagnosed the fatal condition which caused, not only his death, but so much trouble to his friends and, one might say, to the public also. "Comment," says Dr. Maudsley, "upon this case is unnecessary." He states his conviction that "the time has come when it is the duty of medical corporations to exact some knowledge of mental diseases from those upon whom they confer their licences."

There can be no doubt that an affirmative answer is the only one that can be given to Dr. Maudsley's question. At the same time it does not appear to us to be the least surprising that a gaol surgeon should habitually look at a case from the standpoint of criminality, just as it not unfrequently has happened that a professed alienist has looked at a case too much from the standpoint of insanity. The lesson to be learnt, we think, is rather this—that the question of the insanity or sanity of a criminal is one that should be settled solely by medical assessors appointed by the Crown. A common jury is no doubt competent to determine whether or no a certain individual committed a certain act, but it is manifestly incompetent to come to any conclusion as to his state of mind, and it can hardly be blamed for looking doubtfully upon the evidence of persons who may be supposed (rightly or wrongly) to be in some way interested in its decision. It is, we have heard, not unlikely that in the new High Court of Judicature medical assessors may be appointed to advise the judges on medical points, and we should hail such an innovation as a great improvement on our present system. The mere fact that in this case the experts were all in the right, and the gaol surgeon in the wrong, appears to us to affect the question at issue in a very slight degree, and we can hardly blame the jury for coming to the decision it did, although certainly the symptoms of general paralysis appear to have been sufficiently well marked to render the gaol surgeon's difference of opinion very difficult to understand.

Another point of great importance is the second robbery, which clearly ought never to have occurred, and the authorities at the Home Office ought to explain why, when the prisoner was liberated on the ground of insanity, they did not insist on his being confined in an asylum until they should be satisfied, on the certificates of those who had testified to his insanity, that his malady had been cured. The patient had been proved to be a dangerous lunatic, and the authorities allowed him to go at large, and it seems to us to be merely a happy accident that the unfortunate man did not commit murder as well as robbery.

DR. HARDWICKE.

When Dr. Hardwicke became a candidate for the coronership of Central Middlesex, rendered vacant by the death of Dr. Lankester, there was a general determination on the part of the profession in the metropolis to support him as much as lay in their power, although, perhaps, there was an unexpressed regret that a more able man had not come forward from our ranks. We ourselves are thoroughly pledged to the principle of medical coronership, and we unhesitatingly and unstintedly espoused Dr. Hardwicke's candidature. When he was elected it might have been reasonably expected that the profession, without whose aid and co-operation he could not have secured the coveted post, would have received, we will not say gratitude, but certainly considerate treatment at his hands in his official capacity, and that he would protect the dignity of medical witnesses and likewise insist on the necessity of making post-mortem examinations in all cases in which there was any doubt existing as to the cause of death. Have these hopes been realised? Have medical men who have been professionally engaged before him at inquests reason to congratulate themselves upon finding in Dr. Hardwicke an exalted appreciation of the value of medical testimony? The reply is a most decided negative. It cannot be denied that his tenure of office has, so far, been marked by blunders and by a disposition to disparage the importance of medical men and to depreciate medical evidence. Soon after his appointment his singularly indiscreet management of the case of Sir Charles Lyell raised a public storm, which was only allayed by the assurance of Mr. Cross in the House of Commons that, if it should be found necessary, Government would "clip the wings" of coroners. We confess to a feeling of chagrin that this severe rebuke was evoked by the conduct of a medical occupant of the office. Within a more recent period there was a general condemnation of the character of Dr. Hardwicke's remarks on the occasion of an inquest when the word "atrocious" was used in regard to the proceeding of a medical brother. And, lastly, we have the inquest held last week at University College Hospital, in which gentlemen were threatened with pains and penalties for faults they had never committed. A specific accusation was made against a house-surgeon of the institution, Mr. Collyns, which he refuted in our issue of last week, with perfect ease. There was a lamentable want of judgment exhibited by Dr. Hardwicke at this inquest, and the Dean of the Hospital puts it mildly enough when he says that increased order and discretion are needed on the part of the coroner. We must, however, leave the consideration of Dr. Hardwicke's procedures to the superior judicial authority to which the office of coroner is subordinate.

THE DEBATE ON CROUP.

The paper and discussion on croup at the Medical and Chirurgical Society on Tuesday last cannot be said to have thrown much new light on the subject. The meeting was fortunate in obtaining the unexpected help of Sir William Jenner's presidency. But in spite of the historical research and declamatory energy of Dr. Semple, the graceful doubts of Dr. West, and the clearness and force of Sir William Jenner's argument, it was evident that, as was observed by Dr. West, the last word on the subject has not yet been spoken. Dr. Semple, interesting and important as was his collection of opinions from old writers, yet, in his facts and arguments, rather dwelt on the broad outlines of the question than touched the essential points in dispute. Our readers do not need to be informed that the identity of membranous croup and laryngeal diphtheria is, to him, a fact only needing clearer knowledge and more accurate generalisation for its universal recognition. This he insisted on, rather, however, by claiming the cases in dispute—those of sporadic membranous croup—as cases of diphtheria, than by controverting the objections on the ground of etiology and of association, which are the chief support of the view of the diversity of the two diseases. Dr. West's clear description of the contrasted clinical characters of the two diseases, "croup and diphtheria," was claimed by Dr. Semple as a conclusive argument for his own view of the question, on the ground that the simpler cases which formed the one term of the comparison, which were marked by sthenic, sudden characters, and rapid recovery, in which venesection had, in Dr. Cheyne's and Dr. West's hands, so speedily afforded relief, were really cases of non-membranous, simple laryngitis. Such, it must be confessed, was the impression conveyed by Dr. West's speech, but this was evidently not the meaning he intended to convey. We cannot but think that his remarks corroborated his disparagement of the value of historical evidence, whether in memory or in written record. Before the delicate symptomatic distinctions revealed by modern research were known, cases could not be distinguished with that accuracy which is essential for their value as evidence on a question of this nature. The concise summary which was given by Sir W. Jenner of the reasons which have led to his change of opinion, first expressed in these columns, left little to be desired as a presentation of the evidence in favour of the unity of "simple" membranous laryngitis and the diphtheritic form. Neither in origin, course, anatomy, nor ending, could a line be drawn between the two diseases which had not been more than once overstepped, from one side and from the other, within his own experience. Dr. Dickinson, in his few remarks, hardly did justice to his case on the other side. An experience which gives his opinion great weight leads him to place the causes of the two diseases in the foremost rank as evidence of their non-identity. Since simple membranous laryngitis may follow the operation of a non-specific influence, he could not accept the view that it is identical with a disease which manifests specific characters. He did not, however, grapple with the fact alluded to by Sir William Jenner, and to which we some time ago referred at length, that diphtheria, allowed by all to be such, may follow the operation of influences in which nothing specific can be traced. Abstract speculation regarding the nature of diseases must not be allowed more than a very slight influence in our generalisations regarding their relations. Upon the facts of their origin, course, and anatomy we must alone rely for our conclusions as to their nature. Such facts may well be collected by the Committee of the Medical and Chirurgical Society, which was asked for at the meeting, but we doubt whether the question will by that means be entirely put at rest.

INDIAN SANITARY REPORTS.

We had the hardihood recently to make an attempt at condensing within the compass of a short article some of the facts, figures, and conclusions contained in several of these publications, but we confess that the task proved too much for us. Of course, if the study of epidemiology is ever to advance, if we are ever to get an insight into the laws affecting the origin and development of epidemic diseases, we must be content to wait, watch, and record. We regard, for instance, the labours of Dr. Bryden as most valuable in this direction. Differing as we do from him in many of the interpretations which he has put upon the facts he has recorded, we have no doubt that his volumes supply a mine of information and abound in suggestions of a very valuable kind. But we wish we could see a little more careful and systematic study of the facts attending the origin and progress of some outbreaks of disease on a limited scale, made on the spot and recorded at the time, than we find in Indian reports in general.

Among the financial and other reforms about which we hear a good deal from time to time in our government of India, there is one direction in which, as it seems to us, the expenditure might be curtailed with advantage. We allude to printing. The great number, size, and variety of publications that appear under the title of Reports, sanitary, medical, and otherwise, are something bewildering; and many of them are uninteresting to a degree, being made up of pages and pages of figures. The hand becomes wearied with turning over the leaves, and no impression is left on the mind beyond that of a vague pattern of some huge sum in addition about which some one has been ruling a lot of lines in various directions. These pages are headed vital statistics, registers of births, deaths, diseases, vaccination, and what not; and if the reader turns to the letterpress he will find to his dismay, as the reward of his labours, that nowhere is the registration effective, and the conclusions consequently are utterly unreliable. And it can scarcely be otherwise, of course, where such vast populations and such extent of territory are concerned. Moreover, it is not very reassuring to an exact-minded man to find, for example, that "fever" is a term of such amplitude as to include all kinds of diseases in its embrace. If it be necessary for commissioners and others to draw up this vast number of tables, they should be sufficiently forbearing and unselfish to stow them away in official places, or at any rate to make a limited company of their circulating libraries. The cost of printing to the Indian Government must be enormous. We do not deny that some of these books, in blue, green, dirty yellow, white, and straw-coloured covers, are first-rate productions, valuable every way, and a few possess great scientific interest; but it is really time to inquire whether all this writing and printing be necessary. We are curious to know the unfortunate individuals condemned to read these records, and what condition of brain would be induced by the performance of such a feat. Mentally, the task of going through such an ocean of details would far exceed the physical labour of Captain Webb's in swimming the Channel.

THE MANCHESTER INFIRMARY.

For many weeks past the professional and non-professional public of Manchester have been in a state of agitation respecting their infirmary. It must be understood that the infirmary, which was built about one hundred and twenty years ago, is situated in a very large open space in the centre of the town, surrounded by many large and important places of business. For some years it has been felt that the resources of the infirmary were scarcely equal to the enormous demands that were made upon them, and that the building had of late become rife with erysipelas and pyæmia, and similar diseases; but by means of costly improvements and the establishment of a convalescent hospital, a fever hospital, and other attached institutions outside the town, matters have until lately been made to work fairly well. It has now, however, been discovered by some members of the administrative that the infirmary, notwithstanding all the improvements that have been made within it during the last twenty years, and in spite of the utmost care, cleanliness, and good management, is by no means as healthy as it had hitherto been supposed, but that according to some it is now little better than a "pest house." Others, on the other hand, indignantly repudiate these insinuations, and allege that the infirmary is one of the healthiest hospitals in the kingdom, and in support of this statement bring forward the evidence of the reports of the Board from year to year, and adduce the weighty testimony of the late Sir James Simpson, who reported very favourably of this institution. The real facts of the case seem to be that, although the infirmary is old and faulty in construction, it has been made clean and wholesome by the excellent management of the medical and lay staffs, and by this only; still it can scarcely be said to be a "pest house." Some correspondents of the *Manchester Guardian* seem to doubt whether any serious attempt would have been made to get rid of the old infirmary if it had not been thought that the valuable site on which it stands would, if put into the market, realise a considerable sum of money. It was at one time imagined that even six or seven hundred thousand pounds might be obtained for the plot of ground, and that with that sum one or two hospitals might be built on more scientific principles. There is a good deal to be said in favour of erecting a new infirmary, but the wisdom of the suggestion to take the building outside the town is not so evident. It is, perhaps, only natural that the authorities of Owens College should desire to have in the immediate vicinity a hospital in which their students would be able to prosecute their clinical and pathological studies, but it should not be forgotten that one of the most important uses of a hospital is to serve as a sanatorium for the sick poor, whose interests should also be considered. To remove the infirmary to a distance from the centre of the town would entail many inconveniences and great expense on some of the poorer applicants for admission, and the institution would sacrifice much of its utility. To obviate these evils, however, it has been proposed to establish a small hospital or receiving house near the present infirmary, into which urgent cases might be received. The proposal to erect several small hospitals in various parts of the town is scarcely deserving of serious consideration.

What objection is there to pulling down the present building, and erecting a new one on the same site, which is, for a hospital, perhaps one of the finest in any town in England?

THE WATER-SUPPLY AT THE ROYAL RESIDENCES.

THE Report of the Rivers' Pollution Commission just issued gives some important particulars on this subject. Some of the shallow well-water supplied to Osborne is of moderately good quality, but the remainder is unfit for dietetic purposes. Several trial wells sunk upon the estate have supplied palatable and wholesome water of moderate hardness. The water-supply at Windsor is derived from shallow wells sunk near the Thames, and, though hard, is of fairly good quality. Three varieties of water are used at Balmoral, two of which, severally from the Gelder Burn and the Rabate, are excellent; but the pump-water, though clear, colourless, and palatable, is contaminated by drainage, and the Commissioners recommend therefore that this well should be closed, and the Rabate water only used for drinking. A new well might, moreover, be sunk near the Dee, but not less than two hundred yards from the Castle. The water used at Abergeldie is clear, wholesome, and sparkling. The general water-supply is good, but peaty, being brought from Kentore Den, and would be much improved by filtration through sand, spongy iron, or animal charcoal. Sandringham is supplied with water from shallow wells sunk near the house, all of which are much polluted by animal matters, so as to make the water quite unfit for dietetic purposes, and it is, as the Commissioners report, "dangerous water." Abundance of excellent water is, however, obtainable within a short distance of Sandringham House.

LENGTH OF HOSPITAL RESIDENCE IN SCARLET FEVER CASES.

MUCH difference of opinion has been expressed as to the length of the period during which scarlet fever convalescents continue infectious. The authorities of hospitals for infectious diseases in which this disease is treated are, however, called upon to give a practical decision on this point, by sanctioning the discharge of the recovered cases to their homes. The Registrar-General, in his last Weekly Return, published some interesting statistics bearing upon the average duration of the 792 cases of scarlet fever treated in the two Metropolitan Asylum District Fever Hospitals at Homerton and Stockwell during the nine months ending September last. The average weekly number of beds occupied by scarlet fever patients during the nine months was 74 at Homerton and 49 at Stockwell; the cases disposed of during this period, by death or recovery, were 317 at Homerton and 373 at Stockwell. Although the number of beds occupied at Stockwell was 25 less than at Homerton, the numbers discharged, on recovery or by death, considerably exceeded those at Homerton. The average length of hospital residence of the recovered and fatal cases during the nine months, which was seven weeks and three days at Homerton, did not exceed four weeks and five days at Stockwell. Each of these averages understates the mean residence of the recovered cases, as they include the fatal cases, the duration of many of which does not exceed a few days. This does not, however, militate against the value of the figures for comparing the duration of the cases at Homerton and Stockwell. As we pointed out last week, the rate of mortality among the cases treated was almost identical in both hospitals, and it may therefore be presumed that there was but little difference in the nature of the cases admitted. The explanation of the fact that the duration of the cases of scarlet fever treated at Homerton exceeded by 58 per cent. the duration at Stockwell is not therefore apparent. The treatment of infectious diseases in hospitals recommends itself so strongly to sanitarians as the only means for controlling epidemics of this character, especially in large towns, that statistics bearing both upon the mortality in cases so treated, and upon the extent of isolation secured in these hospitals, are at the present time of great value. It would be desirable to ascertain by investigation whether the length of hospital residence which has been adopted at Stockwell is sufficient to secure safety in allowing the convalescents to return to their crowded homes. The hospital treatment of scarlet fever is at present more or less experimental, and the fullest information as to its results is most desirable.

DRINK AND DISEASE.

SOME curious calculations have been made of the proportional amount devoted by the working men of Birmingham to the support respectively of their public-houses and of their hospitals. The figures bear something like the ratio of 30 to 1. £3000 is contributed annually by them to the medical institutions of the town, and £900,000 is spent in drink. The numbers are, on their face, sufficiently startling, and may probably be taken as fairly representative of the state of affairs in most manufacturing districts. But they suggest that a further inquiry might elicit even more startling contrasts. What proportion does the contribution of the working men bear to the total expenses of the hospitals? The medical institutions are for them and for them only. What proportion of the burden do they bear? On the other hand, what proportion of the work of these medical institutions is occasioned by the drink on which they spend so much?

We confess that facts like these suggest a doubt of the value of the time-honoured custom of "support by voluntary contributions." We cannot but feel that the system, in such an instance, fails most completely, and that a radically new system of hospital support, a system of involuntary contribution, should be established and rigidly enforced. Such a measure would at least mete out as absolute a justice as the varying and inaccessible conditions of human life render possible. Let the drink consumed in every town be made to defray such proportion of its hospital expenses as it can be proved, with reasonable probability, that drink has caused. At present we afford to our working classes the freest facilities to drink—nay, more, we put in their way temptations to them irresistible. We remove every obstacle to as free a consumption of liquor as is consistent with the maintenance of equilibrium, and then, with a benevolent appropriateness, we provide hospitals in which the consequences of the drink can be recovered from, ameliorated, or assisted to a euthanasia.

The details of taxation lie beyond our province, but it seems at least a reasonable suggestion that the drink sold within a certain area should be so taxed as to defray the expenses of skilled treatment for those whom drink has prostrated and incapacitated for their work. The obstacle to drinking which such a tax must entail would have a beneficial influence, if slight, yet in the right direction.

THE CRUELTY OF FASHION.

A considerable demand for small birds, especially robins and wrens, has arisen within the last few months for the decoration of ladies' hats, this being the latest requirement of fashion. Not only are the birdcatchers of the Seven Dials and Whitechapel unusually busy, but we have the authority of the proprietor of a large West-end establishment for saying that, great as is the supply, it does not at all equal the demand. We need hardly say that this wholesale slaughter ought at once to be checked, for, as the supply falls short of the demand, we have no guarantee that other birds besides robins are not also destroyed, for no doubt a sparrow in the hands of a clever *artiste* could be made to do duty for a redbreast of brilliant plumage. The wanton slaughter of gulls, terns, &c., which formerly were used for hat decoration, has been stopped by a special Act of Parliament. Apart from the needless cruelty, the destruction of our small birds is a national injury. Whatever legal powers exist should, therefore, at once be put in force, to ensure their protection; and, if these are not sufficient, others must be obtained. We fear it is of little use appealing to the chief offenders—the leaders of fashion. Though the "rights of animals" are rigidly insisted on when the sacrifice of animal life is required for scientific experiment, we have found that these "rights" are seldom respected when the pleasure or convenience of society is concerned.

CONDITIONS OVERLOOKED.

At the last meeting of the Metropolitan Asylums Board, an important question was interposed between certain data crudely digested, and an inference, or, more correctly, an imputation, which it was sought to deduce from them. Mr. Proudfoot, on behalf of the Finance Committee, presented a report, purporting to show the causes of alleged "great differences between the cost of fever patients at Homerton and Stockwell Asylums." The difference was attributed to "medical extras," those at Homerton "averaging 6*d.* a day each patient, and at Stockwell 1½*d.*" The chairman of Finance was for sending the report to the committees of the two asylums in a shape which would have amounted to a censure, or at least provoked the Committee of Homerton to interfere with their medical officers. Dr. Cortis, happily, interposed with the proposal that the committees of the hospitals should be requested to give information on such matters as death-rate, and average duration of residence in the two institutions, both of those patients who recovered and of those who died—conditions obviously governing the expenditure, but which Mr. Proudfoot and his colleagues had most ludicrously overlooked. It is strange that points of vital moment like these should be almost systematically forgotten. We have heard of an inspector under the Poor-law Board looking only at the amount of stimulants ordered by the medical officer of a workhouse within a given period, and criticising his policy, without even taking the trouble to notice such particulars as the number of patients admitted, the nature of their maladies, their ages, or the temperature at the time. It is impossible that justice can be done either to patients or doctors, while important questions affecting treatment and its cost are disregarded. It is well that boards, committees, and their most fussy but least intelligent members, should be occasionally reminded of the facts their ignorance and prejudice cause them to treat with contempt.

FATAL OUTBREAK OF FEVER AT FORT CUMBERLAND, PORTSMOUTH.

A serious and fatal outbreak of typhoid fever has occurred among the recruits stationed at Fort Cumberland, at the entrance of Langston Harbour, Portsmouth. There have been altogether fifty-six cases. Of these sixteen have been well marked, the remainder being of a mild character. Unfortunately there have been four deaths. It is stated that the origin of the epidemic has been distinctly traced to sewage pollution. The whole sewage of Portsmouth, it appears, empties itself into Langston Harbour, and is discharged at the ebb. It has been ascertained, however, that instead of being always thus discharged, the sewage has repeatedly been pumped into the harbour at the flood tide, and, consequently, instead of being, as intended, carried out to sea, it is brought in shore and deposited on the mud-banks in close vicinity to the fort. It is also stated that other cases of typhoid have made their appearance at the artillery barracks at Hilsea, a point higher up the harbour. The whole subject is being inquired into by the medical department. The sick have been isolated and treated in a temporary hospital hut at Eastney, and the recruits, 130 in number, have been removed to Forton, on the Gosport side of the water.

CHOLERA IN SOUTH INDIA.

Referring to the prevalence of cholera in India, it has been suggested that the Prince of Wales, in his tour through the Madras Presidency, will cross the track which the disease has been making during the last four months, especially in the neighbourhood of Trichinopoly and Madura, and that a large concourse of Hindoos is generally the nucleus from which the disease propagates itself. It is improbable that cholera will become epidemic at this season, and still more improbable that the Prince will neglect the advice of those by whom he is accompanied. We may be quite certain that the latest intelligence will be available in regard to every district of India through which the Prince may be likely to pass, and that any alterations will be made in the programme of His Royal Highness's tour that may from time to time be deemed expedient.

THE MIDLAND MEDICAL SOCIETY.

The Inaugural Lecture of this Society was given at the Great Western Hotel, Birmingham, on November 13th (Dr. James Johnston, Physician to the Queen's Hospital, and President of the Society, in the chair), by Dr. B. W. Richardson, F.R.S. A large gathering of the medical men of the Midland Counties assembled to listen to his admirable address "On the Treatment of the Dying," and testified by earnest attention and frequent applause their appreciation of the ability and scientific knowledge displayed by the lecturer in dealing with this important subject. Dr. Richardson divided his lecture into four chief parts: first, a definition of the class of cases which are said to be *in extremis*; secondly, a correction of the old and general terms which have been used to designate the modes of death; thirdly, the actual modes of death as they may now be understood by the light of modern science; and, lastly, the specific modes of treatment in certain cases where death is imminent and, but for the resources of modern science, inevitable. Nitrite of amyl, transfusion, the administration of powerful doses of ammonia, and artificial respiration formed prominent subjects of illustration, and a new instrument for artificial respiration was exhibited. Mr. Oliver Pemberton, as ex-President of the Midland Medical Society, presented, on behalf of the members, to Mr. James Harmar, who has occupied the post of treasurer during the past ten years, a handsomely illuminated address, expressing the warmest thanks of the fellows and members for the excellent manner in which his duties have been performed, and their hearty appreciation of the devotion and energy he has exhibited in the onerous and too often thankless office of treasurer.

DUBLIN HOSPITAL SUNDAY FUND.

The second annual collection on behalf of this fund will be held on next Sunday, the 14th inst. The amount collected during last year was £3306, which, although a small sum as compared with the total income, £23,500, of the eight hospitals which participated in the benefits of the fund, was yet a substantial and valuable addition to the resources of those institutions. The demands on the fund this year will be greater than last, as some institutions which stood aloof will this year receive a share. The council state that they are glad to say that the Hospital Sunday collection has not injuriously affected the subscription-lists of those institutions which supported the movement last year, that many persons who declined to join last year have now offered their hearty co-operation, and that the number of churches and congregations supporting the movement has considerably increased.

BULLETS AND BRAINS.

The manager of a New Jersey paper has for the last seven months been known as "The Editor with a Bullet in his Brain." He was shot in his own office in March last, and recovered so completely that his assailant was released on bail, but relapsed, and died on the 24th of last month. A post-mortem examination was made, and "the bullet was found encrusted within the tentorium, beneath the posterior lobe of the right hemisphere." Three abscesses were found on the right hemisphere, there was marked congestion of the pia mater on the floor of the right ventricle, especially on the right side; the cerebellum was wholly uninjured. The opening (made by the bullet) was an inch to the right of the occipital protuberance, and half an inch above the groove of the right lateral sinus. We may expect further particulars of this interesting case.

MUSCULAR CONTRACTILITY IN A DECAPITATED CRIMINAL.

M. Onimus has had the opportunity of examining the muscles of a decapitated criminal shortly after death. He found that two hours after execution the right auricle beat spontaneously. The ventricle was quiescent, but the slightest stimulus applied to it caused it to contract. After the lapse of five hours, constant currents applied to the skin caused contraction of the subjacent muscles, though the same stimulus applied directly to the nerves no longer induced contraction.

SURGEONCY TO THE QUEEN IN IRELAND.

The lamented death of Mr. John Hamilton, of Dublin, necessitates the appointment of a successor as Surgeon to the Queen in Ireland. Among others who may reasonably hope for this honour is Mr. Rawdon Macnamara. Mr. Macnamara is an Irish surgeon of eminence, the representative of the Irish College of Surgeons in the General Medical Council; an ex-president of the College; an author of some repute in medicine; an M.D. *honoris causâ* of the University of Dublin; surgeon to the Meath Hospital, &c.

Some extremely interesting statistics have been published within the last few days in Paris respecting the extent and conditions of insanity in France. The physicians signing the report are of opinion that at least half the insane people in Paris had insane progenitors of more or less remote consanguinity. It is stated that there is a preponderance of single over married lunatics, but there are so many elements to be considered here that the deduction is not of much value. In Paris there is one lunatic in every 946 inhabitants. The French mind is found to be more liable to mental derangement between thirty and forty years of age than at any other period of life. The political throes through which the country passes, as may be expected, give a distinct character to mania. During the siege of Paris in 1870-1 many men went mad in endeavouring to devise means for annihilating the Germans, and the attempt to frame schemes of army reorganisation is found to have unhinged more than one. The report urges the desirability of making a thoroughly practical study of insanity a part of the education of medical men.

A serious outbreak of enteric fever is said to prevail at Stairfoot, a small village near Barnsley. About thirty cases have already been reported to the Barnsley rural authority. In one house a man was found lying ill on the floor in a state of nudity. In another, it was ascertained that a person slept during the day in a bed which at night was occupied by fever patients. After such painful disclosures the following resolution seems hopelessly insufficient to meet the emergency:—"Seeing, however, that Ardsley (in which township the infected village lies) is about to have a local board of health, it is not considered desirable that any action should be taken, but the sanitary officer is to do all in his power to prevent the fever extending." This is an easy way of evading obligations.

It has been pointed out that one good result of the Prince of Wales's visit to India will be in calling attention to the water-supply of Madras, which for a long time has been in a very unsatisfactory state. The Bishop of Madras has lately written strongly to the Government on the subject. The water which the citizens drink is said to be that which has percolated through graveyards where the victims of typhoid and cholera lie buried. In expectation of the Prince's sojourn at Government House stringent measures will be taken to ensure purity of water. It is significant that since 1860 two governors have died in this particular building, one from cholera and the other from enteric fever.

We understand that a new association for obtaining the repeal of the Contagious Diseases Acts has been formed. It will describe itself as the Social Purity Alliance, and, if report speaks truly, will appropriately have the distinguished aid of Mr. Theodore Tilton, of New York, in its propaganda. The opponents of the much-abused Acts are to be congratulated on the accession of such a coadjutor as Mr. Tilton. For the sake of the mistaken people who have taken up a senseless cry, it is to be hoped that the announcement is true. The utter ridicule which would attach to them in a crusade with such surroundings might do what reason, facts, and statistics have failed to do.

The town of Crediton, in Devonshire, is suffering severely from an epidemic of enteric fever. There have been reported up to this date 40 cases. The local sanitary authority is suspected to be apathetic in the matter; at all events it has been considered necessary to stir it up to a sense of the general peril by a deputation which clamoured for immediate suppressive measures.

A MOVEMENT is on foot for establishing a testimonial to Dr. Webster, J.P., in recognition of his valuable public services. The testimonial will take the somewhat unusual form of a trough and drinking fountain, to be erected in Dulwich, in which locality Dr. Webster practised for many years, in fact since 1815, although latterly his time has been completely taken up by his self-imposed duties in connexion with various public institutions and bodies. Judging by the articles we read in some of the lay papers, Dr. Webster must have a host of friends and admirers. We hope his useful career is far from closing.

IT seems rather hard that a policeman's differentiation of drunkenness from epilepsy should be considered absolute in the face of evidence given by other witnesses in favour of the latter hypothesis. A few days ago a gentleman was charged at the Westminster Police Court with the stereotyped crime of being "drunk and incapable." After the constable's deposition was taken, the gentleman's servant swore that his master was subject to epileptic fits. However, as the defendant elected to have the case settled at once, a penalty of five shillings was imposed, which terminated an affair that might have been made a *cause célèbre*.

AT the quarterly meeting of the Hartlepool Town Council last week, Dr. Moore remarked that during a residence in the town of over twenty years he never knew enteric fever to be so prevalent there as now; several cases, out of fifty which he was attending, were of unusual severity. He expressed the opinion that something was radically wrong with the drainage, and he thought it was the imperative duty of the Council to give the matter their most earnest attention.

IN London last week 1583 deaths were registered, including 1 from small-pox, 40 from measles, 129 from scarlet fever, 12 from diphtheria, 51 from whooping-cough, 23 from different forms of fever, and 24 from diarrhœa. Different forms of violence caused 47 deaths. The three Metropolitan Asylums District fever hospitals contained 264 scarlet fever patients last Saturday.

LADIES with a *penchant* for the practice of medicine, who have received more than one rebuff in the British Isles, appear to have met with more favour on the continent. Friends of the aspiring fair, have, it is stated, been so successful in enlisting sympathy on their behalf as to be able to announce the opening at Brussels of a School of Medicine for ladies on the 1st of December next.

FROM Japan we learn that a mysterious disease "which has hitherto baffled the investigations of European physicians" has broken out among the soldiers of the Imperial Guard. Thirty-seven men have already died. A special court of inquiry, composed of medical men, has been appointed to report on the disease.

WE have instituted inquiries into the facts of the case an account of which appeared in the daily papers on Thursday last, under the heading "Strange Hospital Treatment at King's College Hospital." As the inquest is adjourned, we refrain from making any comment at present.

LAST week the Vivisection Commissioners terminated their meetings for the taking of evidence, but will assemble again in the early part of December for the consideration of the report.

WE regret to learn of the very sudden death of Dr. Thos. Sarvis, a medical practitioner resident in Bethnal-green. Dr. Sarvis had been for many years in the Poor-law service.

OUR DOMESTIC WATER-SUPPLY.

IN directing the attention of our readers to the quality of the food that we eat, the water that we drink, and the air that we breathe, we not only supply information to those whose province it is to prescribe for and endeavour to cure the ills to which flesh is heir, but direct also into the proper channels the largely increasing class of those of our own and of allied professions whose care and concern it now is to prevent sickness and mortality among all classes of the teeming population of the kingdom. "The water that we drink and the water that we ought to drink" is the text of one of the most valuable Reports that has ever issued from an Imperial department. The sixth and final Report of the Rivers' Pollution Commission, which has just appeared, forms a most exhaustive document of more than five hundred pages, and includes, besides, maps that show the geological, hydrographical, and other aspects of the British Isles, and also the polluted river basins of the kingdom. The inquiries have extended over a period of more than six years, during which time the wells, springs, streams, and gathering grounds, from which a large number of corporations, local boards, and private companies derive their water, have been examined. The Commissioners have also analysed numerous specimens of spring, lake, and well waters supplied to communities for domestic purposes, and samples from the Cumberland, Westmoreland, and Lancashire lakes; and the springs issuing from important geological formations—as the chalk, greensand, carboniferous limestone, great oolites, and granite—have been likewise analysed, wherever the chemical examination of such samples promised to throw important light upon the effect on water of storage in large lakes, or of percolation through particular strata. These latter observations were specially necessary, because, as the Commissioners report, the numerous processes for cleansing water once contaminated with sewage or other similar noxious matters, as well as the so-called self-purifying power of streams contaminated with sewage, are altogether untrustworthy, and indeed practically inoperative. The works of eight private companies, who daily distribute upwards of one hundred million gallons of water to the inhabitants of London, have also been carefully inspected, an official work hitherto never before attempted in detail, and this inspection has been supplemented by the analysis of a large number of samples of rain-water, collected for the most part at a considerable distance from towns, with the object of ascertaining how far water which has undergone the natural process of distillation becomes contaminated before it reaches the surface of the earth as rain. As agricultural operations tend more or less to contaminate water, numerous samples have been submitted to analysis, collected from outfalls drawn by cultivated and pasture lands, both unmanured and dressed with various descriptions of manure. Sea-water has been also examined analytically to illustrate the ultimate disposal of the impurities which the various forms of land water carry with them to the ocean. So that, to quote *verbatim* from the report, "water has been thus followed through the complete cycle of its migrations; it has been caught as it descended from the clouds soon after its condensation from colourless and invisible vapour, collected as it flowed in streams after washing the surfaces upon which it fell, examined after it had penetrated to various depths through different geological strata, and, finally, it has been investigated after it had become part of the great mass of the ocean."

The report is very systematically and conveniently arranged under four heads—(1) the chemical examination of potable waters generally; (2) the classification and chemical composition of the potable waters of Great Britain; (3) discussions of special importance in connexion with the wholesomeness of certain kinds of water; (4) the condition of the water supplied to the metropolis, to a large number of cities, towns, villages, and rural districts throughout the country, and to the residences of Her Majesty and the Prince of Wales, which latter include Osborne, Windsor Castle and Frogmore, Balmoral Castle, Abergeldie, and Sandringham. There are also twelve appendices referring specially to rain and drainage waters, the quality of the metropolitan water for four years consecutively, the watershed and geological strata of the upper Thames, statistics of water-supply and mortality, tables illustrating the improvements of public health which result from proper works of drainage and water-supply, a special report on the cholera outbreak in the parish of St. James's, Westminster, in 1854 (with an illustrative map), and the analysis of potable waters by Dr. Frankland and Mr. H. L. Armstrong. Each and all of the parts into which the Report is divided will be noticed in further articles, as well as the appendices above-mentioned. The Commissioners have arrived at the following conclusions and recommendations: (1) That as to the chemical quality of water from different sources, rain-water collected at a distance from towns upon specially cleansed surfaces, and kept in clean receptacles, contains the smallest amount of total solid impurity; (2) that rain-water collected from the roofs of houses and stored in underground tanks is much more impure, and is often polluted to a dangerous extent; (3) that water collected from uncultivated land and allowed to subside in reservoirs, or filtered through sand, constitutes good water for domestic purposes; (4) that water collected from the surface or drains of cultivated land is always more or less polluted with organic matter, even after subsidence in lake or reservoirs, and hence is not good for domestic purposes; (5) that surface-water, draining wholly or partially from cultivated land, should be always efficiently filtered before being used; (6) that a large proportion of the river waters of Great Britain are dangerous, or are rapidly becoming so, from drainage from land, towns, and manufactories; (7) that shallow well-water is usually saturated with leakage or soakage from privies, drains, or cesspools, but it is generally, in spite of these disgusting and dangerous matters, bright, sparkling, and palatable; (8) that of the different varieties of potable water the best for dietetic purposes are spring and deep well-waters. It is concluded that polluted water cannot by any existing processes be rendered wholesome, that the propagation of epidemic diseases by polluted water is now so evident that it may be classed as a fact, that the mortality is not influenced by the hardness of potable water, that there is no trustworthy evidence as to the definite improvement of water by filtration, that if mains are properly laid no deterioration of water in its transmission need ensue, and that the constant-supply system is more sanitary and more economical in its results than any other.

In summarising the conclusions as to the metropolitan supply, it is reported that the Thames above the intake of all the companies receives the sewage of a large number of towns and other inhabited places, the washings of a large area of highly cultivated land, and the filthy discharges from many industrial processes and manufactures. The river is used also for bathing, for the washing of sheep, cattle, and dirty linen. For these and other reasons it is recommended that the Thames should be entirely abandoned as a source of water for domestic use. The same recommendations are also recorded (and on account of similar causes) as to the Lea. It is recommended that the public pumps should be all closed except that near the south-east entrance to Kensington Gardens and one at Maritime Houses, in Mile-end Old Town, but that the use of the water supplied by the Kent Company, from deep wells in the chalk at Deptford, should be continued and extended. The proposed supply of water to the metropolis from North Wales and from the Cumberland lakes is considered costly and unnecessary, but an abundant supply of spring and deep well-water can be procured in the basin of the Thames, at a moderate distance from London, so that the metropolis and its suburbs can, with efficient management, be supplied on the constant system, the water being, before delivery, softened with lime. To inaugurate the introduction of such a system it would be necessary either to throw open the metropolitan water-supply to the competition of new private companies, or to transfer the control of that supply to a responsible body invested with the necessary powers for the purchase of the existing works and the acquisition of so much spring and deep well water as may be necessary. We have continuously and persistently advocated the latter scheme as the one thing needful in this gigantic and superlatively important matter, and are, therefore, very glad to find that the Commissioners give it a very strong comparative preference. The summary of conclusions and recommendations as to the rural districts must be postponed; but we may fitly end by complimenting very highly the Commissioners, and by urging their recommendations (as regards London) upon the attention of the Corporation and the Metropolitan Board of Works. No skilled Report was ever published at so happy a time, if these august bodies only know how to make it serve their own laudably ambitious purposes. We may remind them that water is of more importance than gas.

Correspondence.

"Audi alteram partem."

PROFESSOR MACLEAN, C.B., ON THE TRUE COMPOSITION AND THERAPEUTIC VALUE OF WARBURG'S TINCTURE.

To the Editor of THE LANCET.

SIR,—Dr. Carl Warburg, late of Vienna, now of London, acting on the advice of friends well acquainted with the antipyretic properties of his tincture, has communicated to me for publication the formula for its preparation, which I accordingly give below. Thirty ounces of the tincture, according to the formula, were prepared in my presence in the laboratory here.

It is well known that up to this time this has been a secret remedy. It is no business of mine to defend its author from the charge of vending a secret medicine, which he shares in common with some other members of the profession not unknown. The simple truth is that Dr. Warburg knew he had hit on a remedy of great therapeutic value, and, under the pressure of the *res angusta domi*, hoped by its sale to maintain his family.

The feeling in the profession against secret remedies was so strong that his expectations, after many years of trial and many disappointments, have not been fulfilled, and, as I have said, he has at last, wisely as I think, resolved to make his secret known.

Before passing from this part of my subject, I may quote, as pretty nearly expressing my own opinion on the subject of secret remedies, the following passage by the late Dr. James Johnson:—"No one will accuse us of favouring secret nostrums, but if the inventors of remedies will not publish their compositions, this is no reason why we should not test their efficacy when they come from practical and scientific men. Would any man in his senses, or who has any regard for the welfare of his patients, refuse to administer James's Powder, Battley's Sedative Liquor, or Ruspini's Styptic, because the inventors refuse to make known the composition of these remedies? Dr. Warburg has supplied gratuitously immense quantities of his febrifuge to the profession, and continues to do so, in order that his statements respecting its properties may be fairly put to the test. This is, perhaps, as much as could be expected." Dr. Johnson concluded his notice of the tincture by inviting "the attention of our brethren in this country to this remarkable preparation."

I first became acquainted with the remarkable properties of Warburg's tincture in the following manner. Many years ago, when attached to the Residency of Hyderabad in the Deccan, word was brought to the Resident, the late General James Stewart Fraser, that his son-in-law, the late Dr. Thomas Lancaster Bell, then employed as statistical surveyor of the Deccan, had been brought into the station of Warrunghal, about eighty miles from Hyderabad, in an almost comatose state from remittent fever, caught in a neighbouring jungle, where he was carrying on some scientific investigations, and that but slender hopes were entertained of his recovery. I hastened to his assistance. On arriving at the station I approached the house where the patient was from the rear, and seeing many sheets and other articles of bedding hanging out to dry, I naturally interpreted this into a mournful signal that all was over, that in fact I had arrived in time to bury but not to save my friend. Entering the house I was joyfully surprised to see Dr. Bell seated in an arm-chair in a state of complete convalescence. I then learned that he had been brought by his servants to the station just as an exacerbation of his fever had set in, being the third or fourth of his attack. Dr. Bell had taken quinine freely when first attacked, but was quickly reduced to such a condition of mental confusion as to be incapable of directing the treatment of his case. When seen by the medical officer of the station he was in a most alarming condition, and it was too evident that another exacerbation would prove fatal. It so happened that an officer belonging to the Mysore Commission was visiting a friend in the cantonment who was not only well acquainted with the efficacy of the tincture in malarial fevers, but had a supply of it with him. In the desperate circumstances of the case the station surgeon administered the remedy; it was followed by a profuse but not exhausting action of the skin (hence the drying process which had alarmed me), the fever did not return, and the patient made a rapid recovery.

After such an experience as this, I did not fail to use it in similar cases, as opportunities offered, and by its means rescued many who were in as great peril as in the case related above. My experience in the treatment of malarial fevers by Warburg's tincture has not been confined to India. My friend and colleague, Surgeon-Major Madden, will remember the case of a young officer of the Royal Engineers, who had the misfortune to be quartered in a building much below the level of the surrounding ground on which stand Brompton Barracks, Chatham, where he was nightly exposed to the poisonous emanations conveyed by the wind from the unwholesome marshes of the Medway. He contracted a sharp remittent fever, which resisted quinine given in free doses. The case became alarming, and I was asked to see him. I at once administered Warburg's tincture in the manner to be presently described, and this young man never had another exacerbation.

A supply of this tincture was sent to the Gold Coast for use in the late expedition, but from all I can learn it was not much used by the medical officers of the force. After the war the *Victor Emanuel*, that model hospital-ship, now unfortunately dismantled, was anchored off Netley. From the medical stores of this ship I obtained all the "Warburg" remaining, and used every bottle of it in the treatment of the formidable fevers disembarked from the Gold Coast at Netley, in every case with success when not complicated with hepatic abscess.

I have only to add, in concluding this account of my personal experience of the remedy, that in the article on Malarial Fevers contributed by me to Dr. Russell Reynolds's System of Medicine, I spoke highly of this febrifuge, for which I was taken to task by a writer in the *Indian Annals of Medicine;* and for the last fifteen years, in my lectures on Tropical Medicine here, I have made known its value to the gentlemen belonging to the public services going through the course of special instruction in the Army Medical School.

To the best of my knowledge Warburg's tincture was first introduced into Southern India, for use on a large scale, by the late Lieut.-General Sir Mark Cubbon, K.C.B., Commissioner of the Mysore Province, who will long be remembered in India as one of the most successful administrators of his time, and of a service prolific in splendid examples of a governing race. Having himself used the remedy with success, he placed at first 500 and subsequently 1000 bottles of it at the disposal of the late Dr. C. J. Smith, being well known as surgeon to the Mysore Commission. Ere long its reputation was established at Mysore among the officers of the Commission (much exposed to malaria in the discharge of their duties), and I believe I am right when I say that none of them ever ventured into a malarious locality without being armed with "a little bottle of Warburg."

I have not space at my command to say more of its use in Southern India, where it was always better known and more used than either in the Bengal or Bombay Presidencies. Many great engineering works in Southern India, carried on in "deadly jungles," were brought to a successful issue mainly by the protection afforded to the workmen by this medicine. Some remarkable evidence on this point was placed before the Royal Commission which inquired into the health of the Army of India by my friend Major-General Cotton, R E.

I have only to add that many very eminent members of the profession in this country, among whom I may instance Sir Andrew Halliday, the late Sir James Gibson (Director-General of the Medical Department of the Army), the late Dr. Babington, Mr. Skey, and many others, were led to use this febrifuge, and have left on record strong evidence of its value as a therapeutic agent. The same is true of many distinguished physicians and teachers on the Continent.

It will be seen that quinine is the most important ingredient in the formula, each ounce bottle containing nine grains and a half of the alkaloid. Its presence has been detected by every chemist who has attempted its analysis, and never doubted by any medical man of experience who has used the tincture. Many will say, "'After all,' this vaunted remedy is only quinine concealed in a farrago of inert substances for purposes of 'mystification.'" To this objection my answer is, I have treated remittent fevers of every degree of severity contracted in the jungles of the Deccan and Mysore, at the base of mountain ranges in India, on the Coromandel Coast, in the pestilential highlands of the northern division of the Madras Presidency, in the malarial rivers of China, and in men brought to this hospital from the swamps of the Gold Coast, and I affirm that I have never seen quinine, when given alone, act in the manner characteristic of this tincture; and although I yield to no one in my high opinion of the inestimable value of quinine, I have never seen a single dose of it given alone, to the extent of nine grains and a half, suffice to arrest an exacerbation of remittent fever, much less prevent its recurrence, while nothing is more common than to see the same quantity of the alkaloid in Warburg's tincture bring about both results.

I am prepared also to hear that I am giving undue importance to this remedy. But I cannot forget that, taking one year with another, fevers destroy twice as many people as small-pox, cholera, and all other epidemic causes put together.* Therefore it is that a therapeutic agent vouched, on testimony which I submit is trustworthy, to be more efficacious in a certain class of diseases than any other known remedy, is a matter of supreme importance to our native fellow-subjects, and to the well-being of the sixty and odd thousand British soldiers who hold this great possession for the Crown and people of India.

In conclusion, I venture to express a hope that, the reproach of secrecy being now removed, a more extensive and fair trial may be given to this remedy, particularly in the public services, than it has yet had, and that, if it be found to be such as I have described in this notice, its author will not be left to find his only reward in the consciousness of having deserved well of his kind.

The tincture is administered in the following manner:— One half ounce (half of a bottle) is given alone without dilution, after the bowels have been evacuated by any convenient purgative, all drink being withheld; in three hours the other half of the bottle is administered in the same way. Soon afterwards, particularly in hot climates, profuse, but seldom exhausting, perspiration is produced; this has a strong aromatic odour, which I have often detected about the patient and his room on the following day. With this there is a rapid decline of temperature, immediate abatement of frontal headache—in a word, complete defervescence, and it seldom happens that a second bottle is required. If so, the dose must be repeated as above. In very adynamic cases, if the sweating threatens to prove exhausting, nourishment in the shape of beef-tea, with the addition of Liebig's extract and some wine or brandy of good quality, may be required.

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* Dr. Cornish, Sanitary Commissioner, Madras.

In the terrible remittent fevers described by Livingstone and his followers, the form of purgative prescribed by the great traveller, and known to his people as "Livingstone's Rousers," may be premised. By no authors is the necessity for careful nutrition and due stimulation so much insisted on as by the companions of this immortal explorer, notably by the Rev. Mr. Waller, who, I believe, is a physician as well as a missionary.

DR. WARBURG'S TINCTURE.

℞ Aloes (socotr.) libram,
Rad. Rhei (East India),
Sem. Angelicæ,
*Confect. Damocratis, ana uncias quatuor;
Rad. Helenis (s. Enulæ),
Croci sativi,
Sem. Fœniculi,
†Cret. præparat., ana unc. duas;
Rad. Gentianæ,
Rad. Zedoariæ,
Pip. Cubeb.,
Myrrh. elect.,
Camphoræ,
‡Boleti laricis, ana unciam.

The above ingredients to be digested with 500 ounces of proof spirit in a water-bath for 12 hours; then expressed and ten ounces of disulphate of quinine added; the mixture to be replaced in the water-bath till all quinine is dissolved. The liquor, when cool, is to be filtered, and is then fit for use.

Your obedient servant,
Netley, Nov. 1875. W. C. MACLEAN.

THE MEDICAL SOCIETY OF LONDON.

To the Editor of THE LANCET.

SIR,—At a meeting of the Council of this Society held yesterday, attention was directed to an article on the Metropolitan Medical Societies, which appeared in THE LANCET, October 9th, in which, after awarding its due meed of praise to the work done by this Society, you remark, "It is much to be regretted that no Transactions of this Society have yet been published." I am requested by the Council to state that a volume of Proceedings was issued to the Fellows in October, 1874, and that a second volume edited by the Secretaries is now in the press and will shortly be in circulation.

I have the honour to remain, Sir, your obedient servant,
C. THEODORE WILLIAMS, M.D.,
Nov. 6th, 1875. Honorary Secretary.

SMALL-POX IN SAXONY.

To the Editor of THE LANCET.

SIR,—In No. 17 of Volume II. of your valuable paper of this year, it is said (p. 610), in the article Small-pox: "No official accounts of Saxony are forthcoming." I am glad to give you the desired account. As to the year 1871, the official information on the total small-pox deaths is not quite certain; but I believe that there may have been at least 9000; in the year 1872 there were 5863; in 1873, 1772. In these last two years 30 per cent. of the deaths were in children under the age of one year.

The number of the population of Saxony was on the 1st December, 1871, 2,556,244. The small-pox death-rate per 1000 of population was therefore: 1871, 3·5; 1872, 2·2; 1873, 0·7. I am, Sir, yours faithfully,
R. GUENTHER, M.D.,
Medical Officer of the Privy Council.
Dresden, 5th November, 1875.

GLASGOW.

(From our own Correspondent.)

THE various medical classes in connexion with Glasgow are now in full working order. The opening address to the students at the University was delivered by Dr. George Buchanan, the Professor of Clinical Surgery, and was fairly received by a noisily appreciative audience of the young alumni. On the following day the Dean of the Medical Faculty, Dr. Alexander Lindsay, gave the inaugural discourse at the Andersonian University. The well-known ability and experience of the lecturer secured him a large audience. Instead of choosing any stereotype subject, Dr. Lindsay spoke of some of those conditions that rule in the world of matter, selecting more particularly the laws of diversity, unity, and economy, and illustrated and dwelt on the divisions under these heads. His address was well received, and was delivered without the aid of note or manuscript. In addition to the two schools mentioned, we have the nucleus of an extramural school, and lectures on surgery and medical jurisprudence are being delivered. The University authorities have resolved to recognise these lectures as qualifying for graduation. This is as it should be, but the same privilege should be extended to the lectures at the Andersonian. The majority of the medical profession in the University were at one time lecturers at the Andersonian before their advancement to their present chairs, and, when acting as such, vigorously and justly clamoured against a monopoly of teaching. On their promotion they appear, however, to forget their former views, and abandon a liberal policy. The ostensible cause given for the non-recognition of the teachers is the fact that, according to the conditions of the founder of the school, those elected to the various chairs should be called professors of the subjects they expounded. They thus, it is said, become rivals, not merely in teaching, but in the actual possession of a title. I venture to think that such reasoning is unworthy of any university, and trust a more generous one may be adopted. The recognition of extramural lectures has enhanced greatly the reputation of Edinburgh as a medical school, and the same mode of procedure to all here it is presumable would promote in every way the true interests of medical science.

Favoured by excellent weather, Dr. Russell has for the last three weeks been able to report a wonderfully healthy condition of affairs, the mortality tables indicating an average of only 21 per 1000, against 31 of the same month of last year.

There has been since the commencement of August last a somewhat bitter feeling between the directors of the Royal Infirmary and the Police Board, which culminated in a meeting between the different representatives on 3rd Nov. Full details are given in the daily papers, and will doubtless give rise to much discussion. Briefly stated, the matter under dispute was this. In the suburban burghs enteric fever had been prevalent for some time, and Dr. Russell was anxious to obtain information as to the locality of such cases which had been removed to the Royal Infirmary, and with the ostensible object also of having such cases sent to the Fever Hospital at Belvidere, which is under the control of the municipal authorities of Glasgow. The infirmary directors declined to accede to this request, and a somewhat personal and hasty correspondence in the daily papers took place between the superintendent of the infirmary and Dr. Russell. The conclusion come to at the meeting will be seen from the following summary from one of our daily papers:—

"A conference took place yesterday between the managers of Glasgow Infirmary and the Health Committee of the Police Board, with the view of arrangements being made for information being given to the Sanitary Department of all fever cases sent to the infirmary. Mr. William MacEwan, on behalf of the managers, read a statement in reply to the minute adopted by a recent meeting of the Police Board, in which he denied that the managers of the infirmary had in any way aided the authorities in neighbouring burghs to evade their responsibility. He also explained that, in virtue of payments made some time ago, and of annual contributions, certain parties had a right to send their patients to the infirmary. He also emphatically denied the allegation that sewage was sent from the infirmary into the sewers to the detriment of the public health. The Heath Committee, on their part, disclaimed all intention of injuring the infirmary, but argued that it was necessary, to enable them to protect the health of the city, they should be made aware of all cases of epidemic disease within their bounds, and of all cases imported from neighbouring districts. The directors consented to give returns of all fever cases sent into the infirmary from the city, but declined to be made middlemen between the Health Committee and the suburban burghs."

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* This confection, which consists of an immense variety of aromatic substances, was once officinal, and is to be found in the Ph. Lond., 1746.

† Dr. Warburg informs me that this ingredient was added to correct the otherwise extremely acrid taste of the tincture. Many other substances were tried, but none answered so well as prepared chalk.

‡ This is the Polyporus laricis (P. officinalis, Boletus purgans, or Larch agaric), "formerly," says Pereira, "used as a drastic purgative, and still kept by the herbalist."

It is understood that the infirmary directors at their last quarterly meeting resolved to increase the salaries of each of the medical officers by an addition of £50 for the ensuing year.

Glasgow, November 8th, 1875.

IRELAND.

(*From our own Correspondent.*)

Medical and other scientific meetings and lectures have once again become the order of the day. Freshmen from the country are visible in the Irish metropolis intent on study or the appearance of it, or on the pleasures associated with the return of citizens and sojourners to Dublin. Opening addresses have for several days been the rage in the medical schools and hospitals, many of these orations presenting features of interest to the general as well as to the medical hearers. One delivered at the Meath Hospital, by Dr. Stokes's comparatively young successor, has been accorded a very considerable meed of praise. Dr. John Wm. Moore promises to fill worthily the place vacated by the celebrated Stokes. On Wednesday next, at the College of Physicians, it is proposed to hold the opening meeting of the Medical Society of that body. To-night the veteran Dr. Stokes opens the session of the Royal Irish Academy.

Death has, as your columns have already announced, removed another leading member of the medical profession. John Hamilton has passed from amongst us. His illness and death have not been quite correctly described, as I am informed; but a statement will, I am told, shortly be given as to the exact nature of the disease which proved fatal to him, and, awaiting this, I abstain from further comment. Very many patients lose a valued professional adviser by Mr. Hamilton's decease.

Dublin, Nov. 8th, 1875.

Obituary.

GEORGE ROSS, M.D.

We have to record the death of Dr. George Ross, which took place at his residence, 11, Hart-street, Bloomsbury, after a short illness, in the fifty-eighth year of his age. The deceased was the eldest son of George Ross, Esq., of Stoke, and grandson of George Ross, of Dalkeith, a lineal descendant of the ancient branch of the family of Ross. He evidenced at an early age an active and inquiring mind, and as a boy commenced to give literary form to his ideas. The taste grew with his years, and in manhood shaped the course of his life. He entered the medical profession as pupil to Mr. Phillips, of Albion-street, Hyde-park, and received his professional education at St. George's Hospital. Literature was his dream from boyhood. His first published efforts appeared in the pages of the *Old Monthly*, to which he became a frequent contributor. Some of his published poems are of a very high order. He resolved, however, at last to give himself wholly to his legitimate profession. In 1852 the late Mr. Yearsley proposed to Dr. Ross to start in conformity with him a new journal, and soon after the *Medical Circular* appeared, Dr. Ross undertaking the duties of editor.

In 1854 Dr. Ross was elected by the constituents of the ward of Farringdon Without their representative in the Corporation of the City of London. In 1869, when the office of medical officer of health for St. Giles's and Bloomsbury was vacant, almost at the last moment Dr. Ross was urged to come forward. He did so, and was appointed. This office he held until his death; and the regard in which his services were held is best testified by the resolution which was passed at the meeting of the vestry following his decease. Dr. Ross was a graduate of the University of St. Andrews, M.D, L.R.C.P. Edin., M.R.C.S. Eng., &c. He was a member of the Charity Organisation Society, and of the Commission of Sewers; Vice-President of the Society of Medical Officers of Health; and a member of the Civil Engineering Committee and the Sanitary Sub-committee of the International Exhibition, 1874.

WILLIAM RICHARDSON, M.D.

We have to record the death at Kilburn, on the 18th of September, of Dr. William Richardson, author of "Remarks upon Diabetes, especially in reference to Treatment." He was born at Perth, July 26th, 1811, and was descended from an old Scotch family. At the age of 18 he graduated M.A. at the University of Aberdeen. Shortly afterwards he came to London, and was admitted a member of the College of Surgeons. In 1850 he graduated M.D. at St. Andrews with great distinction, after which he became M.R.C.P., receiving the highest encomiums from his examiners. In 1853 he went to Tunbridge Wells, and without any introduction speedily became the leading physician of the place. In 1860 he was attacked by diabetes in its worst form; by his own treatment and the use of means pointed out in his treatise he was able to enjoy life and continue his practice until 1868, from which period he lived comparatively in retirement. Having lived the life of a sincere Christian, his end was illumined by a sure hope of better things to come. He leaves a large circle of relatives and friends who deeply mourn his loss.

GEORGE ALLARTON, M.R.C.S. Eng., L.S.A.

Mr. George Allarton died at his residence, South-street, Southmolton (where he had been medical practitioner for over 17 years), on Friday, October 29th, aged 62 years, and his remains were interred in the cemetery there on November 4th. He was in medical practice in West Bromwich for more than twenty years, and was deputy coroner for South Staffordshire. He was also the author of the following works—viz., "Lithotomy Simplified," "An Interesting and Unique Case of Cæsarean Section," and a "Treatise on Median Lithotomy." Mr. Allarton was a man of great learning and ability.

THE ROYAL COLLEGE OF SURGEONS.

At an ordinary meeting of the Council of the Royal College of Surgeons held on Thursday last, Mr. Marshall introduced an elaborate scheme proposing that all intending candidates for the diploma of Member or Fellow of the College should be compelled to pass a compulsory and authoritative elementary examination at the end of the first winter, or immediately after the commencement of the succeeding summer session. Mr. Marshall has been led to make this suggestion by the large number of rejections at the Primary Examinations at the College and the unsatisfactory kind of knowledge possessed by many candidates who do pass. If there were a compulsory examination in Anatomy and Physiology at the end of the first year, Mr. Marshall thinks that many students who now squander away their time would be induced to apply themselves to work, and by that means be diverted from an idle and profitless course of life, and made useful members of the profession. Although the scheme was on the whole kindly received by the Council, many objections were suggested, and the question was finally referred to a committee for consideration.

Medical News.

Royal College of Surgeons of England. — The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Court of Examiners on Tuesday last:—

C. Knox and T. H. Lewis, Liverpool; J. R. Clark, G. H. Burnham, C. M'Larty, T. Millman, and M. D. Stark, Toronto; H. B. P. Barry, London Hospital; A. T. Wilkinson, Manchester; John Christian, W. K. Davies, J. H. Marsh, S. T. Proctor, and E. P. Thurstan, St. Thomas's Hospital; W. A. Dingle, W. F. Mayne, and W. H. T. Winter, St. Bartholomew's Hospital; C. S. Rundle and C. S. Kilner, Edinburgh; H. W. Thomas, Birmingham; E. C. Beale, Cambridge; G. A. Walker, Edinburgh and Aberdeen; W. D. Jefferson, King's College; W. F. Hopwood and H. A. Layton, University College; J. C. Saunders, Cambridge and St. Bartholomew's Hospital; T. Jones, C. G. W. Lowdell, and J. H. Poland, Guy's Hospital.

Of the 41 candidates examined, 12 failed to satisfy the Court of Examiners, and were referred for three months' further anatomical and physiological study.

University of London.—The following is a list of the candidates who have passed the recent 2nd M.B. examination:—

FIRST DIVISION.

Batterbury, George Henry, King's College.
Batterbury, Richard Legg, King's College.
Garlick, George, University College.
Hetley, Henry, Guy's Hospital.
Hobson, Lewis John, University College.
Hullard, Jean Arthur, B.Sc., University College.
Jameson, Leander Starr, University College.
May, Bennett, Birmingham General Hosp. and Sydenham Coll.
Rose, William, King's College.
Smith, Herbert Alder, St. Bartholomew's Hospital.
Verco, Joseph Cooke, St. Bartholomew's Hospital.
Voelcker, George Henry, University College.

SECOND DIVISION.

Bogg, Thomas Wemyss, University College.
Buchanan, Arthur, Guy's Hospital.
Crespin, Edgar Reginald Legassicke, Guy's Hospital.
Crétin, Eugène, St. Bartholomew's Hospital.
Maclean, Thomas Edwin, University College.
Moore, George Edward, King's College.
Palmer, Frederick John Morton, Guy's Hospital.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 4th:—

Betty, Samuel George, Park-street, Regent's-park.
Heard, Charles Goodridge, Truro, Cornwall.
Jackson, Edwin, Whalley Range, Manchester.
Kay, Alfred, Commercial-road East.
Knight, John Tomlinson, Sandiacre, Derbyshire.
Marsh, Edwin Addison, Arthur-road, Brixton.
Parkinson, Sidney George, Infirmary, Northampton.

Dr. Atthill, vice-president of the College of Physicians, was last week elected master of the Rotundo Lying-in Hospital, Dublin.

Benjamin Barkus, M.D., and Robert J. Banning, M.D., have qualified as Justices of the Peace for the borough of Gateshead-on-Tyne.

Statistical Society.—The first ordinary meeting of the present session will be held on Tuesday, the 16th inst., at the Society's Rooms, Somerset House-terrace, Strand, when the President, James Heywood, Esq., M.A., F.R.S., will deliver his inaugural address, and present the Howard Medal to the successful candidate, this being the first award. Mr. E. G. Ravenstein, F.R.G.S., will give "Statistics collected at the Geographical Congress in Paris"; and Dr. W. A. Guy, F.R.S., will read a paper on "John Howard's true place in History." The chair will be taken at 7.45 P.M.

Presentations.—Mr. James Middleton has been presented with a large silver tray bearing the following inscription:—"To James Middleton, Esq., M.R.C.P., M.R.C.S., from a few friends on his retiring from the office of physician to the City Dispensary, in token of their high esteem, and as an acknowledgment of his unwearied services during a period of thirty years." The presentation was made by the Lord Mayor at a meeting of the governors of the dispensary at the Mansion House on Wednesday, the 3rd inst.—Mr. W. J. Fleetwood, who has been connected with the Chester General Infirmary for four years, at first as visiting, and afterwards as house surgeon, was presented, on his resignation on October 14th, with a handsome case of operating instruments by the visiting surgeon, matron, dispenser, nurses, and servants of the institution.

Grange-over-Sands.—Scarlet fever has been again prevalent in this place of resort, and in all the surrounding villages for many weeks past. It will hardly be credited that although the village boasts of a local board, which has been in existence for above twelve months, not a single effort has been made to improve the drainage, which for years has been notoriously defective.

Medical Appointments.

Bond, J., L.R.C.P.Ed., L.M., L.R.C.S.I., has been appointed Assistant Medical Officer to the Haydock Lodge Lunatic Asylum, Newton-le-Willows, vice Johnstone, resigned.

Booth, L., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Accrington Urban Sanitary District, vice Gillespie, deceased.

Briggs, H. B., M.R.C.S.E., has been appointed Resident Accoucheur at King's College Hospital.

Broom, J., L.K.Q.C.P.I., L.R.C.S.Ed., L.M., M.R.C.S.E., has been appointed Consulting Physician to the British Alliance Assurance Corporation (Limited).

Cape, J. T., M.R.C.S.E., has been appointed Medical Officer of Health for the Totnes Rural Sanitary District, vice the District Medical Officers, until Christmas, 1876: £100 per annum.

Clay, R. H., M.D., has been appointed Medical Visitor of Plympton House Lunatic Asylum, Plympton, Devon.

Crossle, F. C., M.B., C.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Newry No. 2 Dispensary District of the Newry Union, vice Anderson, resigned.

Crowdace, J. H., L.S.A., has been appointed Assistant Medical Officer to the East Riding of Yorkshire Lunatic Asylum, Beverley.

Day, E. J., M.R.C.S.E., has been appointed House-Surgeon to the Dorset County Hospital, Dorchester, vice Hearn, resigned.

Deans, J., M.R.C.S.E., has been reappointed Medical Officer for the Coldridge District of the Crediton Union, Devon.

Fisher, Dr. T. C., has been appointed House-Surgeon and Apothecary to the Essex and Colchester Hospital, vice Boodle, resigned.

Footner, J. B., M.R.C.S.E., has been appointed a House-Surgeon to King's College Hospital.

Fowler, J. K., M.R.C.S.E., late House-Surgeon, has been appointed an Assistant House-Physician to King's College Hospital.

Godson, C., M.D., M.R.C.P.L., has been appointed a Physician-Accoucheur to the St. George Provident Dispensary, Mount-street, vice Carter, resigned.

Gould, A. P., M.B., B.Sc., has been appointed Surgical Registrar at University College Hospital, vice Godlee, resigned.

Graham, A., L.R.C P.Ed., L.R.C.S.Ed., has been appointed Surgeon to Court Robin Hood A. O. F., Park-gate, Rotherham.

Grealy, N., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Apothecary to the Galway Dispensary and Union Workhouse, vice O'Sullivan, deceased.

Ground, E., M.R.C.S.E., has been appointed an Assistant House-Surgeon to King's College Hospital.

Hartnoll, H. T., M.R.C.S.E., has been appointed Medical Visitor of Court Hall Lunatic Asylum, Kenton, Devon.

Hebb, R. G., B.A., M.B., M.R.C.S.E., has been appointed a House-Physician to King's College Hospital.

Lilley, G. H., L.R.C.P., M.R.C.S.E., L.M., has been appointed House-Surgeon to the Coventry and Warwickshire Hospital, vice Eagar, resigned.

Macdonald, A., M.D., has been appointed a Physician to the Royal Hospital for Sick Children, Edinburgh.

Maybury, W. A., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the 2nd Ward District of the Colchester Union, vice Brown, resigned.

Nettleship, E., F.R.C.S.E., has been appointed an Assistant-Surgeon to the Hospital for Diseases of the Skin, Stamford-street, vice Sims, resigned.

Perks, C., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Burton-on-Trent Urban Sanitary District, vice Belcher, resigned.

Ravenhill, T. H., M.R.C.S.E., has been appointed an Hon. Medical Officer to the Birmingham Lying-in-Charity, vice Warden, resigned.

Rayne, C. A., M.B., has been appointed Assistant-Physician to the Manchester General Hospital and Dispensary for Sick Children, vice Harris, deceased.

Redwood, T. H., M.D., L.R.C.P.L., M.R.C.S.E., has been reappointed Medical Officer of Health for the Rhymney Urban Sanitary District.

Robbs, C. H. D., M.D., M.R.C.S.E., has been appointed Medical Officer for the Spittlegate District and the Workhouse of the Grantham Union, vice W. Robbs, M.D., M.R.C.S.E., deceased.

Sparrow, G. G., M.R.C.S.E., L.R.C.P.Ed., L.M., has been appointed House-Surgeon and Secretary to the Royal Isle of Wight Infirmary, Ryde, vice Pletts, resigned.

Tindle, J. G., M.R.C.S.E., has been appointed House-Surgeon and Dispenser to the North Shields and Tynemouth Dispensary, vice Bennett, deceased.

Twining, A. H., L.S.A.L., has been appointed a Junior Resident Medical Officer to the Royal Free Hospital, vice Pink, resigned.

Ward, W. A., M.R.C.S.E, L.M., has been appointed House-Surgeon to the Infirmary, Richmond, Surrey.

Warner, F., M.D., F.R.C.S.E., has been appointed an Extra Acting Physician to the Birmingham and Midland Free Hospital for Sick Children, vice Welch, resigned.

Wardrop, D., M.B., C.M., has been appointed Junior House-Surgeon to the Birkenhead Borough Hospital, vice Murray, appointed House-Surgeon to the Southport Infirmary.

Watson, A. M., M.D., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Penistone, Yorkshire, vice Ward, deceased.

Welch, J. B., M.B., M.R.C.S.E., has been appointed an Acting Physician to the Birmingham and Midland Free Hospital for Sick Children, vice Mackey, resigned.

Young, C., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Yarm District of the Stokesley Union, Yorkshire.

Births, Marriages, and Deaths.

BIRTHS.

BRODRIBB.—On the 5th inst., at Watford, the wife of Charles A. Brodribb, M.R.C.S.E., of a son.

DAVSON.—On the 1st inst., at Campden Villa, Maida-vale, the wife of S. H. Davson, M.D., of a son.

HATHERLY.—On the 2nd inst., at Wellington-street, Park-side, Nottingham, the wife of H. R. Hatherly, L.R.C.P.Ed., of a son.

KEITH.—On the 13th of Sept., at Nuwara Eliya, Ceylon, the wife of William Gregory Keith, M.B., C.M., L.R.C.P.Ed., L.R.C.S.Ed., Assistant Colonial Surgeon, of a daughter.

MACKINNON.—On the 1st inst., at Aldershot, the wife of Surgeon-Major C. Mackinnon, Army Medical Department, of a son.

MIDDLETON.—On the 7th inst., at Manorhead, Stow, N.B., the wife of Dr. James Middleton, of a daughter.

NEWBERRY.—On the 8th inst., at Burgess Hall, Leeds, Kent, the wife of W. J. Newberry, M R.C.S.E., L.S.A.L., of a daughter.

SAUNDERS.—On the 6th inst., at Lower Seymour-street, Portman-square, the wife of C. E. Saunders, M.D., of a son.

STILWELL.—On the 4th inst., at Beckenham, the wife of R. R. Stilwell, M.D., of a son.

MARRIAGES.

JAMISON—GREEN.—On the 4th inst., at the Parish Church, Weybridge, Arthur J. Jamison, M.D., to Isabella, daughter of the late Rev. H. Green.

LUCE—RYAN.—On the 4th inst., at Winchester Cathedral, James Johnstone Luce, M.D., of Stratford-on-Avon, to Mary, widow of the Rev. John Ryan, Curate of Holy Trinity Church, Southampton, eldest daughter of the late Wm. Barry, Esq., of Kilbarry, Co. Cork, and grandniece of the late Matthew De Rinzy, Esq., D.L., of Clobemon Hall, Co. Wexford, Ireland.

SHORTT—ROGERS.—On the 9th of Sept. (by special licence), at St. John's Church, Bangalore, John Shortt, M.D., M.R.C.P.L., F.L.S., &c., Surgeon-Major and Inspector of Vaccination, Madras Presidency, to Annie Julia Henrietta, eldest daughter of Surgeon-Major C. J. Rogers, Zillah Surgeon, of Coimbatore.

DEATHS.

ANDERSON.—On the 31st ult., at Ajaccio, Corsica, James R. Anderson, L.R.C.S.Ed., retired Staff-Surgeon R.N., aged 40.

BEADLES.—On the 4th inst., at Park House, Forest-hill, John N. Beadles, M.R.C.S.E., late of Broadway, Worcestershire, aged 73.

CHARTRES.—On the 31st ult., at Clifton House, Hampstead, J. S. Chartres, M.D., Surgeon-Major Army, aged 47.

DAVIS.—On the 2nd inst., at Linden House, Winkleigh, Devon, Wm. H. Davis, M.R.C.S.E., aged 44.

HAMMOND.—On the 3rd inst., at Market-street, Cambridge, J. Hammond, F.R.C.S.E., aged 72.

LLOYD.—On the 2nd inst., David Lloyd, M.R.C.S.E., of Carmarthen.

M'GILLIVRAY.—On the 25th ult., at Kilmore, Co. Argyll, Geo. M'Gillivray, M.D., aged 49.

PASSMORE.—On the 4th inst., at Brighton, John Geo. Passmore, M.R.C.S.E., aged 59.

PULLAN.—On the 2nd inst., at Epworth, Lincolnshire, Richard Pullan, M.R.C.S.E., formerly Assistant-Surgeon R.N., aged 82.

SARVIS.—On the 4th inst., Thomas Sarvis, M.D., of Bethnal-green-road, Medical Officer of Health for Bethnal-green, aged 54.

SIMPSON.—On the 3rd inst., at Priestley-road, Warwick, John H. Simpson, Surgeon, aged 68.

SPENCER.—On the 1st inst., at Stoke Newington, John Spencer, M.R.C.S.E., aged 61.

STRADLING.—On the 5th ult., at Glastonbury, F. R. Stradling, Surgeon, aged 56.

TAIT.—On the 22nd ult., at Dunse, John Tait, L.R.C.S.Ed., aged 56.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE SKIPTON GUARDIANS.

THE proverbial and often false economy of so-called guardians of the poor is exemplified in the recent action of the Skipton Board towards their medical officer, who, after holding his appointment for a year, has applied for an advance of salary, basing his claims thus—1st, the salary has been the same for the past twenty-five or thirty years; 2nd, an Infirmary for Contagious and Infectious Diseases for the whole union has been added to the workhouse without any additional salary; and 3rd, the number of inmates in the workhouse has been nearly trebled. To the intelligent minority of the guardians their medical officer's claim seemed most reasonable; but on a vote it was decided to give no advance. The workhouse doctor consequently resigned, and as his professional brethren in the town are sensible of the justice of his claim, they all refuse to apply for the post. In this dilemma the guardians are advertising the appointment, and it now remains to be seen whether anyone, or who, will assist the guardians in frustrating the apparently just claims of their medical officer. Considering that there is not a breath of complaint against his professional skill or attention to the sick poor, we hardly think any medical man would be justified in offering himself to fill the vacancy.

Mr. G. D. O. Thomas.—Declined with thanks.

MEDICAL OFFICERS OF HEALTH: THEIR DUTIES AND THEIR RELATIONS TO PRIVATE PRACTITIONERS.

B. U. R. asks a series of questions, which we proceed to answer *seriatim*:—1. "Is it the duty of a medical officer of health to see those who are sick?" By the regulations of the Local Government Board, a medical officer of health is required to "inquire into and ascertain by such means as are at his disposal the causes, origin, and distribution of diseases within his district"; also, on receiving information of the outbreak of any contagious, infectious, or epidemic disease of a dangerous character within his district, "to visit the spot without delay, and inquire into the causes and circumstances of such outbreak, and advise the persons competent to act as to the measures which may appear to him to be required to prevent the extension of the disease, and, so far as he may be carefully authorised, assist in the execution of the same." These duties can only be carried out with a definite knowledge of the nature of the disease, and it is left to the judgment of the medical officer how to obtain this. He has no right of entry to the sick without the consent of the sick persons themselves or those in charge, and he is not exempted by the above requirements from the customary professional courtesies, unless, indeed, the medical attendant should refuse to aid or co-operate with him.—2. "Is it his duty to see them two or more times?" Such a duty might arise under certain difficulties of diagnosis, or of applying necessary means of preventing the spread of the disease; but clearly it is one that, where there is an ordinary medical attendant, must be strictly carried out in co-operation with him, unless, indeed, the latter refuse to co-operate.—3. "Is it his duty to make suggestions as to treatment in the medical attendant's absence, and without his consent?" Unquestionably not. This would be equally a breach of professional etiquette and of his proper duties. These are limited to measures of prevention, and here circumstances may arise in which it may be his duty to make suggestions; but always subject to the consideration that he has no right of interference with the medical attendant in charge, unless with the assent of the latter, or that he is satisfied that measures necessary for the safety of the community are being neglected.—4. "Is it his duty to enter and examine a house in which there is no illness, and that is not suspected of being in an insanitary condition?" It may be a duty for him to satisfy himself that a house is free from sickness or insanitary states during inquiries into the distribution, causes, or prevalence of disease.—5. "Supposing him to condemn some cesspool or drainage arrangement, is it his duty to say what must be done, or leave it to be done by the occupier, on the chance of his approving or not, as the case may be, when it is finished?" It is no part of his duty to say what *must* be done, unless some bye-law of his authority exist touching the matter which empowers him to be imperative; but he has a duty of seeking by reasonable advice and suggestion to prevent what is to be done being wrongly executed.

"NOBLESSE OBLIGE."

To the Editor of THE LANCET.

SIR,—The attention of the Committee of this hospital has been called to a letter in last Saturday's LANCET, written by Mr. R. J. Metcalfe, of Beccles. I am requested by them, as their honorary secretary, to write to you on the subject of that letter. These are two, and they should be kept distinct from each other.

1. Mr. M.'s own treatment by "the authorities of the North Cambs Hospital"; and
2. The propriety of a certain regulation in this hospital.

1. On the first subject Mr. M. complains of discourtesy on the part of our chairman and our resident surgeon. The former, the Rev. Canon Scott, Vicar of Wisbeach, is as far removed from discourtesy or any sort of unkindness as black is from white. The latter gentleman is also utterly incapable of any such conduct as is imputed to him. We ourselves, as a Committee, and all others who have personal knowledge of these two gentlemen, are quite convinced of the impropriety of any such charge of discourtesy. Your correspondent's feelings seem to have been overwrought by the painful circumstances in which he was placed in consequence of his father's sad illness. We have been told that to have extemporised a millboard splint would have taken him but a short time, far less than the hours occupied in journeying to and from Wisbeach on the occasion.

2. As to the rule itself, it has been made the subject of long and anxious consideration and discussion. Under the peculiar circumstances of this hospital, the Committee—who have met this day, thirteen in number—have again, after reading your correspondent's letter, decided to let the rule remain as it is. It is quite inaccurate, however, to describe as the effect of the rule "that no instrument or appliance was allowed to be taken out of the hospital." The rule or minute is as follows. It was passed in this form on January 27th, 1874:—"That no furniture, surgical instruments and appliances, or property of any description belonging to the hospital, be removed from the premises for any purpose whatever without the special permission of the Committee, or, in case of emergency, of one of the trustees, and with the concurrence of the house-surgeon and one of the other medical officers."

Expressing our regret that Mr. Metcalfe should have mixed up mere personalities and imaginary grievances with the subject for public consideration, and that THE LANCET should have been made the vehicle of such irrelevant matter, I am, Sir, on behalf of the N.C.C.H. Committee,

Your obedient servant,
ALFRED J. PERRY, Hon. Sec.,
Vicar of St. Augustine's, Wisbeach.

North Cambs Cottage Hospital, Wisbeach, Nov. 2nd, 1875.

⁂ We regret that the Committee should have confirmed a rule which has operated so harshly. We are sure that the subscribers of a hospital would regret that a splint had been refused to a surgeon with a broken arm under the circumstances of this case. It would be quite enough, to protect the surgical apparatus of a hospital, to require the house-surgeon to be responsible, and to enter any loan of it in a special book.—ED. L.

CONSTANT WATER-SUPPLY.

IT is gratifying to perceive even faint indications of the eventual satisfaction in London of what we have repeatedly urged as one of the prime necessities of urban populations—a constant water-supply. The East London Waterworks Company have given notice of their intention to apply the constant service, from the 1st of March to 1st of April, 1876, to certain areas in the parishes of St. John (Hackney), St. Matthew (Bethnal-green), and St. Leonard (Shoreditch). The Kent Waterworks Company have also signified their intention to give a constant supply of water to certain portions of the parish of Woolwich. We have advocated the constant service system solely in the health interests of the community; but there appear to be some people so sanguine in respect of its potent results as to predict that its adoption would have the effect of closing half the Fire Insurance Offices, and of reducing the Fire Brigade establishment to one-half its present proportions.

L.R.C.P. Lond.—Every information respecting it may be obtained by making application to Dr. Paget, Cambridge University.

THE FLEXIBLE STETHOSCOPE.

To the Editor of THE LANCET.

SIR,—In reference to the flexible stethoscope recently introduced by Drs. Reid and Morison, I may state that I have been in the habit of occasionally using one identical in principle for three or four years. The idea was "suggested" to me by observing a broken stethoscope on the mantelpiece. I cut off the chest-piece with about two inches of the stem, and then cut away the ear-piece until, by cutting and sand-papering the remainder, it exactly fitted my meatus, leaving also about two inches of the shaft attached. Upon uniting the chest- and ear-pieces with about two feet of common elastic tubing, I obtained a flexible stethoscope which exactly fitted my meatus, and which was quite equal in acoustic properties to any other that I ever saw. Subsequently, being annoyed a little by the concussion caused by the application of the chest-piece, and also to lessen the roaring, I bored a small oblique hole in the ear-piece.

If any medical man likes to follow out these directions, I guarantee him a flexible stethoscope in every respect (except in appearance) equal to any that he can buy, and which will have the great advantage of exactly fitting his ear.

Another recommendation of this stethoscope is that the wood is warmer to the ear, and not so apt to set up irritation or give cold. I have found it of some use in auscultating babies, the backs of fever patients, hysterical females who cannot bear the pressure of the ordinary stethoscope, and the uterus per vaginam, to ascertain the seat of the placental attachment. For this last purpose it is very well adapted; but it is better, for obvious reasons, to tie tightly a piece of gutta-percha tissue over the chest-piece before using it.

And now I have said all I can in its favour. It has all the usual faults which I have before found in flexible, air-conducting stethoscopes—viz., confusion of sounds from too great reverberation, and adventitious sounds arising from the friction of the hand holding the chest-piece with it. The latter can, with practice, be instantly distinguished from chest-sounds; but the first leads to that greatest of all faults of a stethoscope, indistinctness of definition, and, being obviated by nothing that I know of, is so great an objection as to be fatal to the use of the flexible stethoscope under any circumstance in which the ordinary stethoscope can be used with any approach to comfort.

The flexible stethoscope conducts plenty of sound, in fact more than the ordinary stethoscope considerably; but it is the same with it as with the microscope, in which, as every practical worker knows, low power and good definition is greatly to be preferred to high power and bad.

Yours obediently,
Blackpool, Nov. 8th, 1875. WM. HARDMAN.

To the Editor of THE LANCET.

SIR,—In your last two impressions letters have appeared from Drs. Hutchinson and Balbirnie with reference to the flexible stethoscope. The former ascribes to Dr. Sibson, and the latter to Dr. Golding Bird, the use of such an instrument. The instruments known as having been used by these gentlemen in no way resemble that advertised by Messrs. Arnold and Sons, except in that they are flexible. Both *were* constructed much shorter, and both *had* flat ear-pieces. When Dr. Reid and I gave a plan of the instrument in question to the makers, these were the only flexible stethoscopes of which we were cognisant. Many besides Drs. Hutchinson and Balbirnie may have used instruments either *exactly* similar, or bearing a more or less general resemblance to that noticed in your journal; but such not having, so far as we know, been published, we were perhaps not unnaturally ignorant of their existence. While recognising with your correspondents the advantages of the instrument, our experience of its use has caused us to attach such importance to the construction of the ear-peg as to consider it a distinctive feature. Let us hope that this form of stethoscope, having now been brought into more general notice, may retain its place, and that others may in practice corroborate the encomiums bestowed upon it by your correspondents. I am, Sir, yours obediently,
Canonbury, N., Nov. 9th, 1875. ALEXANDER MORISON, M.B.

Mr. John Snell, (Bacup.)—Several cases of the kind have been published in THE LANCET from time to time: e. g., in the number for Jan. 25th, 1873, the case of Hadaway *v.* Bournstone, at the Bloomsbury County Court; another in that of March 6th, 1875, page 360—a case at the Marylebone County Court, in which Mr. Serjeant Wheeler gave judgment for the plaintiff.

WARM SWIMMING BATHS.

To the Editor of THE LANCET.

SIR,—In your issue of the 6th inst., Bath is spoken of as possessing the only warm swimming bath. I have frequently bathed at Brighton in Brill's Circular Swimming Bath, the water of which is kept always at the summer temperature of the ocean. In winter it may be legitimately termed a warm or tepid bath, and must be superior to Bath in being *sea* water.

Yours faithfully,
November 10th, 1875. GEO. DELVES.

CASE OF TRAUMATIC GANGRENE OF RIGHT ARM; AMPUTATION AT THE SHOULDER-JOINT; RECOVERY.

To the Editor of THE LANCET.

SIR,—The following case is, I think, sufficiently interesting to have a place in your columns.

George B——, an agricultural labourer, of the parish of Down Ampney, Wilts, a fine muscular man, aged thirty, nearly six feet high, and twelve stone in weight, was engaged on Aug. 26th, 1875, in a large barn, in which machinery worked by steam power was in motion, when, somewhat out of bravado, he volunteered to put the strap on the wheel, which was twelve feet from the floor, connected with the chaff-cutting machine, and to do so he had to ascend a ladder that was resting against a beam of the roof which spanned the building, and being anything but an adept at the work, he leaned so far over the driving shaft, which crossed the said beam at right angles, that the left skirt of his jacket, or, to use his own phraseology, his slop, was caught by a projecting nut, so that he was very quickly wound up, and after revolving several times until the whole of his clothes were literally torn to rags, he was thrown diagonally across the barn on to a heap of straw which had been providentially placed there.

The man, though conscious, feeling very faint and exhausted, stimulants were administered to him, and in the meantime Mr. Langley, surgeon, of Cricklade, was sent for. He had the patient removed at once to his own home, which was about a quarter of a mile from the scene of the accident, and on examination found fracture of the left humerus, and some loss of sensibility and numbness in the right hand and forearm, which led to the opinion that the brachial plexus and probably the vessels had sustained serious injury; but the tumefaction around both shoulders was already so great as to render it very difficult to detect the exact nature of the injuries sustained. He was given a full dose of sedative solution of opium, cooling lotion applied to the left arm, and the right hand and forearm were enveloped in cotton-wool.

On the 29th the man was transferred as a pauper patient to Mr. Cornwall, F.R.C.S., of Fairford. There was now total loss of sensibility and motion up to the elbow; the part felt quite cold and clammy, and there was extensive purplish discoloration over the extensor surface. The shoulder was still very much swollen and painful, and, though no fracture nor displacement could be detected, there was evidence of the whole of the structures in the axilla and around the shoulder having undergone extreme strangulation before his clothes, which were made of very coarse and strong material, gave way. My own opinion was that both nerves and vessels were implicated, and that the latter were in all probability occluded by the torsion or twisting to which they had been subjected. He was ordered a fair allowance of wine, stout, beef-tea, &c., and continued the sedative dose at bed-time, which he much craved for.

Mr. Cornwall and myself visited the man alternately, and we very quickly found unmistakable proof of the death of the part, vesications arising, and other cadaverous changes taking place. The mortification continued to extend up the arm until the 6th September, when a distinct line of demarcation was visible about an inch above the insertion of the deltoid externally, but internally it reached the very apex of the axilla. The limb now presented a most loathsome appearance, for maggots were preying upon the poor dead member. Asking the man on one occasion how he was going on, he replied rather humorously that "he should feel better if he had not so much livestock in the bed."

At this stage I was strongly in favour of amputation; but it was feared that he was not in a position to bear it, and that even if he did not die under the operation he would in all probability have sloughing in the wound afterwards. However, as he lived on, and his condition, to say the least, became no worse, we decided at last to remove the limb; and on Sept. 13th, chloroform having been administered, and Mr. Langley compressing the subclavian artery and Mr. Cornwall having charge of the limb, I performed amputation at the shoulder-joint. Cutting from without inwards, I dissected up the integuments for nearly three inches, cut obliquely through the deltoid, separated the attachments of the muscles from the tuberosity, opened the capsule, threw out the head of the bone, and passing the knife behind it, I had merely to cut through the parts beneath; for the gangrene extended so high that no internal flap whatever could be obtained. The hæmorrhage on dividing the vessels being most profuse, I immediately grasped the axillary artery between my thumb and forefinger, and Mr. Langley placed a ligature around it. Unfortunately this slipped; but I again laid hold of it, and this time pulling it well forwards, and separating it from its close connexions, it was effectually secured. We then tied three other arteries which bled freely. By this time the poor fellow was wellnigh moribund; but by discontinuing the chloroform, and giving him brandy *ad libitum*, he was somewhat restored. The flap, which was not large enough to cover half the wound, was retained *in situ* by sutures very loosely applied, and the part covered with wet lint. Fearing secondary hæmorrhage, I remained with him for eight hours, and before leaving gave him a draught containing half a drachm of sedative solution of opium (Battley's).

On visiting him early the following morning, we found there had been no further hæmorrhage, that he had slept comfortably, and had taken a fair allowance of wine and beef-tea, and that the bowels and bladder had both been relieved.

I regret that notes of the case were not taken, as from memory I am unable to detail his state from day to day; but suffice it to say that he progressed uninterruptedly towards recovery, and the rapidity with which granulation proceeded, after the first few days, was very astonishing.

On Oct. 13th I removed the last ligature, and by the end of the month the wound had completely healed. The dressings throughout were of the most simple nature, our chief object being to keep the wound as healthy as possible. Doubtless the good hygienic conditions by which he was surrounded, and his own cheerful and sanguine disposition, influenced very greatly his recovery.

The injury to the left arm subsequently proved to be very serious, the fracture being comminuted, and extending into the elbow-joint. Union is now taking place; but I fear there will always be more or less impairment of motion.

Our thanks are due to Mr. Langley for his kind assistance at the operation, and the man's wife deserves great praise for the very excellent way in which she carried out our instructions, and attending to him with all the care and judgment of an experienced nurse.

I remain, Sir, yours truly,
Fairford, November, 1875. H. W. FURNIVALL, M.R.C.S. Eng., &c.

HOSPITAL VENTILATION.

Fraser's Magazine for the current month contains an article on the "Ventilation of Hospitals," which, without adding anything to what is already known, or attempting to treat the subject elaborately and upon a scientific basis, will, nevertheless, do good by diffusing information about the principles and general facts of hospital ventilation among subscribers to these institutions. In dealing with his subject, the writer draws largely upon Mr. Erichsen's excellent lectures on Hospitalism, which first appeared in the pages of THE LANCET, and upon the works of Reid, Parkes, Guy, Wilson, and others, with those of Miss Nightingale and Miss Florence S. Lees.

Birkenhead.—Our correspondent should apply to Messrs. Churchill.

A WASHING MACHINE.

To the Editor of THE LANCET.

SIR,—I send you a short description of a washing machine, recently invented for the purpose of washing the "cotton-waste" used for machinery, but so well adapted for cleansing all kinds of infected clothing that I venture to think that it should find a place in every hospital, workhouse, and public disinfecting establishment. The principle is simple, and the work so well performed that even the cotton-waste—a substance hitherto almost uncleansable, except by a process destructive to the fabric—is so perfectly freed from oil and starchy matters that its quality is actually improved and rendered available for the finest work.

The machine is the invention of Mr. W. Kirton, of Nottingham, where it may be seen in daily operation. It consists of a strong cast-iron steam-tight case, in which revolves a wire cage to contain the articles to be washed. This cage is divided longitudinally into compartments by perforated partitions. Superheated steam, boiling water, or cold water can be introduced into the apparatus by pipes communicating with the interior through the hollow axis which rotates the cage. These pipes are so perforated that the steam or water is delivered upon every part of the fabric to be operated on. Thus, supposing the machine to be filled with sheets, blankets, or other articles, the lid is clamped down, and superheated steam is forced in from the engine boiler, afterwards hot water is introduced from the same source, and the steam being still admitted, the contents are well boiled, whilst the cage is made to revolve rapidly. By opening a stop-cock, the dirty water is drawn off (being completely expelled by the action of the steam), and cold water is introduced. The vacuum thus produced, together with the centrifugal action of the revolving cage, effectually rinses the clothing.

In the case of greasy materials, the inventor has prepared an ammoniacal soap, which he uses also for the purpose of washing ordinary household linen &c., and certainly the difference between specimens of articles washed by this machine and those "got up" by the washerwoman is most striking.

During a recent visit to Nottingham, Mr. Kirton showed me one of these machines, set up in an ordinary sized washhouse attached to his private residence. It was worked by a one-horse power steam-engine, and fully illustrated the practical advantages it possesses over the common appliances seen even in our best equipped hospital laundries.

This description is necessarily imperfect; but enough has been said to show the various adaptations to which the apparatus may be subjected for the purpose of disinfecting articles of clothing.

Yours sincerely,

Lincoln, November, 1875. G. M. LOWE, M.D.

Curious.—It is now very rarely bestowed, and, in fact, the practice has fallen into desuetude and almost into oblivion.

Mr. J. McInnes is thanked for his offer, which, however, we regret we cannot accept.

"GILEAH."

To the Editor of THE LANCET.

SIR,—In *The Times* of Tuesday last, under the heading "Tragedy on Board Ship," are reported the murderous actions of a seaman, named "Noan," while on a voyage from Hong-Kong to Bangkok. The explanation of these deeds is given by the captain as follows:—"The man Noan, by whom the tragedy was committed, was suffering from a disease known among the Malays and Siamese as 'gileah' or 'amocque.' It takes the form of ringworm, and is attended in *every* case by madness of more or less severity."

As everything contributing to enlightenment on the pathology of insanity is of importance, especially the somewhat vexed question of co-existence of skin disease with it, perhaps some of your readers who may have observed the disease in question may be able to give a description of it. It has not been my own fortune to meet with the association, although I have seen much of skin disease, including ringworm, among Eastern people.

I am, Sir, yours faithfully,
JAMES ADAMS, M.D.,
Medical Superintendent.

Metropolitan District Asylum, Caterham, Nov. 10th, 1875.

UNQUALIFIED PRACTICE AND QUALIFIED PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—As you say the case of "One whose Qualifications afford no Protection" is a very bad one, I think I can give you a case which equals it in many particulars.

One of the medical men in my neighbourhood habitually employs an unqualified assistant, who does almost all his parish work, vaccinates for a public appointment without his principal in many cases *seeing the children* at all, and to my knowledge attended five midwifery cases in one week. In many cases the assistant has attended long illnesses, and the patient has been seen once or twice by the principal before death, and the usual certificate given.

As your correspondent so justly remarks, the clubs (which are also greatly attended by the unqualified assistant) are ruled by the few, with whom the medical man is careful to keep on good terms, and attend well; whilst in many cases the others have to send twice or three times before being seen.

Certainly the profession cannot hope to be defended from quacks whilst the (in almost all cases) old members behave so shamefully themselves.

I remain, Sir, yours &c.,

November, 1875. ANOTHER WHO IS QUALIFIED.

"MEN OF THE WORLD" v. "SCIENTIFIC SPECIALISTS."

THE following passages from an article on the "Report of the Poor-law Board" in the last number of the *Saturday Review* deserve attention:—

> "There is so much indolence to be surmounted, there are so many private interests to be overridden, that there is not much chance that Parliament will take so unpopular a task in hand until something like an intelligent opinion can be created out of doors. The Reports of the Local Government Board Inspectors would supply the materials out of which this opinion would have to be constructed. They are laymen, and therefore not likely to take a purely medical view of the facts presented to them. Their estimate of the acts of the several sanitary authorities will be the estimate of *men of the world*, not of *scientific specialists*, and it will for that very reason be the better calculated to impress men of the world. If it were desired to raise the sanitary condition of the country to an ideal pitch of perfection, it would no doubt be expedient to go to the doctors for suggestions; but since all that we can at present aim at is to make that condition conform to common-sense rules, which are conceded in theory almost as universally as they are violated in practice, laymen answer the purpose better. Yet it is the Reports of the laymen that are carefully kept back from the public."

When a generally intelligent and well-informed dogmatist is so carried away by his prejudices that his dicta become ludicrous, it is sometimes sufficient for the purpose of recalling him to consciousness that his argument should be transformed into a *reductio ad absurdum*. May we be permitted to apply that treatment to the reasoning of the *Saturday Review?* The change of words required is singularly slight.

> "If it were desired to make the country perfectly healthy, it would no doubt be expedient to go to persons who have devoted their lives to the study of the causes, the prevention, and the cure of unhealthiness for suggestions; but since all that we can at present aim at is to make it moderately healthy, the advice of persons who have not made a special study of health or disease, and who are only 'men of the world,' will answer the purpose better."

The same method of reasoning might be applied to other matters. For example:—

> "If it were desired to produce an article likely to place the needs of the sanitary situation before the public with a fidelity wholly free from prejudice, and rising to a pitch of perfection, it would no doubt be desirable to go to somebody who understood the subject for suggestions; but since all that we can at present aim at is to give such a version of the case as shall magnify the pretensions of laymen and depreciate the services of the doctors, the assistance of a layman will, of course, answer the purpose better."

It is impossible not to perceive that the *Saturday Review* has hit on an excellent expedient to secure the end apparently in view.

A CAUTION.

To the Editor of THE LANCET.

SIR,—It is well that through the columns of your widely circulating journal the profession should learn of the latest novelty in pushing the notoriety of those unblushing pretenders who feed on the weakness and gullibility of suffering humanity, for which purpose you will kindly admit the following details, the veracity of which is guaranteed by the enclosure of the names of all the parties concerned, though it is not needed to publish them.

A lady, suffering from cancer, was ordered to —— for change, and desired to proceed by the easiest mode of conveyance. Her sister proceeded to the chief railway station to engage an invalid carriage, and saw the official in charge of such arrangements, who, although not prepared yet with slinging hammocks, promised to make the most comfortable disposition of the means at his command. Then requiring to know the nature of the disease of the sufferer for whom it was necessary to engage this mode of transit, and being told that it was for a lady affected with cancer, said, "Oh, we have a Swiss doctor here who cures cancers and consumptions. He cured one of our porters, who was turned out of the Consumption Hospital as incurable." The lady, on this recommendation, requested the address of this "Swiss doctor," and his services were obtained for her poor sister, it is idle to say, with the usual result of a large expenditure of money, a fearful increase of suffering, and, worst of all, the painful frustration of hopes buoyed up by cruel deceit and fraudulent misrepresentations.

Surely no railway board would sanction such an unwarrantable interference with passengers by their trains from any of their officials, and the public ought to be protected from imposition reaching them in such an insidious and dangerous form. That the "station master" was justified in seeking the knowledge of the malady, as to its nature, whether contagious or not, is true; but to require information for the purpose of pushing the services of any irregular practitioner of the healing art is too great a strain on the credulity of the age to impute the motive purely to benevolence.

I am, Sir, yours truly,

November, 1875. ARGUS.

Mr. Clement E. Priestley, (Ely.)—The medical officer of health has no privilege of entry under the circumstances stated, except by permission of the head of the family, and such permission does not exonerate him from the courtesies due to the medical man in attendance. In this case the medical officer of health should first have communicated with the medical attendant.

TREATMENT OF INCONTINENCE OF URINE.

To the Editor of THE LANCET.

SIR,—In THE LANCET for January 23rd, 1875, appeared a communication from me, requesting suggestions as to the treatment of a long-standing case of incontinence of urine. In reply to the numerous suggestions that were kindly offered through the medium of your journal, I beg to state that I treated the case with five-minim doses of tincture of belladonna three times a day, following out the suggestion of Dr. James Sawyer. The treatment was continued for six weeks, with very marked improvement, and at the present time the patient is almost entirely free from this very harassing complaint. The successful treatment of the case with belladonna is, I think, worthy to be noted, as cases of this kind are not unfrequent.

Very truly yours,

London, Nov. 11th, 1875. B.

The "Differential" Stethoscope.

To the Editor of The Lancet.

Sir,—I observed in the advertising columns of last week's Lancet Mr. Millikin's advertisement of a so-called "differential stethoscope." With reference to this advertisement, I beg to say that the instrument in question was one of my earliest and very imperfect attempts at the production of a biaural stethoscope with head-spring, and was obtained, as I have discovered to-day, by Mr. Millikin in May last from the instrument-maker who was working out my idea. Doubtless without any harm being intended by either of the parties concerned, this is an infringement of my invention of a head-spring stethoscope, at present being introduced by the Messrs. Arnold, of West Smithfield.

Trusting you will allow this letter to appear, along with the enclosed letter from Dr. Herbert Davies relative to the same subject,

I am, Sir, yours truly,
R. Harvey Hilliard, M.D.

Belgrave-terrace, Upper Holloway, N., Nov. 9th, 1875.

23, Finsbury-square, E.C., Nov. 9th, 1875.

Dear Dr. Hilliard,—You kindly gave me about two years ago a very convenient and ingenious double stethoscope, provided with a head-spring, which you had invented. As a similar instrument has lately appeared, I think it is only due to you that I should state the fact above mentioned.

Believe me, yours very truly,
Herbert Davies.

P.S.—You may, of course, make use of this note as you think fit.

Typhoid and Distemper.

To the Editor of The Lancet.

Sir,—The evidence presented by "H. H." respecting the connexion between "distemper" in the dog and typhoid in the human being tends to confirm an observation that I made eight or nine months ago.

I was attending a batch of typhoid cases of a severe type, to account for which I could not at first discover any cause; but a short time afterwards I was called to attend an eccentric woman (residing in the midst of the infected neighbourhood), also suffering from typhoid. She had in the house six or eight canine pets, all of which seemed to be suffering from some form of distemper. It occurred to me that this might be the source from which these typhoid patients were infected. I caused all the dogs to be destroyed, but unfortunately no post-mortem examination was made. No fresh cases in that vicinity have since come to my knowledge.

Manchester, Nov. 10th, 1875. C. L. Smithard, M.R.C.S. Eng.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Dr. G. Johnson, London; Prof. Maclean, Netley; Dr. C. Theodore Williams, London; Prof. Macleod, Glasgow; Mr. Garland, Yeovil; Mr. Chambers, Chester; Dr. B. Foster, Birmingham; Mr. Saunders, South Molton; Dr. King, Hull; Mr. Robinson, Dorchester; Mr. Mitchinson, London; Dr. Bond, Brinklow; Dr. Senftleben; Dr. Purvis, Mainhouse; Rev. J. A. Hatchard, St. Leonard's; Mr. Bell, Uppingham; Mr. Deschamps, London; Dr. Daly, Dalston; Mr. Layton, Islington; Dr. Mercer, Beverley; Dr. Carpenter, London; Mr. Smart, Brighton; Dr. Donald, Ceylon; Mr. Reed, Stafford; Mr. Hardman, Blackpool; Dr. Wilson, Greenock; Mr. Thompson, Spennymoor; Mr. Furnivall, Fairford; Dr. Gould, London; Mr. Thomas, London; Messrs. Edmondson and Co., Skipton; Mr. Harries, Plymouth; Mr. Banks, Liverpool; Mr. Phillips, London; Mr. Mackey, Edgbaston; Dr. Jonasson, Reykjavik, Iceland; Mr. Pines, London; Dr. Will, Aberdeen; Mr. Coates, Salisbury; Mr. Perks, Burton-on-Trent; Mr. Bromley, Hammersmith; Mr. Wollen, London; Mrs. Ross, London; Dr. Boenner, Berlin; Dr. Middleton, Manorhead; Dr. Pettigrew, Aberdeen; Mr. Hall, Bath; Mr. Young, Chatham; Mr. Harland, Folkestone; Dr. Lush, Weymouth; Mr. Ward, Darlington; Mr. R. Worth, Wingfield; Dr. Hilliard, Holloway; Mr. Fowler, London; Dr. Griffith, London; Dr. Morison, London; Mr. Graham, Rotherham; Mr. Pike, Gloucester; Mr. Furness, Carlisle; Mr. Roberts, London; Dr. Guenther, Dresden; Dr. Broom, Sheffield; Mr. Borchert, Netley; Mr. Thomson, London; Mr. Brooks, Odiham; Mr. Crofts, Burton-on-Trent; Mr. Fitness; Mr. W. Smithwick; Dr. Alexander, Bradford; Dr. Delves, Exeter; Mr. M'Innes, Wakefield; Mr. Pearce, Ipswich; Dr. Adams, Caterham; The Registrar-General of Edinburgh; Prolapsus; The Publisher of *Land and Water;* Qualified; A Poor Christian; G. R.; M. M.; Veritas; M.D.; M.R.C.S., Leeds; James; An Occasional Reader; J. S.; A Poor Surgeon; B.; &c. &c.

Letters, *each with enclosure,* are also acknowledged from — Mr. Wilders, Birmingham; Mr. Hartley, Cheltenham; Mr. Newberry, Maidstone; Mr. Robinson, Brighton; Mr. Ogden, Manchester; Mr. Savage, Swinefleet; Messrs. Leader and Sons, Sheffield; Dr. Grant, Longton; Dr. Tate, Woodbridge; Mr. Edwards, Shottisham; Mr. Smith, Manchester; Messrs. J. and H. Grace, Bristol; Dr. Thornley, Leicester; Mr. Harrison, Ellesmere; Mrs. Bakewell, Church Stretton; Mr. Brown, Tredegar; Mr. Miller, South Brent; Mr. Clark, Dalton-in-Furness; Mr. Cox, Manchester; Mr. Williams, Talgarth; Mr. Bedford, Amersham; Mr. Moore, London; Dr. Willmore, Romsey; Mr. H. Lyne, Newport; Mr. Williams, Llanrwst; Mr. Bink, Wakefield; Mr. Cole, Hatton; Medicus, Exeter; G. J. D.; Medicus, Hartlepool; Alpha, Kegworth; W. T., Oundle; Medicus, Sheffield; J. Y.; S. W. R.; A. B., Wakefield; Medicus, Newcastle-on-Tyne; Delta; M.R.C.S., Newcastle-on-Tyne; Nucleus, London; L.R.C.P. Lond.; A. D., Totnes; W. B. A.; G. Folkestone; A. B., London; P. P., Swansea; F. W., Dublin; R. W.; Medicus.

St. Leonard's News, Welshman, Newcastle Chronicle, Leeds Mercury, Birmingham Morning News, Marlborough Times, Western Morning News, Manchester Guardian, Medical Record, Dublin Evening Mail, Cork Constitution, Redruth Times, North British Daily Mail, Croydon Advertiser, and *Midland Counties Express* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

The Lancet Office, Nov. 11th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 5	29·90	S.W.	47	48	...	58	46	...	Foggy
" 6	29·04	W.	54	57	...	57	47	0·47	Raining
" 7	29·45	W.	45	48	...	59	44	...	Overcast
" 8	29·33	N.W.	38	40	...	47	35	0·35	Misty
" 9	29·50	W.	35	40	...	54	35	...	Foggy
" 10	28·64	N.W.	50	51	...	53	39	0·41	Raining
" 11	29·98	N.W.	43	44	...	50	40	0·47	Raining

Medical Diary for the ensuing Week.

Monday, Nov. 15.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Medical Society of London.—8½ p.m. The Discussion on the "Case of Excision of the Astragalus," shown by Mr. Watson on Monday last. — A paper by Dr. Drysdale: Subject, "For and against Animal Vaccination."

Tuesday, Nov. 16.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Pathological Society of London.—8½ p.m. The following Specimens will be exhibited:—Fractured Bones of Gorilla; Rickets in Pheasants; Distended Diverticula of Intestine; Pulmonary Embolism; Tubercle of Pancreas; Tumour of Jaw; Tubercular Lupus of Tongue; Fatty Tumour of Male Breast; Hydatid in Heart; Elio-sarcoma of Brain; Larynx after Tracheotomy; Dilatation of Bile Ducts; Aneurism of Aorta; Obliteration of Superior Cava; Ulceration of Duodenum; Congenital Malformation of Œsophagus; Syphilitic Growth of Cerebral Sinuses; Disease of Pulmonary and Tricuspid Valve; Hæmorrhagic Periostitis; Elioma of Brain; Fatty Tumour of Spinal Cord; Congenital Deficiency of Common Bile Duct; &c. &c.

Wednesday, Nov. 17.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1¼ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Thursday, Nov. 18.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Harveian Society.—8 p.m. Dr. J. E. Pollock, "On certain Varieties of Heart Disease with reference to Prognosis and Treatment."

Friday, Nov. 19.

St. George's Hospital.—Ophthalmic Operations, 1¼ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Saturday, Nov. 20.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

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Introductory Address
TO
A COURSE OF LECTURES
ON THE
PRINCIPLES AND PRACTICE OF SURGERY.

Delivered on the 5th of October, 1875,

BY THOMAS BRYANT, F.R.C.S.,
SURGEON TO, AND LECTURER ON SURGERY AT, GUY'S HOSPITAL.

GENTLEMEN,—It is with unfeigned pleasure that I to-day appear in this theatre as one of your lecturers on surgery, and, as a duty, have to unfold before you the scroll upon which has been written by the skilled hands of the master minds who have preceded me—many in this place—the principles and practice of the divine art of surgery.

I acknowledge with satisfaction that I am entirely indebted to this position, through the treasurer, to the kind action of my colleagues; and freely admit that this fact added no little to the pleasure I felt in accepting an honour that in itself amply satisfies my highest surgical ambition; for I know of no prouder position than that bestowed upon us by our fellow-workers. It is true that the pleasure and honour of the position are a little dulled by the responsibilities with which it is surrounded and the natural anxiety that I confess to feel as to my capabilities of doing adequate justice to so great a subject. But the kind reception you have just given me, and the confidence reposed in me by those whose confidence I value, will do much to lighten the load I have undertaken to bear, and to assure me that any shortcomings on my part in the mode of my teaching will by you be considerately dealt with, if I perform what I now undertake to do—to give you good advice as to the nature and treatment of such surgical subjects as it will be my privilege to bring before you.

In the delivery of these lectures I shall ever bear in mind that you have come here to learn how to practise your profession, and, as a consequence, I shall regard it as my duty to teach you how you ought to act under different emergencies—how you are to treat certain diseases; and in doing this it will be my aim to give you principles of practice rather than details—to point out to you the road you are to walk in rather than the manner in which you are to walk; for in our profession a knowledge of principles is the only sure and fruitful source of its progress, and the knowledge that a man can use is the only real knowledge that is available for its practice. I shall therefore suppress all inclination to enter with you into argumentative discussions or abstract questions, although I shall not forget to point out lines of thought with which you may profitably occupy your leisure hours, or upon which you may exercise your speculative and reasoning faculties; but I shall ask you to do this only when you have learnt what I shall hope to teach.

My teaching will consequently be as practical as I can make it—using the word practical in its fullest sense, rather than in its empirical; for I shall base it upon the scientific knowledge of our profession, upon the broad principles of general pathology,—the pathological aspect of disease being, however, subservient to the clinical, which has reference to the peculiarity or special constitution of the individual patient. For example, before I point out to you the special treatment of *wounds*, I shall first describe how repair takes place in the different tissues, and I shall do this in order that you may know how best to help natural processes, and how not to interfere with natural repair. In the treatment of *hæmorrhage*, before I describe the different means the surgeon has at his command for its control, I shall show you how by natural hæmostatics hæmorrhage is arrested; and I shall do this in order that you may understand the principles upon which your practice should be based, and that you may select the means that utilise to the utmost natural processes. In the treatment of *aneurisms*, before I go into the details that are so necessary for their cure, I shall show you how a natural cure may occur; for that surgeon will be most successful in his means who understands the most fully the physiological processes employed by Nature for this end, and is the best able to turn them to account. In the treatment of *dislocations*, before I describe to you the best methods for their reduction, I shall point out what it is that prevents the restoration of a displaced bone to its normal position, in order that you may recognise the sources of difficulty that you are likely to meet with in their treatment, and why it is that bones, when displaced, are not always readily reduced. In the treatment of *fracture*, I shall first show how repair takes place, and how it may be interfered with, in order that you may know how best to utilise the processes you want to encourage, and how to avoid what may retard or neutralise their action.

In short, before I tell you how you are to deal practically with, or treat, the different accidents to which the human body is exposed, I shall point out how you may best utilise natural processes for their repair, and how you may avoid interfering with them; for I would wish to impress upon you all, in this the very beginning of a course of lectures upon the Practice of Surgery, the wisdom of your accepting as a living and abiding principle of action, that should be with you in all cases and under all circumstances, and that should influence you in the treatment of all injuries and of most diseases—I mean "an unbounded faith in the restorative power of natural processes." I mean, however, no blind faith that is to lead you into a negative and idle practice—no faith that will support, even to the slightest degree, a do-nothing and blindly expectant course of treatment. But I mean a faith that is based upon a sound knowledge of the processes that Nature adopts in the repair of injuries, even the most severe—a faith that leads you to inquire so closely into the action of these natural processes as to teach you how you may best remove such obstacles as may interfere with their steady evolution—a faith that will teach you to use to the full the means you have at hand in natural processes for the repair of injuries, and that will prevent you from doing anything that is likely to interfere with their steady and beneficent action. For, gentlemen, in the treatment of all injuries, let the surgeon put aside altogether every idea of his being able to cure the wound; let him accept cheerfully and gratefully a more humble position, and look upon himself as Nature's handmaid; let him feel also that by so doing he is well fulfilling his high mission. Let him do what Nature unassisted cannot do—replace displaced parts, and by mechanical contrivances keep them in position. Let him remove all foreign bodies that must irritate, and take away all hindrances to natural repair, and so apply his dressings and regulate the surroundings of a case that no harmful influence can take effect. *Let him then leave the case alone*, guarding it with a watchful eye ever open to suggest the removal of what may interfere with natural repair, or the application of what may prove a help towards the attainment of the desired end. When absolute rest is one of the essential elements of success, let absolute rest be afforded, and when movement is called for, let such be enforced; for let the surgeon feel that in accidental surgery, when he has replaced injured parts as well as he can in the position in which they were before the injury, and by mechanical appliances has so fixed them that no movement or outside influence can readily interrupt the natural process of repair—when he has removed everything that is likely to interfere with the steady evolution of the process, he will understand in all its fulness *the evil of meddlesome practice, of meddlesome surgery*, and be ready to recognise the truth of the maxim I now wish to impress upon you, that under all circumstances and in the treatment of every case, even the most simple, the surgeon should, before he interferes, to use a legal phrase, show cause why he should do so; for I would have you bear in mind that every act in surgery, as in every-day life, should be based upon a principle and have a definite object; in the treatment of any surgical case, however simple, no step should be taken, no interference sanctioned, unless with the view of carrying out some reasonable scheme, or the attainment of some definite end, and unless such a view is before the surgeon I hold that it is his bounden duty under all circumstances to stay his hand, and stand by, and in an expectant state of mind to watch the progress of the case until the time for action has arrived. For if the surgeon be not sure that he can do good, let him be sure that he does no evil. If he is not clear that the time for action has arrived, let him be clear that the time for interference has not. Let him know that meddlesome surgery is as injurious as meddlesome midwifery, and meddlesome statesmanship, and let him learn, when disposed to interfere without a definite reason, from the great politician and captain who governed this country so wisely and so well, and ask himself the question—*Why cannot he leave the matter alone?* The onus of action must always rest upon the back of the surgeon. Let him see that he carries it with judgment, and let him know that in the practice of surgery, as in other things, a masterly inactivity is often a valuable policy; for to do nothing is often a wise treatment, and by knowing how to wait a great deal more is often effected than by interference. A policy of inaction may try a man's energy, and tax his power of self-restraint; its adoption may also demand as much thought as, and possibly more wisdom and effort, than the greatest activity. But true wisdom should teach us as much what not to do as what to do, and in the practice of surgery inaction is far better than action when to act means simply to err.

Let me, however, impress upon you the wisdom of acting decidedly and boldly when action is called for; let no vacillation spoil your practice; let no half measures be employed that carry out but in part the principle or practice you have been led to regard as the right one to follow, and never hesitate to carry out to the full the legitimate conclusions of your own unbiased judgment. In fact, as an honest man, give your whole mind to the case before you; weigh all its points, and estimate their value, and having *judiciously* come to a conclusion as to its nature and requirements, *judicially* proceed to carry out the decision of your own judgment: do this also with a wise boldness, with a courage tempered with the responsibility of your act.

Let me now turn to the subject of *operative surgery*, and see how far the remarks I have just made are applicable to it. Let me ask if faith in the restorative power of natural processes is still to be your guiding influence? and if, in the treatment of injuries and disease, the surgeon, before he acts, is always to show cause why he should interfere, such a rule of practice in operative surgery is still to be enforced? Let me inquire whether the evil influence of a meddlesome practice has diminished, or the soundness of a policy of inaction in certain circumstances lessened. And, lastly, let me ask if a wise caution in deciding on interference is of less moment, or a discreet boldness in action of less account? Gentlemen, I must tell you that all those principles of action when applied to operative surgery are to be read with double emphasis, and I must ask you to keep them before you as your guiding rules of practice; for, I can assure you, if they are of value in the non-operative development of practice, they are of infinitely greater value in the operative; and that unless you have them by you as guiding principles by which all your thoughts and acts are to be influenced, you will be too apt to fall into bad ways, and, as surgeons, fail to do justice to your patients and to yourselves, or to bring credit to your school. It is true, when a limb has been crushed or irreparably injured, when a part has been attacked by a disease which clinical experience has taught the surgeon to be incurable, that faith in Nature's restorative powers may be misplaced. But when art has stepped in and taken away what Nature unassisted is incompetent to deal with; when the surgeon, as Nature's handmaid, has given a helping hand to natural processes, and has taken away by artificial means what by natural means could neither be restored to usefulness nor cast off,—this faith in the restorative power of Nature may be practically relied upon; for the surgeon has only to adjust the parts that have been disturbed by his operation and to leave them alone, to protect them from external injury, and guard them against all outside influences that may interfere with the healing process. He has but to leave them to natural processes for repair, as in the simplest wound.

I must ask you, however, to bear in mind that, *in deciding upon the performance of an operation*, much thought and care are called for; and let me beg of you, as surgeons, always to feel that you do this under a heavy responsibility, for in the smallest operation there is a risk, and no risk to life should be run without a definite reason. Never look at the case from a purely surgical point of view, and be still more careful that you do not regard it from your own standpoint. Look at it from your patient's point of view alone, and simply ask yourself if it is to his interest and for his advantage that it should be undertaken. For example, you have a patient under your care with a certain disease, and if you regard this disease purely from a surgical point of view you may say at once that it would be a good case for such an operation, and as that poor professional thing—a mere operator—you may be tempted to do it. You regard the case from your own standpoint, and may be encouraged to interfere from the pleasure the performance of the operation may afford you, the benefit its performance may do you in the eyes of your neighbours, or the whip it may perhaps give you over a brother and possibly a rival practitioner. In the given case one or all of these influences may take effect, and urge you to interfere. You look upon the case from your patient's point of view, and may possibly see that the operation is not a necessity, and that, if *expedient*, it is so to a very limited degree; or in weighing the matter more closely, purely with your patient's interest at heart, you may decide that the operation is neither a necessity nor expedient; and, on still closer thought, you may come to the conclusion that if you were in your patient's position, with your knowledge of the case and all its risks, you would not have the operation performed. As a surgeon and a true man you will be influenced by these last considerations, you will decide against interference. The purely professional aspect of the case will be set aside with the purely personal. Your decision will be influenced by the necessities of the case as read in the light of your patient's interests, and that alone.

These arguments apply likewise with equal force *to the selection of the operation that is to be performed.* Your patient's good, and his alone, is to be considered. Let no fancy on your part for a certain operation tempt you to do more than the requirements of the case demand; let no personal preference for an operation influence your decision. Having decided that operative interference is called for, make it clear to your own mind what the necessities of the case demand, and having done this, so arrange your plans that you can carry them out in the simplest way and with the least risk to life. In short, do from necessity what the necessities of the case require, and do what you have to do in the simplest and safest way.

For example, if you have a case of stone in the bladder to deal with, it may be your duty to take it away, and if so, you are bound to do so by the simplest means and by the safest operation. If the accumulated experience of the profession tells you that the simplest and safest way is by a crushing operation, you are bound to do it if you have sufficient skill, and if you have not, you should pass the case over to another who has. And if by the same large experience you are told that a cutting operation is preferable, by the same principle it is your duty to see that it is carried out. No mere personal preference for, or personal success in, one or other of these operations ought to have the slightest influence upon you in guiding your decision; you are to consider your patient's interests, and his alone.

Again, you have a patient with disease of the foot involving some of the bones and smaller joints, and from the progress of the case it is clear that nature unassisted is incompetent to heal it. An operation is, therefore, called for, and you have to decide what that operation shall be. Is it to be one that is solely determined by the requirements of the case? Or is it to be one for which you personally have a fancy, or which your own limited experience—for all mere personal experience is comparatively limited—leads you to regard with favour? Gentlemen, you anticipate my answer, and know that I am about to tell you your decision should be influenced alone by the requirements of the case, and by nothing else. As a surgeon you are bound to take away the disease, but nothing more. You are neither to consider this operation nor that; no preference for a Hey's amputation, a Chopart's, a Pirogoff's, or a Syme's, is to have any weight with you. If by a Hey's amputation you can take away the disease, for the removal of which your interference is alone justifiable, no further sacrifice of parts should be entertained. If the disease be more extensive, and can only be removed by a Chopart's amputation, a Chopart's amputation is the one you ought to adopt. When nothing less than a Pirogoff's amputation will take away what requires removal, a Pirogoff's may be performed; and a Syme's amputation is only to be entertained when the disease is too extensive to permit of the Pirogoff's being carried out. And when none of these operations will effect what you want (the removal of the disease), an amputation above the ankle may be had recourse to, for, by the testimony of all surgeons, the major operation of amputation of the leg is alone justifiable when the minor operations upon the foot are inapplicable or have failed.

Gentlemen, this testimony against amputation is based upon a sound principle, and is universally admitted; and surely, by the unbiased or unprejudiced reason of all surgeons, the same arguments that apply to amputation of the leg should apply to each of the enumerated operations in their order of magnitude over the minor. The surgeon who would teach that amputation of a foot above the ankle should be performed for all diseases of the foot that require removal would rightly lay himself open to censure; but surely the surgeon who always performs a Syme's amputation when something far less serious would suffice—who shuts his eyes to the advantages of the minor operations, and consequently, from want of experience, fails to know them—is not quite free from blame. At any rate, gentlemen, do not you fall into such an error. Remember that, as surgeons, it is your duty to take away from the body only such parts as are irreparably injured or diseased, and nothing more; that in the surgery of the foot you are to do this by the minimum of interference; and that all the operations I have named in their order of severity are good when well applied.

From the surgery of the foot also learn the surgery of the body; or, rather, through the surgery of the foot learn the great principle that ought to influence you throughout all operative surgery. Learn to know that, as a duty, you are only to remove from the body what nature unassisted cannot cast off, and what, if left, will interfere with life or life's usefulness; and bear always in mind that you are to do this with the least risk to life, with the least sacrifice of parts, and with the least local disturbance.

When I tell you that the surgeon is always to operate with the least risk to life, you may think that I am repeating an axiom which needs no enforcement, and yet I would wish to bring the point before you if only to impress upon you the necessity of its observance; for as a surgeon I cannot honestly say that it is always acted upon with the closeness which it is due, nor with the strictness which the conviction of the sacredness of life ought to enforce. Gentlemen, as surgeons, always regard life as a sacred thing, and let it be your primary aim to preserve it or prolong it. When considering an operation this feeling should influence you much; indeed, without such a feeling no operation should be entertained. And let me add that it is a thought that will often simplify many of the questions that come before you; for if in any given case you have to select one of two operations, and by referring *to the experience of the profession* you find that one of the two operations you are considering is far more fatal in its effects than the other, the weight of evidence ought to go against it; at any rate the advantages to be gained by the more dangerous measure ought to be very great indeed to justify the surgeon in selecting it in preference to the one that has been shown by general experience to be the safer. For example, let me take a case of disease of the knee-joint in a young subject, say under twenty, and let me assume, for the sake of argument, that by the flux of time it has become clear that Nature, even when well and fully assisted by art, has proved herself incompetent to effect a cure by natural processes, and that the removal of the disease by some operative measure is called for. What is that operation to be? Is it to be excision or amputation? And I put this question to show you how necessary it is to consider the influence of age upon the results of an operation. To answer it you refer to the accumulated experience of many surgeons, not resting solely upon your own, and find that in amputation for chronic knee-joint disease in subjects under twenty, the mortality is not greater than 1 in 17 cases, and by a reference to the same general experience in excision, you find that it is at least 1 in 3½; the mortality of excision of the knee in young subjects being five times as great as that of amputation for chronic joint disease; or, in other words, we find that by amputation sixteen recoveries are to be secured with one death, whereas by excision the same number of recoveries can only be secured by five deaths, four lives being unnecessarily sacrificed to secure the advantages of excision to fifteen subjects. Now, let me ask you if the advantages afforded by the operation, even by the most successful cases of resection of the knee-joint, can in any way compensate for the unnecessary loss of so many human lives; and if the advantages of excision can possibly be so great as in any way to justify the surgeon in performing the operation as a rule of practice? With the sanctity of life prominently before me, and with the feeling that to save life is our highest duty, and to add to life's usefulness the next, I have no hesitation in saying that excision of the knee-joint, as a rule of practice in young patients, ought not to be adopted. That it is justifiable in exceptional cases in young life, and as a more common rule of practice in subjects of a greater age, is doubtless true; for by the same arguments that I have adduced against the operation in young subjects, the practice may be justified in the older in exceptional cases. But what I wish to illustrate by this question of operation is a principle: it is to show you that you are to consider the life of the patient before other things, and that in comparison with it all other points sink into insignificance. I confess, when a surgeon shows me with a smile of satisfaction a successful case of excision of the knee in a child or subject under twenty, I see behind that smile the ugly fact that, to gain one result in which he glories—if his experience has been extensive,—many inglorious results have taken place. I feel, also, that the success has been bought at too high a price, and that it ought not to be encouraged.

When I lose my judgment and become an enthusiast, when I look to my own experience alone and ignore the accumulated experience of others, pin my faith to a system which has to be established, and, in my enthusiasm for a theory, presume to talk about controlling natural processes and guaranteeing a successful termination to any operation I may have the will to undertake, I shall doubtless teach you other things; but with the calm light of the past illuminating the present, with a mind still open to receive the facts which the experience of those who have preceded me have given, and a judgment not yet clouded by any strong personal bias for or against any theory or any practice, I am urged by a sense of duty to bring prominently before you the principle upon which I have enlarged and illustrated, and beg you, before anything else, to let the main object of all your surgery be the saving of life; and next to the saving or prolonging of life let it be your aim to add to life's usefulness. But take care that you do not this at the expense of the higher object; take care that in attempting the minor object you do not fail in the major; take care that in your anxiety to add to life's usefulness you do not sacrifice the life itself.

When considering the advisability of an operation upon an aged subject, consider well these points. Think twice, and even thrice, about performing an operation that is not a necessity to save life—that is not called for urgently by the danger the presence of the disease produces, or by the distress that it causes. Hesitate about performing any operation of expediency upon such a subject. For example, if anyone, man or woman, has a simple fatty or other tumour, the presence of which affects life but distantly, or is merely a discomfort or an inconvenience, do not touch it; for if you do, you do so at a risk to life which the necessities of the case do not warrant, although in a younger subject surgical interference would be justifiable. You meet with an old man who has a stone in his bladder, and the stone, beyond giving rise to mild symptoms of its presence, does not render life distressing or unendurable, and you have to decide upon the treatment of the case. What are you to do? I will tell you what you are not to do, and that is you are not to risk the man's life; you are not to perform any operation upon him that does this to any extent; you are not to cut the patient by lithotomy, nor are you to attempt to crush the stone if many operations are likely to be required. You would be justified only in interfering if you find the stone small, and if, on carefully weighing probabilities, not more than three sittings will be required. You are not, however, to do this if the man has soft and fat textures. If there are any indications of visceral mischief, such as lung trouble, particularly bronchial, liver derangement, or last, but not least, renal trouble; you had better leave the case to nature, and relieve symptoms by the many ways your art suggests, than by any act of yours endanger life. If you are not sure, as I said at an early part of this lecture, of doing good, be sure that you do no harm. The patient may die, but take care that he does not do so at the surgeon's hands.

By the same argument you will hesitate about performing any operation, that is not an urgent necessity to save life, upon any subject who has exhausted his powers by drink, or who is either a drunkard or an habitual spirit-drinker. Hesitate also about interfering with any great eater. But above all things hesitate about performing any operation that is not a necessity upon the subject of Bright's disease.

Remember, also, that operative surgery, although an important part, is only a part of surgery; and recognise the fact that the higher duties of the surgeon are to be found outside the operative department and away from the operating table. But, at the same time, bear in mind, when the surgeon, through his higher faculties, comes to the conclusion that an operation is a necessity to save life, or is justifiable to prolong it or to render life more valuable, it is his bounden duty so to have educated his manual powers, so to have studied the mechanical part of his art and the necessities of the case he has to deal with, as to be able to carry out with all the skill of which the living matter he is dealing with is worthy the dictates of his own judgment; and let him be sure, if success does not crown his efforts, that failure can in no way be attributed to any want of ordinary skill, any want of care, or any want of preparation. For the ultimate result of an operation rests, without a shadow of doubt, upon the right execution of each step in it; and when each step has been efficiently performed the surgeon's duty has been fulfilled. But remember that a failure in any one of the steps of an operation, from the very beginning of the case up to the final dressing of the wound, as a rule, means failure in the whole, and that a want of attention to what might appear to be a trivial matter may spoil what would otherwise have been a brilliant success; for success in operative surgery rests as much upon the right execution of so-called small points as of the large, and that surgeon is the most successful who, with the main object of his operation in view, looks most into details. By the operating surgeon, nothing that tends towards success should be looked upon as trivial—nothing so small as to be beneath his notice.

Gentlemen, I must now close my lecture, and I will do so by asking you to carry away the principles I have attempted to enunciate, and to accept them as guides in your professional career. Ponder over them at your leisure, and so make them your own; take them into your minds and mentally digest them, so that they may become part and parcel of your nature, and find expression in the daily acts of your professional life. Bear in mind that all wounds—accidentally received or surgically produced—are healed by natural processes, and that all the surgeon can do in their treatment is to remove obstacles to natural repair, place wounded parts in the position in which natural repair is the best effected, and stimulate the process. Have unbounded faith in the restorative power of natural processes. Before you interfere in any case with things as you find them, always feel that the onus of interference rests with you, and that unless you can show good cause to your own mind why you should do so, you had better leave matters alone. Have a horror of meddlesome surgery, and a great respect for a do-nothing practice when no indications for doing, or for doing good, present themselves; but remember that by doing nothing judiciously you often do more good than by action, and that to know how to wait is a great power. When action is called for, act boldly and with decision, and let no vacillation spoil the practice your own honest judgment has pronounced to be right. Act in all things under a deep sense of the responsibility of your actions, and remember at all times that it is with a human life you are dealing.

In operative surgery let these feelings have their fullest influence, and in no case nor under any circumstances perform the simplest or the largest operation unadvisedly. Bear in mind that in the simplest operation there is a risk to life, and that under all circumstances that risk is to be recognised. Remember likewise that that risk is not to be run without a definite reason. Always recognise it yourselves, and see that it is made known to your patient or to his friends. Treat no operation as being absolutely free from danger, and never presume to guarantee any result.

In deciding upon the propriety of an operation, always regard it from your patient's point of view and in his interests, and on no account allow yourself to be influenced by any professional or personal bias.

In selecting the operation to be performed, choose the one that fulfils the most closely the objects you have in view—viz., the removal of the disease that demands removal with the least danger to life and the least sacrifice of parts. On no account let any personal preference for an operation, or personal success in it, induce you to deviate from this rule.

In fact, gentlemen, do to your patients what you would have done to you were you in their place, with your own knowledge and appreciation of the risks with which the proposed surgical act is surrounded; for your profession is a noble one. Be careful that no selfish ends be allowed to spoil the beauty of its objects. Let no professional prejudice or narrowness creep in to mar the thorough goodness of its results. Let your practice of surgery be based upon principles, and let your principles of surgery be based upon a higher one, and let that higher principle be no less a one than that which binds us all together as men—as Christian men; for, if we be surgeons, let us not forget that we are Christian men as well, and let our professional conduct be governed by the same influences that govern our conduct in daily life.

If the objects of the surgeon are high—and who is there that can deny it?—surely the principles upon which his acts are based should be high likewise. If the principles I have inculcated are high—and I admit they are,—let me remind you they are so only in order that they may help you onwards to fulfil manfully the noble objects for which you have entered at this hospital, and, as surgeons, to do something towards the relief of human suffering.

ON A FATAL CASE OF BLOOD-POISONING OF UNCERTAIN NATURE, PRESENTING SEVERAL UNUSUAL CHARACTERS.

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ASSISTANT-PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL; EXAMINER IN PRACTICE OF PHYSIC IN THE UNIVERSITY OF EDINBURGH.

THE case of which the following particulars are subjoined was one presenting several features of remarkable interest, and it therefore deserves publication. It seems, indeed, not an easy task, judging purely by its clinical characters, to place it in any clearly defined nosological category; but the nearest approach to such an attempt has been made in the title given above. Mr. Steele of Reigate, under whose immediate care the patient was, has kindly supplied to me the early history of the case.

X. Y., aged twenty-one, a slightly built, fair-haired gentleman, on the 26th September, 1875, began to complain of a noisy barking cough, and of some occasional spasmodic difficulty of swallowing. The day following he sought Mr. Steele's advice for these symptoms, and he further complained of some fulness about his neck. That gentleman at once detected an enlargement of the thyroid gland, and, finding no other physical signs, attributed the troubles described to that particular affection. Mr. Y. had never been robust, but had had no illness of any importance till four years previously, when he had a severe attack of typhoid fever. During the summer he had been somewhat overworked, and had not had sufficient holiday relaxation. The swelling was ordered to be painted with tincture of iodine, and a mixture was given containing three-grain doses of iodide of potassium in an ounce of infusion of gentian. Confinement indoors was also enjoined. It was noted that the action of the heart was somewhat feeble; pulse about 60; the skin was cool, and the appetite fairly good. The patient contrived to amuse himself in his room, and did not feel unwell. In the course of a few days the inspiration became gradually rather noisy, but was not difficult; and there was slight "brassy" cough, with the expectoration of a little grey mucus. The voice was also hoarse.

On the 10th of October I saw the case for the first time with Mr. Steele, and confirmed the above conditions. The thyroid body was then uniformly enlarged, symmetrical, hard, and firm. The finger could not be passed into the sternal notch. The lymphatic catena on the right side of the neck was enlarged, but not, or very slightly, upon the left side. There were no other enlarged lymphatic glands upon the body. The thyroid gland was only a little tender upon manipulation, and the integument over it was tense, cool, and non-adherent. The pulse was 60 per minute, regular, and the action of the heart was feeble. The tongue was a little furred, and a mawkish taste in the mornings was complained of. The bowels were comfortably relieved. The stomach was rather irritable, and there was a tendency to nausea. The chest was everywhere resonant on percussion, with the exception of some slight dulness under the manubrium of the sternum. The breath-sounds were modified generally by an apparently conducted tracheal note, but they were more shrill in the right suprascapular and infrascapular regions. The voice-sounds in these situations were also louder and more bronchial than on the left side.

Two small flattened tumours were found on the abdomen on the left anterior lumbar region, dusky-grey in hue, rounded and well-defined. They were tender when pinched up, and were distinctly in the integument. These had been observed for about ten days. The legs were natural in all respects. The spleen was not at all enlarged, and the liver was of normal dimensions. There had been a little soreness of throat and œdema of the uvula, and painting with equal parts of tincture of perchloride of iron and glycerine had been practised for relief of this. The urine was natural in quantity and appearance. The patient got up each day, and changed his room. No dysphagia, or very little, was complained of, but there was some irritability of stomach, and also occasional tendency to faintness and retching.

It was decided to increase the iodide of potassium to five grains for a dose, and to give as much of the carbonate of ammonia with it in infusion of gentian. The thyroid swelling was still painted with tincture of iodine.

On the 13th October there was no marked change, but some coryza had occurred, and the iodide was evidently ill-borne. About this time paroxysms of pain were complained of, issuing from the right side of the seventh cervical vertebra and shooting into the front of the right shoulder. At times these attacks were very severe. Opiates were given every four hours for the relief of this pain, and with some benefit. The nights were bad and the attacks of pain and retching were more frequent at night. The ointment of biniodide of mercury was now rubbed into the thyroid swelling. One application of this, however, caused vesication, and no more was employed. The breathing continued noisy, and at times there were short paroxysms of dyspnœa together with the attacks of pain and retching, requiring semi-erect posture in bed. The cervical glands continued to enlarge a little. During the two following days no decided change occurred. The pain still proved very annoying, and persisted in the same situation, and the faintness and retching continued. Usually a little bilious mucus was brought up. About the 15th October it was distinctly to be observed that the swelling of the thyroid gland was diminished and the whole organ was softer and less tense than before, perhaps even softer than a healthy gland, but the enlargement remained of symmetrical character, and there were still signs of tracheal and bronchial pressure as before. Some grey pearly masses of mucus were brought up after coughing, but the cough was not at all urgent. On the 17th October the pulse was 60, feeble; temperature normal; urine natural in appearance and void of albumen. The blood was examined microscopically, and the proportion of white cells was found to be normal, the red globules forming healthy rouleaux. The same dulness, and no more, was found at the manubrium on percussion, the resonance being good elsewhere over the chest. Air entered well into both lungs, but the respiration was markedly shrill and tubular, both in front and behind on the right side, less so on the left. The voice had a bleating character to bystanders, and on auscultation was bronchophonic over the upper half of right side. The thyroid body remained in about the same condition as when last noted—viz., uniformly enlarged, elastic, and symmetrical. The pain persisted in precisely the same situation. The patient directed attention on this day to some swellings upon his head, and on examination two firm node-like tumours were found upon the left parietal region, and two more upon the upper frontal region. These were situated in the pericranium, were only a little tender on pressure, but did not ache otherwise, and never at night. They had been noticed about a week previously by the patient himself, but he had not mentioned them.

Mr. Savory was invited to the consultation on the evening of this day, and he made a minute examination of the patient. It was decided to give quinine in three-grain doses every four hours, and to push the nourishment and wine more vigorously.

On the 18th October dorsal decubitus was no longer possible. The pulse was 72; respiration 14 in the minute, and noisy. The tongue was covered all over with a thick dirty-white fur. No material wasting was observable. The quinine was well borne. A bad night ensued. On the 19th, at 9.30 A.M., the pulse had risen to 90, was soft, but of fair volume. Respiration 20 in the minute. No fresh glandular enlargements to be felt. The spleen was natural as to size. Air entered both lungs well; breath-sounds very shrill. Tongue still more coated, and senses of smell and taste lost. The nares were dry, and inspiration through them impossible, though expiration could be managed. The attacks of pain became more frequent and severe, the sensation being compared to a feeling of dislocation. Some whiffs of chloroform were inhaled with slight relief to the paroxysms of dyspnœa. At 6 P.M. the pulse was 88; temperature 98·4° in axilla, 98·6° under the tongue. Two glands in the left groin had become enlarged and painful during the day, and the axillary glands were also somewhat enlarged. Strong beef-tea, eggs, and port wine were given as freely as possible. The quinine was increased to four grains and a half, with fifteen minims of tincture of perchloride of iron added to each dose. The pain now recurred at shorter intervals with increased severity, and was scarcely relieved by anodyne and hot fomentations. At midnight fifteen grains of chloral hydrate were given. Oct. 20th, at 1 A.M., a severe paroxysm of dyspnœa occurred, accompanied with retching. The respiration was very noisy (roaring) and rapid, like that of severe spasmodic asthma, and the distress increased. The shoulders were supported, fanning was employed, and some chloroform was given to inhale. Stimulants were also administered. No relief was afforded. The lips became more and more dusky, and the arms were thrown about wildly. Respiration ceased almost suddenly. Silvester's method of artificial respiration was practised for about fifteen minutes, and brandy was injected into the rectum. All efforts were in vain.

No post-mortem examination was obtained.

Remarks.—The illness just described lasted in all about four weeks. The family history afforded no clue whatever to the nature of it. The patient resided in a healthy country district, and had been, so far as was known, exposed to no insanitary or malarious influences. The earliest symptoms were, perhaps, referable to some irritation of the pulmonary branches of the vagi nerves. A condition of low health and feebleness had been reached for some time previously. The first coarse nutritional derangement to be recognised was a hard but uniform enlargement of the thyroid gland; and for some time most of the symptoms appeared to be due to this as a source of mechanical disturbance. Thus the altered respiratory sounds and voice and the peculiar cough seemed to be accounted for. This enlargement gradually progressed, and the cervical lymphatic system likewise became involved. These changes, however, could not be set down to any form of inflammatory growth, neither were there any indications of their being dependent upon tubercular, syphilitic, or cancerous cachexia; for the conditions present, and the history obtained, negatived all these hypotheses. Together with the involvement of the lymphatic glands, certain changes occurred in the integument over the abdominal wall and in the pericranium; and the physical signs in the chest afforded strong presumptive evidence of enlargement of the bronchial glands. At no period was there any splenic enlargement, and throughout the case there was absence of pyrexia. The blood also presented no signs of leukæmia.

Death by apnœa evidently ensued upon mechanical irritation of the pneumogastric nerves. The final paroxysm of dyspnœa, like those which preceded it, was accompanied by simultaneous retching and partial syncope.

In the absence of an autopsy, the primary cause underlying these processes has to be sought. To anticipate a view which might perhaps plausibly be held after a consideration of the facts of the case—viz., that the symptoms betokened the presence of a malignant tumour of the anterior mediastinum or of the thyroid body itself,—the fact may here be restated, that the latter organ became soft and yielding towards the termination of the case, and at no period presented any unevenness or evidence of involving other adjacent structures. Such conditions seem to be quite incompatible with the rapid spread of a malignant growth into or around the texture of this gland.[*]

No more reasonable explanation offered itself than that which was adopted—viz., that, owing to some peculiar form of blood-poison, the lymphatic system, in a large measure, including the thyroid gland as a part of it, became involved, and, by mechanical interference with certain nerves, gave rise to the varied symptoms which occurred, and which eventually caused death at a somewhat early period in the case. The integumentary and pericranial tumours may likewise be referred to the same cause.

It should be noted that the paroxysms of dyspnœa were not due to uncomplicated laryngeal spasm. There was never present pure stridor of laryngeal quality, and although it is not possible to aver that there was no such element in the dyspnœa, the characters of the respiratory trouble indicated the existence either of bronchial obstruction due to spasm, or, more probably, of spasm mixed with and dependent upon direct pressure from enlarged bronchial glands. Hence there never was any likelihood of affording even temporary relief by tracheotomy, for the obstruction was manifestly intrathoracic and beyond reach, and, further, the mechanical tension at one period exercised by the enlarged thyroid body had ceased to exist for some days before death. Had the thyroid gland continued to enlarge, and cause increased local pressure, an incision into the mesial line to relieve this might have been indicated. Direct compression by the gland upon the recurrent laryngeal nerves could hardly have proved more urgent towards the end of the case, but these branches may have been, and probably were, pressed upon by enlarged intrathoracic glands. The pain was, no doubt, of neuralgic nature, and due to pressure of glands upon a part of the brachial plexus.

Neither iodide of potassium nor quinine appeared to exert any beneficial influence upon the morbid process, and medical art was powerless to avert the bitter and untimely end of this remarkable and most distressing case.

Grafton-street, W.

CASE OF

ANEURISM OF THE ARCH OF THE AORTA;

OBSCURITY OF THE SYMPTOMS;
DEATH FROM RUPTURE INTO THE PERICARDIUM.

By HENRY BRIETZCKE, F.R.C.S.,
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The following case is so instructive, and resembles so closely a case reported in The Lancet of October 16th, by Dr. Frederick Robinson, that I venture to forward the notes for publication.

Corporal J. C——, aged thirty-one, a tall, muscular, well-built man, was received into the Military division of Millbank Prison on Sept. 22nd, 1875, under sentence of eighty-four days' imprisonment with hard labour, for deserting from the army in 1870. On admission he underwent the usual medical examination; he then stated that he was not feeling well, and was troubled with shortness of breath and a heavy cough. The following notes were taken:—

Present condition.—Unhealthy aspect; cicatrices of old abscesses on different parts of the body; badly nourished. Right lung: Posteriorly, puerile rough breathing; dulness on percussion and bronchophony in right interscapular region; absolute dulness on percussion in sternal half of subclavicular region and pectoriloquy at extreme apex; heart-sounds feeble and indistinct; laryngeal cough; no pulsation, thrill, bulging, or murmur over area of dulness; no abnormal sounds over vertebral column. Under these circumstances he was admitted into hospital.

History.—States that he first began to be ill in February, 1875, at New York; he got wet, and had a wheezing in his chest. In July he began to be very short of breath, and then consulted several doctors; he was told he had "bronchitis and asthma, with a tendency to consumption." His voice became hoarse in August while on his way to England. He has felt uneasiness in the left side of the chest for some time, but only when lying down; for the last four months he has been obliged to lie on his right side, as he felt "smothered" if he rested on the other.

Sept. 28th.—Ordered a mixture of dilute sulphuric acid with digitalis. Not so well. Temperature 101·2°; pulse 132. Has had a rigor, followed by febrile symptoms. Had a bad night; tongue furred. Vomited two or three times; this, he says, is caused by efforts to cough up phlegm which he feels in his throat. No expectoration to speak of. Breathing slightly quickened and of a laryngeal description; he cannot lie on his left side. On being questioned, he states that he has a slight difficulty in swallowing solids, that the bolus of food appears to lodge in the gullet somewhere towards the left side in front, and that he is obliged to take fluid to wash down every mouthful; this, he says, has lasted for two or three months. Notwithstanding this statement, he took a good dinner of meat and potatoes the day after admission, and was not unusually long over it. Never had hæmoptysis; no hereditary history of phthisis; no history of injury or strain.

30th.—9 P.M.: Pulse 120; respiration 33. Laryngeal breathing; and hard, paroxysmal, hoarse cough. The respiratory murmur is very deficient all over the left lung; in fact, very little air appears to enter, although there is no dulness on percussion or sign of consolidation. No pulsation in episternal notch; no bruit; no difference in the two radials; no pain in the back or chest. Ordered vapour of conium; and to have five minims of dilute hydrocyanic acid, twelve minims of spirit of chloroform, fifteen minims of ethereal tincture of lobelia, and one drachm of compound tincture of cardamoms, in water to an ounce and a half, every six hours.

Oct. 2nd.—9.45 A.M.: Pulse 120, full; tongue very foul; temperature 100·6°. Has had no sleep. Yesterday there was slight purulent expectoration. States that his breathing is relieved by the conium vapour. Excessive resonance on percussion over the left lung, deficient respiratory murmur, rhonchus; over the root of the lung, in the interscapular region, the breathing is extremely loud and bronchial, and the voice resounds through the stethoscope; but this is also to be found to some extent on the right side.

3rd.—11 A.M.: Face flushed and slightly dusky; orthopnœa on being raised up; pulse 140; temperature 102°.—1 P.M.: On carefully examining the chest, in consultation with Mr. Gover, the senior medical officer, we find absolute dulness on percussion in the right subclavicular region, with a sense of resistance to the finger, and this extends towards the sternum, especially over the second and third costal cartilages and corresponding intercostal space close to the sternum. In the right lung there is distinct vesicular murmur, and resonance on percussion; in the suprascapular region the breathing is loud and rough. During respiration the left chest scarcely rises at all; the right expands well. There is absence of respiratory murmur on the left side, and excessive resonance on percussion. Over the left interscapular region the breathing is loud and blowing. The lower intercostals on both sides fall in during respiration, and the diaphragm does not act well. No increased cardiac dulness; no pulsation or murmur. In the absence of indications of laryngeal disease, as well as of the symptoms characteristic of aneurism, we diagnosed a solid tumour, cancerous or glandular, compressing the left bronchus and irritating the left recurrent nerve.

4th.—10 A.M.: Pulse 128; bad night; cough troublesome; expectoration bronchitic and slightly purulent. Temperature 100·2°; face flushed, nostrils dilating; laryngeal breathing and cough.—5.15 P.M.: Severe attack of spasmodic breathing; duskiness of face and partial insensibility. These symptoms passed off on raising him in the bed, and his breathing became more natural.

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[*] My colleague, Dr. Andrew, has reminded me of the opinion held by the late Dr. Southey Warter, of St. Bartholomew's Hospital, that cancerous growths often progress without exciting any pyrexia; and, so far, in this case this observation might have lent support to the view of malignant disease, but for other and weightier reasons this supposition could not be entertained. See also Wunderlich on Temperature.

5th.—10 A.M.: Reported to have had a second severe attack of orthopnœa in the night; is now slightly easier; pulse 125; temperature normal. Took his breakfast; has expectorated some pure pus unmixed with air-bubbles; lies on his right side; rapid emaciation since admission; pupils normal. On listening over the centre of manubrium a loud amphoric sound is audible, resembling air passing through a narrow tube; second sound of heart sharp and flapping. To have ethereal tincture of lobelia, 160 minims; iodide of potassium, eighty grains; camphor water to eight ounces: one ounce every four hours.—9 P.M.: Pulse 120; temperature 99°. At 2 A.M., while sitting up in bed, he suddenly called out "Jack!" to a fellow-prisoner, fell backwards, and expired.

Autopsy, eighteen hours after death. — Rigor mortis; body rather thin, but strong frame. On removing the sternum, a tumour was visible, projecting forwards slightly to the right of the median line, and occupying a position opposite the first, second, and third ribs; it was not adherent to the sternum, and there was no sign of erosion. Right lung adherent to the walls of the chest; left lung free. On opening the pericardium, a large quantity of clotted blood was found. The left vena innominata was pushed forwards in front of the tumour; the right occupied its normal position. The innominate artery arose from the upper and anterior part of the tumour, was pushed over to the left side, crossed the trachea obliquely, and immediately divided into carotid and subclavian. The left subclavian and carotid were somewhat pushed forwards and slightly elongated, but soon assumed their normal position. About half an inch below the part where the pericardium is reflected from the aorta and pulmonary artery, and to the right and somewhat behind the ascending part of the arch, was a small triangular opening, containing a clot of fibrine, where the tumour had given way. The ascending aorta and pulmonary artery were incorporated by a thickening of the visceral pericardium. The right division of the pulmonary artery passed behind the tumour, and was somewhat encroached upon. On opening the tumour, it was found to consist of a large sac, commencing at the termination of the ascending aorta, and involving the whole of the transverse part of the arch. The posterior wall was filled by a dense mass of laminated fibrine, firmly adherent and an inch thick. The ascending aorta contained no fibrine, but was dilated, and a pouch existed on the right side, immediately above the valve—apparently a dilatation of the corresponding sinus of Valsalva. The channel of the blood was in front, and the vessels arising from the transverse part of the arch were pervious, the deposit of fibrine being just posterior to their orifices. The thoracic aorta was thickened and atheromatous. The part where the tumour had given way contained no laminated deposit, being very thin, and directly in the current of the blood. With some difficulty the whole of the laminated fibrine was removed; and it was then discovered to be a true aneurism, all the coats of the vessel being intact. On removing the viscera of the chest, and dissecting from behind, the œsophagus was found to be flattened by the tumour, which was about the size of a small cocoanut. The left bronchus was much compressed; the right was free. There was also some pressure upon the bifurcation of the trachea. The left recurrent laryngeal nerve was involved in the tumour, or, rather, was compressed between it and the structures occupying the concavity of the aortic arch; it then passed up along the posterior surface. The trunk of the right pneumogastric passed down upon the posterior surface of the tumour. There were no signs of pressure upon the vertebræ.—Heart: Pulmonary valves healthy; right ventricle thin and rather dilated; left ventricle normal; aortic and mitral valves competent, the former a little rough. The muscular tissue was firm and normal under the microscope.—Lungs: The upper lobe of the left lung was bloodless, pale, and emphysematous; the lower lobe congested. Pus escaped from the cut bronchial tubes; slight roughness of the pleura at the base from old pleurisy. The right lung was crepitant and engorged. No emphysema, except at the anterior border of the middle lobe; no bronchitis. The liver, spleen, and kidneys were healthy.

For the following remarks I am indebted to Mr. Gover, the senior medical officer:—

In this case the symptoms and signs were those, not of an aneurism, but of an intrathoracic tumour, the result of nature's attempt at a cure. The case proves that a healthy condition of the heart is compatible with the near neighbourhood of a vast aneurism, and in this respect it tends to support the views of Hayden, Corrigan, and Stokes. The posterior direction of the aneurism explained the entire absence of thrill, pulsation, and murmur; but the absence of pain due to pressure on sentient nerves is not so easily accounted for. Dr. Hayden, in his learned and elaborate work on "Diseases of the Heart and of the Aorta," calls attention to the importance of a double sound over a limited portion of the vertebral column as in the highest degree suggestive of aneurism; but even this sign was absent, although the aneurism tended posteriorly. The obstruction of the left bronchus was nearly if not quite complete, and this forms an instructive and unusual feature in the case. Dr. Hayden considers that defective expansion of one side of the chest is not of much diagnostic value, and Dr. Stokes states that he has never met with an example of complete occlusion of a bronchus by the pressure of an aneurism. And yet it is certain that cases of aneurism occasionally occur in which the symptoms are, at first, limited to those produced by pressure upon the trachea or bronchi. In this instance the occasional laryngeal spasm and the absence of respiration on the left side allowed of an approximate diagnosis as to the seat of the disease, but its nature was left an open question. In estimating the difficulties of diagnosis, it must be remembered that only a few days before death this man had been received as being fit for imprisonment with hard labour. When examined, shortly after his arrival, the physical signs were those of compression of the trachea or bronchi, with high-pitched dulness over an area which was certainly suspicious. It was only towards the last that symptoms of laryngeal spasm were added to those of compression; and this, as pointed out by Dr. Hayden, is the usual order of events.

NOTES OF A CASE OF EMPYEMA.

By REGINALD G. ALEXANDER, B.A., M.B.,
PHYSICIAN TO THE BRADFORD INFIRMARY.

The following fatal case presents some interesting features in consequence of the destructive ulceration which took place soon after paracentesis thoracis had been performed, and which destroyed, in several parts of the chest, the intercostal muscles, the pleura costalis, and skin, leaving large holes through which three fingers could easily be passed and the thoracic viscera reached and touched. This state of things lasted for more than a month, with much less constitutional disturbance than might have been expected.

The patient, M. N——, came to consult me in March, 1872, after an illness of six weeks, during which he had complained of anorexia, cough, night-sweats, and loss of flesh. He spoke in a hoarse whisper, and had, in fact, all the symptoms of laryngeal phthisis; but under appropriate treatment (chiefly directed towards improving the general health) he recovered, gained many pounds in weight, declared himself quite well, and continued so until the 18th of December, when, after exposure to cold, he awoke in the night with acute pain in the left side, rigors, and dyspnœa so severe as to prevent him from calling his friends. Unfortunately he did not at first call in his medical attendant, and he only came under my notice on Jan. 11th, 1873, when he complained of pain in the left side and dyspnœa. The left side measured an inch and a half more than the right; the whole lung was dull upon percussion, and there was total absence of respiratory murmur throughout its whole extent. Temperature 101°; pulse 106. Linseed-meal poultices ordered, and a saline diaphoretic with compound tincture of camphor, from which great relief was obtained; but paracentesis thoracis could not be performed as the patient lived in an out of the way district.

Jan. 19th.—A sudden accession of pain with rigors came on (the symptoms pointing to the formation of pus within the cavity), and distinct fluctuation being felt at a spot two inches to the left of the left nipple and four inches below it, a trocar was introduced (the opening being made valvular), and three pints of pus were discharged, without causing the least faintness, dyspnœa, or other bad symptom. The temperature at the time of operation was 101°, pulse 120, and very feeble. A large quantity of pus was discharged into poultices, and objection was raised to washing out the pleural cavity. Iodide of potassium, quinine pills, and cod-liver oil were ordered. The appetite of the patient and his general condition improved considerably; the cough was slight, with mucous expectoration.

Feb. 2nd.—The patient declared himself better, and could lie on the right side; slight cough; appetite good; temperature 101·2°; pulse 130.

9th.—The discharge continued; patient weak, but appetite good; temperature 102°; pulse 130. The discharge became very offensive, and an ulcerative process commenced, which destroyed the pleura costalis, intercostal muscles, and skin, progressing from within outwards, and ultimately producing several large holes on the anterior surface of the left side of the chest, through which the finger could be easily passed.

March 3rd.—The ulceration advanced; the right leg became œdematous and an enormous size. Ordered warm sponging, a diuretic mixture, and the raised position for the leg.

16th.—The œdema of the leg disappeared entirely; temperature 101°; pulse 130, very feeble and sharp. Ordered wine, milk, eggs, all of which the patient took well.

30th.—Aphthæ in the mouth. Ordered the glycerine of borax, and an acid mixture of dilute nitro-hydrochloric acid with tincture of nux vomica three times a day.

April 3rd.—Aphthæ gone; temperature and pulse high; the holes in the chest-wall increased in size; three fingers could easily be passed into the thorax and the viscera touched. The pus had a gangrenous smell, but the breath was untainted.

7th.—Ulceration extended; *the ribs left bare*, and the cartilages exposed to view; *the lung plainly visible*. The patient ate and slept well, and declared that "but for the holes in his chest" he would soon be well. He began to spit pus. Temperature 102°; pulse 130.

10th.—The tissue-destruction increased; appetite good, but the patient began to despair of recovery.

11th.—Became suddenly worse; intense pain in both sides of the chest and abdomen; possibly perforation of the diaphragm. He died after twelve hours' great suffering. No post-mortem examination could be obtained.

Remarks.—The patient had always a bad aspect, but apparently a strong constitution, and it was a matter for regret that objection was raised to the introduction of a drainage-tube and the frequent washing of the pleural cavity with warm water containing Condy's fluid, &c., which might have prevented the gangrenous ulceration and caused the case to terminate favourably, as in two instances which have subsequently come under my notice. It is curious, however, to note how long a person can live in the sad condition to which this young man was reduced, and the practical deductions to be derived are—1. That there is little risk to the life of the patient, and small amount of discomfort experienced by him, in the operation of paracentesis thoracis, even when performed by a simple trocar and canula in place of the aspirator, and at a point of the chest by no means the seat of election. 2. That the danger of the free admission of air into the pleural cavity has been overrated in its *rapid evil effects* upon the vital powers.

Bradford.

EXCISION OF THE ELBOW-JOINT.

By WALTER RIVINGTON, M.S. Lond., F.R.C.S. Eng.,
SURGEON TO THE LONDON HOSPITAL.

The excellent results obtained by Mr. Maunder by the method of operating which he recommends are no doubt correctly attributed by him to preservation of the natural relations of the triceps to the fascia of the forearm and anconeus muscle. The first surgeon who pointed out the advisability of avoiding transverse incisions across the triceps and the fascia appears to have been Dr. R. Hodges, of America, as stated by Mr. Bryant in his work on the Practice of Surgery, and this was some years previously to the inculcation of the same doctrine by my colleague Mr. Maunder. In mentioning this fact I have not the least desire to detract in any way from the credit justly due to Mr. Maunder, for it is probable that but for the greater prominence which he has given to the improvement it might have been confined to a small circle of operators. I think, however, that Dr. Hodges's claim should not pass without some recognition. Other surgeons, too, who have been in the habit of adopting the method of excision of the elbow by a single straight incision through the triceps and fascia down to the bone, have, consciously or unconsciously, retained the relations of the triceps and the fascia, together with the anconeus. In point of fact, the relations could not well be disturbed. It is only where a H- or ⊣-shaped incision is adopted that this can happen. Even with these methods very good results may be obtained in some cases.

In January, 1872, I operated on a smith, fifty-four years of age, for rheumatoid disease of the left elbow-joint, attended with great infiltration of the tissues of the arm and forearm. The parts were so brawny, thick, and inelastic, at the time of operation, that I was obliged to make a transverse incision through the fascia and triceps on the outside in order to obtain access to the bones. The ultimate result was all that could be desired. The patient could have knocked anyone down by the action of the triceps alone. He was unfortunately nearly blind, and could not follow his occupation. For three years he remained perfectly well. In the spring of the present year he injured the arm, and an attack of inflammation ensued, with formation of an abscess over the new joint. A small sinus at present exists, and the arm is weakened, but the power of extension remains.

In another case, occurring in 1871, in which I had operated by the straight incision, without knowing the particulars of Mr. Maunder's method, the persistence of a sinus after operation led me ultimately to divide the ligamentous union of the bones, with the triceps and fascia, transversely. The sinus closed by granulation, the bones, triceps, and fascia reunited, and the lad had a perfect arm. The case was one of synovial disease of long standing, and the triceps was atrophied before operation. Not many months ago I met the boy in the street, where he demonstrated flexion, extension, pronation, and supination to me, and stated that the limb was in every way as good as its fellow.

I mention these cases (which were shown to the Hunterian Society) to prove that, although it may be better to adopt the straight incision with the precautions insisted on by Mr. Maunder, yet equally good results are obtainable even when the triceps and fascia have been subjected to an additional transverse incision. In only one case have I employed the H-shaped incision. The triceps was atrophied, there were several sinuses, and the patient was so unhealthy that I advised amputation; but as the friends would not consent to the removal of the limb, I practised excision. The ultimate result I do not know, as the patient was sent to the seaside, and I have not seen her since. Under any circumstances, the wasted state of the triceps, which was of a pale yellow colour, would have probably precluded the restoration of extending power. Mr. Maunder was fortunate in meeting with a patient suffering from accident, and not from disease, and therefore with a triceps in a perfect state of efficiency. He was also fortunate in meeting with a patient capable of winning a billiard match. Had either of my patients been similarly gifted, he would have been equal to the occasion. Nevertheless, I fully admit the value of Mr. Maunder's demonstration of the *rationale* of the straight incision, and believe that the straight incision should be practised wherever it is possible to do so.

Finsbury-square.

West Kent Medico-Chirurgical Society.—The second meeting of the session was held at the Royal Kent Dispensary, Greenwich-road, on Friday, November 5th, Dr. J. N. Miller, president, in the chair. Dr. J. Braxton Hicks brought forward some cases illustrating the effects of large doses of quinine in some cases of puerperal fever. The next meeting will be held on Friday, December 3rd, at 8 p.m. precisely, when Dr. Tilbury Fox will read a paper.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

COMPOUND DEPRESSED FRACTURE OF SKULL; PARALYSIS OF RIGHT ARM ON SIXTH DAY AFTER RECEIPT OF INJURY; ELEVATION OF DEPRESSED PORTION OF BONE; RECOVERY WITH USEFUL ARM.

(Under the care of Mr. THOMAS SMITH.)

THE following case, for the notes of which we are indebted to Mr. Edward Milner, surgical registrar, illustrates some of the difficulties that occasionally present themselves during the treatment of depressed fracture of the skull in children without primary compression. The majority of the best authorities agree that in any case of depressed fracture of the skull, but especially when it occurs in children, the proper course to pursue is not to interfere with the depressed portion of bone if there be no symptoms of compression. It will be observed that in the subjoined case the symptoms of compression did not show themselves until the sixth day after the accident. Sudden paralysis of motion and sensation then appeared, and other symptoms of brain-pressure gradually supervened. The line of practice to be adopted was clear. Accordingly, Mr. Smith elevated the depressed bone and let out a quantity of pus and disorganised brain-matter. After this the patient progressed satisfactorily. There is, however, another point of interest in this case—namely, the great and persistent lowering of the temperature in the paralysed limb. As a rule, in such cases the temperature is not more than one or two degrees below normal, and tends to rise to the healthy standard in a few days. In this case the paralysed limb remained about 6° F. below the normal for many weeks.

Edward N——, aged six, a previously healthy boy, was struck on the left side of the head by a heavy piece of wood which had fallen from a third-storey window. On admission on the evening of June 8th, immediately after the accident, he was found to have sustained a contused and lacerated wound of the scalp, about an inch and a half in length, and situated about the level of, but slightly anterior to, the left parietal eminence. At the bottom of the wound a depressed portion of bone could be distinctly felt, the point of a probe being stopped against a distinct ridge when passed over the line of fracture. There was no paralysis of any part of the body. Patient was very sick and somewhat heavy, but quite conscious, and understood everything said to him. There was no bleeding from the nose, mouth, or ear, and only very slight bleeding from the wound. Pupils equal, slightly dilated, and acting readily to light; breathing noiseless, regular, and natural.

June 9th.—Is quite conscious, and understands what is said to him. Has been sick since admission. Is not noisy, but very restless and irritable, and constantly calling out. Had no sleep last night. Pupils equal and acting to light; temperature 98·2°; pulse 78, irregular in force and frequency; respiration 22, natural.

10th.—Restless and irritable, throwing himself about in bed, and constantly crying out. Still very sick; indeed can keep nothing whatever upon his stomach. Slept badly. Bowels not open since the accident. Pulse 96, good volume, more regular; temperature 98·3°; respiration 20. Wound looks well; very free discharge of somewhat offensive pus. To take ten grains of chloral hydrate in an enema.

11th.—Bowels open very freely this morning; still sick, but not so sick as in the previous twenty-four hours; still very irritable and restless, calling out constantly when awake, and throwing off the clothes; pupils equal, acting readily to light, slightly dilated; has kept nothing upon his stomach in the way of food since admission. Respiration 28; temperature 98·4°; pulse 112, regular, but feeble and compressible. To be fed every four hours by an enema composed of two eggs and a pint of beef-tea.

12th.—Very much better; much less irritable; no more sickness. Temperature 99°; respiration 24; pulse 108, much better volume and quite regular. Slept well; bowels open; very free discharge from the wound.

13th.—Much better; slept well after ten grains of chloral hydrate; no more sickness; takes food well by the mouth.

14th.—Slept well; much more quiet, and apparently very much better until 9.30 A.M., when complete paralysis of motion and sensation of right arm suddenly occurred. Up to 9.30 A.M. both motion and sensation had been perfect, for he was seen holding a piece of bread, and also moving a cup of milk with his right hand within a few minutes of that time. The paralysis supervened without the least apparent constitutional effect upon the patient. He was under the observation of the registrar when it occurred, who noticed him using his arm freely, and within five minutes called the attention of the nurse, who was washing the patient at the time, to the fact that the arm was hanging helplessly by the side. Within an hour of the coming-on of the paralysis patient became very much more irritable and restless, calling out constantly, complaining of his head, and hardly keeping the clothes on him for a moment. Face had also become slightly drawn to the right side.

A consultation having been held, Mr. Smith had the patient removed to the operating theatre and placed under the influence of chloroform. He then enlarged the wound with a sharp pair of bone forceps, cut off sufficient bone to make room for the point of an elevator beneath the edge of a depressed portion of bone about two inches long in the greatest diameter. This depressed portion he then, by means of the elevator, brought up to the level of the surrounding skull, letting out at the same time about a drachm and a half of pus and dirty brain-matter. A poultice was ordered to be applied to the wound, and the patient sent to bed.

15th.—No change in condition of arm. Face straight and expression vacant. Has lost all power of articulating words; makes a noise, but cannot form words. Has had no sleep; very restless, constantly calling out and getting out of bed. Is very feeble. Bowels open five times in twelve hours since operation, the motions containing a little blood. Pupils equal, dilated, acting. Temperature 101·1°; pulse 140, very feeble but regular; respiration 36.

16th.—Aspect much improved. Arm still in same state as regards motion, but it gives him some slight pain when pinched. Pupils as yesterday. Bowels open four times in twenty-four hours; motions very loose, but containing no blood. Slept well, and is not nearly so irritable or restless. Pulse 116, regular, but very feeble; temperature 98·3°; respiration 28.

18th.—Aspect and power of articulation much improved, but within the last twenty-four hours the left side of the face has become drawn to the left side, and tongue protruding slightly to the right side. Patient is much less restless. Slept well. Appetite much improved. Bowels open three times in twenty-four hours; motions still very loose.

19th.—Power of articulation much improved. What he says now can be understood fairly well. No improvement in condition of arm. Pupils equal. Bowels opened four times in last twenty-four hours, and still very relaxed. Temperature 98·4°; pulse 114.

21st.—General aspect very much improved. Sensation in arm much better, and he is able to raise the limb for the first time; he cannot move or close the fingers. Bowels open; less relaxed. Temperature 97·5°.

23rd.—Gaining power rapidly in arm; is able to close the fingers so as almost to grasp an index finger. Face remains drawn to the left side as before. Poultice constantly applied to wound, from which there was free discharge. Bowels open once; not much relaxed. Temperature 98·4°; pulse 110.

25th.—Not nearly so well; has been very sick; speech not so clear; less power of movement in the arm; complains of much pain in the head. Bowels opened yesterday, but not to-day. Free discharge from the wound. Pulse 96, very feeble and slow; temperature 97·5°.

28th.—Still very sick; appetite bad; bowels open; expression very vacant. Temperature 98·4°; pulse 114, very feeble, but regular; arm not improved.

29th.—Bowels open very slightly after two enemata of oil. Cheek still drawn to the left; saliva occasionally running from mouth; tongue protruded slightly to the right. Still very sick. To have four grains of calomel on tip of tongue.

30th.—Bowels open very freely. Sick only once since. General aspect very much improved. Appetite better. Arm about the same. Wound looks well; very free discharge; poulticed constantly, and syringed with Condy's fluid and water.

July 1st.—No more sickness; bowels open freely; more power in arm; slept well; takes his food well. Temperature 98·2°; pulse 90, of very much better volume, and regular.

2nd.—Passed a good night. Temperature 98·4°; pulse 94. The arm is gaining power, but is still much colder than the other; sensation is perfect. Wound looks well; discharging freely; treated as before. Bone can no longer be seen at the bottom, being completely covered in.

7th.—Since last note has been gaining power slowly in the arm, but it is becoming more rigid; the flexors are gaining over the extensors of the forearm, and the hand is constantly closed, the fingers being extended by patient only with the greatest difficulty. The right arm is 6° Fahr. colder than the left. The left pupil was noticed to be slightly more dilated than the right for the first time to-day; both act readily to light; face is still drawn to the left as before. Temperature 98·2°; pulse 104, quite regular and of good volume.

14th.—Less rigidity and more power in the right arm; fingers easily extended; noticed to be slightly deaf in the left ear; arms have the same relative temperature as before; very little discharge from wound. Water-dressing applied. Temperature 98·4°. Sleeps and eats well.

20th.—Wound all but healed; patient allowed up; deafness on left side slightly increased; face still drawn to the left side as before; tongue protruded straight. Slowly gaining power in the right arm.

27th.—Wound completely healed. Allowed in the hospital square daily. Has no pain in his head; sleeps and eats well; arm is gaining strength; fingers readily extended. Right arm wasted, being much smaller than the left, and there is still a difference of 6° F. in temperature against the right arm. Speech quite clear; deafness about the same; and the face is still drawn to the left side.

Aug. 12th.—Patient discharged to-day, with the wound in the head completely and soundly healed. Face still drawn to the left side; tongue protruded straight. Left pupil slightly more dilated than the right; both pupils acting freely and readily to the light. Still deaf in left ear, and this deafness is slightly increasing. The left arm is larger than the right, and is warmer by 5·6°F. There is very good use and movement in the right arm and hand, he is able to button his coat with it, and the strength in it is still improving. Speech has perfectly returned, and he swears with great volubility. He seems rather stupid for his age, and his mother does not think him so bright as before the accident. He has had during the last fortnight three most violent, almost maniacal, outbursts of temper.

CHRISTCHURCH (CANTERBURY, NEW ZEALAND) HOSPITAL.

STRICTURE OF THE URETHRA; DILATATION; CURE.

(Under the care of Mr. Courtney Nedwill.)

In the "Mirror" of Jan. 23rd there is a series of seven cases of stricture of the urethra treated by Mr. C. Nedwill on the immediate dilatation plan. Subjoined is another series of six cases.

Nos. 6 and 7 of the former series have presented themselves for examination since the report. In February a No. 12 bougie was easily passed in No. 6 case, and in July last, without the slightest resistance, the same sized instrument was introduced in No. 7 case, an interval of six months having elapsed since the previous trial.

Case 8.—R. P——, aged twenty-eight, labourer, was admitted into the hospital on Oct. 17th, 1874, with stricture of the urethra, about the beginning of the membranous portion, from which he has been suffering for seven or eight years. Four years ago, he says, an abscess formed in the perineum, leaving a fistula through which urine escaped for two months. A No. 4 bougie only could be introduced through the stricture on his admission, but by the 23rd Sir H. Thompson's dilator was used. On the 29th a No. 12 bougie passed freely, and again on Nov. 24th, and the patient was completely relieved from all his symptoms.

Case 9.—J. F——, aged thirty-nine, a cook, was admitted into the hospital on Oct. 27th in a very weak, emaciated condition. Had tried to commit suicide before admission on account of suffering much pain, and having great difficulty in passing water. The urine was loaded with albumen. A stricture of the urethra was detected at the bulb, through which only a No. 3 bougie could be passed into the bladder. Mr. Nedwill gradually dilated every second or third day until a No. 8 was used, but the difficulty in introducing this sized instrument was so great that nothing more was done just then, as there was so much albumen still in the urine. The patient was kept in the hospital till about the 1st of January, 1875, when, finding the albumen had very considerably diminished in quantity, and the stricture had contracted, Mr. Nedwill determined to use Sir H. Thompson's dilator. The patient never had a bad symptom afterwards, and was discharged cured on Jan. 26th, a No. 12 bougie passing easily into the bladder.

Case 10.—G. S——, farmer, aged forty, admitted on Dec. 5th, 1874, with stricture of fifteen years' standing, about two inches from the orifice of the urethra. A No. 3 bougie only could be passed on admission, but in a few days Richardson's dilator was used. A No. 12 catheter was left in the bladder, and the man had never a bad symptom afterwards. At the end of March last a No. 12 was passed with ease, and again about Aug. 26th, 1875.

Case 11.—W. G——, aged twenty-three, applied for relief of retention of urine on the 15th January, 1875. For two years past he had had great difficulty in urinating, and his health was becoming seriously affected. A warm bath and the sedative solution of opium were ordered, and afterwards, notwithstanding the most patient attempts, no instrument could be got through the stricture beyond the bulb. During the night the patient had repeated doses of opium and several baths, but failing on the following day to reach the bladder, Mr. Nedwill sent the patient into hospital with the object of aspirating the bladder, which he did, and drew off two quarts of offensive urine. Next evening fresh attempts were made to pass a bougie, but in vain, so that the aspirator was used again. After using several No. 1 catgut bougies, Mr. Nedwill cut the end off a very small No. 1, and passed right down to the point of it a fine wire. With this bougie he managed, after nearly half an hour's steady pressure, to get it engaged so much in the stricture as to give to the hand the sensation of its being stuck in wax. It was left in for fifteen minutes, and then, after steady continuous pressure, kept up for about twenty minutes, Mr. Nedwill had the satisfaction of feeling it pass into the bladder. Without this wire it is certain no bougie ever yet made could have been passed; the wire gave it just enough rigidity to allow of a continued pressure being kept up. This bougie was tied in the bladder for twelve hours, and on its withdrawal a No. 3 went in easily. In a few days Sir H. Thompson's dilator was used. From this date until August 26th, 1875, a No. 12 bougie had been passed on several occasions without difficulty. It should be mentioned, that for several weeks after the operation this man was in a very critical condition. He passed during this time large quantities of blood and pus, and although the stricture is now apparently quite cured, the patient still suffers from an irritable bladder.

Case 12.—R. T——, a sailor, aged thirty-two, admitted on April 28th, 1875, with stricture of urethra. Has had difficulty in passing water for nine years, with occasional attacks of complete retention. A caustic bougie, which was said to have been followed by temporary relief, had been used some time before. He soon relapsed, however, and on admission, as no instrument could be passed, and as the bladder was very considerably distended, the bladder was aspirated above the pubes, and three pints of urine drawn off. The next day he passed urine in a very small stream, almost guttatim. For three weeks Mr. Nedwill was unable, in spite of repeated attempts, to get an instrument through the stricture, which was about the junction of the bulbous and membranous portions; and during this time he had a hot bath night and morning, which enabled him to pass his urine with somewhat less difficulty. At length a No. 1 elastic bougie was introduced into the bladder, and on its withdrawal after twenty-four hours a No. 3 was passed with ease. A severe shivering fit, however, coming on, no more instruments were passed for a week. On several occasions afterwards Mr. Nedwill failed in getting through the stricture, and rigors followed these attempts so frequently that the patient was put under chloroform, and Sir H. Thompson's dilator was forced through the stricture, the finger being kept in the rectum to guide the instrument. A No. 12 silver catheter was passed, but had to be taken out a few hours afterwards on account of rigor. Next day the patient looked very ill, temperature 104°, and complained of a feeling as if he "had been hammered all over." Quinine in ten-grain doses was administered night and morning, and the man made a good recovery. Discharged July 10th. Since discharge a No. 12 catheter has been passed.

Case 13.—W. J——, aged thirty-three, a sailor, admitted on June 11th, 1875, with hæmaturia and history of stricture. A No. 4 bougie was held firmly in front of the bulbous portion of the urethra. After a fortnight's residence in the hospital, as there was no albumen in the urine, a No. 4 bougie was used with difficulty. This, however, was followed by rigor and constitutional disturbance. Quinine having been given for some days, Sir H. Thompson's dilator was passed through the stricture; but on its withdrawal a No. 10 catheter only could be introduced. Rigor, very high temperature, and a sharp attack of orchitis followed. Quinine was administered freely, commencing with a ten-grain dose, followed by two grains and a half every four hours. A few days before the patient's discharge—convalescent on the 5th of August—a No. 12 bougie was passed easily. Again a severe rigor followed, but no further ill effects.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

At the ordinary meeting of this Society, held on the 16th inst., the President, Mr. G. Pollock, in the chair, a very large number of specimens (many of them of great interest) were shown. Among them we may specially indicate a remarkable case of Embolism of the Pulmonary Artery, shown by Dr. Fagge; a specimen of Tubercular Lupus of the Tongue and Palate, by Mr. Fairlie Clarke; and two interesting examples of Congenital Malformation of the Œsophagus, due to the arrest in development of the anterior part of the alimentary canal, the pharyngeal portion not becoming blended with the lower end of the tube; the case formed thus a parallel to the more frequently occurring condition of atresia ani.

Mr. Marcus Beck and Dr. Coupland were nominated auditors.

The following gentlemen were elected members of the Society: — W. M. Ord, M.D., H. Royes Bell, F.R.C.S., H. Hugh Clutton, F. R. Cross, J. P. Irvine, M.D., J. B. Jessett, F.R.C.S., E. E. Noel, M.D., and H. A. Lediard, M.D.

Mr. Maunder exhibited a specimen of Cancer of the Male Breast, which had been removed from a patient forty-two years of age. It commenced with soreness and ulceration of the left nipple, and on removal the tumour, which appeared to be scirrhus (but it had not been examined microscopically), was of the size of a Tangerine orange. The patient also was present, and, although eighteen months had elapsed, it could be seen there was no recurrence in the scar. An enlarged gland in the axilla existed at the time of operation. The specimen was referred to the Morbid Growth Committee.

Dr. Goodhart showed a recent specimen of Insular Sclerosis of the Brain and Spinal Cord, taken from a female patient who had for some time past shown the characteristic symptoms of the disease—viz., spasmodic movements of the limbs and head, increased by effort, nystagmus, staccato speech, without impairment of sensibility, electromotility, &c. Two days before death, which took place from pneumonia, there was paralysis of the palate. The white matter of the brain and cord presented numerous patches of sclerosis.

Dr. Coupland brought forward a recent specimen of Ulcerative Endocarditis, which presented a good example of so-called aneurism of the mitral valve. The left side of the heart was dilated and hypertrophied, and projecting upwards into the auricle was a pouch, the size of a bean, formed by a protrusion of the auricular surface of the anterior mitral cusp. The ventricular surface of the cusp showed an ulcerated hole near to the attached border of the valve, large enough to admit the tip of the little finger, leading into the aneurism, which was filled with fibrine. The remainder of the valve was quite natural, but the aortic valves were thickly covered by vegetations, the central cusp being widely perforated. There were two infarctions of old date in the spleen, one of great size. The specimen was obtained from a male patient, forty years of age, who had been six days in hospital. The symptoms, which were chiefly those of præcordial pain and cardiac dyspnœa, were of five weeks' duration. There was no history of rheumatism. Dr. Coupland remarked upon the formation of aneurism of the mitral valve from ulceration on the ventricular surface, and inquired whether in most cases this was not secondary to the disease of aortic valves.—Dr. Hilton Fagge pointed out the effects of friction on the endocardium as productive of local endocarditis, a fact first observed by Dr. Hodgkin, and insisted on by Dr. Moxon, who some years ago showed specimens in favour of this view. Did the vegetations on the aortic valve in the present case come in contract with the mitral at the seat of ulceration?—Dr. Coupland said that it was just this question of friction from the aortic vegetations on the mitral valve that he wished to raise when he asked whether the lesion on the latter could be considered secondary to the aortic disease. That such was the *modus operandi* in the present case was very likely, seeing that there were two erosions on the mitral valve, above the large ulceration, which would have come in contact with the aortic vegetations. But these vegetations were not long enough to reach the site of the aneurism, although the existence of the splenic infarction was presumptive evidence in favour of their having done so at an earlier period.

Dr. Crisp exhibited a specimen of United Fracture of the Humerus from a Gorilla, remarking that it was of interest as showing how completely union had taken place. He also showed several specimens of Rickets in Pheasants which had been reared under hens, and thus under artificial conditions. The long bones were greatly distorted and wanting in ossific material, their ends being enlarged. The skull and spine were not much affected.

Dr. Fagge showed an interesting specimen of Embolism of the Pulmonary Artery obtained from a patient who had died of enteric fever under the care of Dr. Mumford. Death occurred in the fourth week of the disease, with symptoms of dyspnœa, following an attempt to get out of bed. The ulcers in the intestines were in process of cicatrisation, some presenting adherent sloughs. The lungs were engorged. The valves of the heart were healthy, and the organ contained gelatinous decolourised clot. The base of the pulmonary artery was filled by loose black coagulum, but lying across the vessel at its bifurcation was a clot which at first seemed as if it were made up of four distinct cords twisted on one another. It was really a long cylindrical clot folded upon itself; it bore no marks of the valves upon its surface. The cava, iliac, and femoral veins were empty. Dr. Fagge supposed that the long clot in question came from one of the femoral veins, had become detached and washed off into the pulmonary artery, and then folded up across the main division of the vessel. There had been no signs of thrombosis in the leg, so that it was probable the detachment had occurred close upon the formation of the clot.—Dr. Crisp thought the view held by Dr. Fagge should be received with caution.

Dr. Fagge showed two specimens of curious Pouches from the Ileum, which he proposed to call "distension diverticula." The first was obtained from the body of a emale who died with symptoms of acute strangulation. Gastrotomy had been performed, and a small knuckle of ntestine was found lodged in the right femoral ring. At one part of the intestine there was a pouch projecting between the folds of the mesentery. The second case presented two or three similar diverticula, but there was no history of obstruction in this case. Dr. Fagge suggested that these diverticula were produced by distension of the bowels, leading to a protrusion of the mucous membrane, and that their presence indicated previous intestinal obstruction. The diverticula showed no tendency to return after the intestines were opened.

Dr. BARLOW exhibited a specimen of Tubercle of the Pancreas. He remarked on the existence of this affection being either denied or ignored by most writers on morbid anatomy. It is, however, mentioned by Foerster and Friedrich, but chiefly in the form of cheesy nodules or cavities, and its existence in acute miliary tuberculosis has been denied by Klebs. The specimen shown confuted this latter view, since it was an instance (a child aged one year and eleven months) in which pale white granulations, the size of a pin's head, occurred in the pancreas in a case of general tuberculosis, granulations occurring in the lungs, kidneys, ureter, bladder, and peritoneum. Microscopically the structure of the nodules was that of tubercle, becoming caseous in the centre.

Mr. MARSH showed a specimen of Osteo-Sarcoma of the Superior Maxilla which he had removed from a boy fourteen years of age. The disease had been in progress for six months, and when seen there was a swelling on the face just above the bicuspid teeth; it did not involve the hard palate. Exploratory puncture showing it to be a new growth in the antrum, Mr. Marsh removed the whole of the superior maxilla, which was done with facility, it not being found necessary to prolong the incision along the orbit. Mr. Butlin had examined the tumour, and pronounced it to be an osteo-sarcoma. Mr. Marsh referred to another case of sarcoma of the antrum in a child which he had removed by scooping a short time ago. There had been no return.

Mr. FAIRLIE CLARKE showed a specimen of Tubercular Lupus of the Tongue, Soft Palate, and Gums. The patient was a bricklayer eighteen years of age, who had been under the care of Mr. Teevan at the West London Hospital. There was no family history of phthisis or syphilis. The whole of the buccal mucous membrane was thick, velvety, and infiltrated; there was a large ulcer on the left side of the tongue, and the whole of the soft palate had ulcerated away. The salivary glands were considerably enlarged, but there was no implication of the lymphatics. Dr. Sparks and Mr. Butlin reported that there was an infiltration of small round cells in the submucous tissues. It was singular in there being no ulceration of the skin, lupus affecting a mucous membrane primarily being very rare. A few cases of tubercular ulceration had been put on record, chiefly by continental writers.—To a question put by the PRESIDENT as to whether the soft palate had cicatrised, Mr. Clarke replied in the negative.—Dr. FAGGE alluded to one case of tubercular ulceration of the tongue which he had examined. The floor of the ulcer was covered by yellowish grains, as in "tubercular" ulcers of intestines. He recalled another case, in which tubercular ulceration of the larynx had invaded the soft palate.—Mr. MARSH said that several years ago tubercular ulceration of the tongue had been described by Sir James Paget.—Dr. GOODHART inquired whether the patient died of phthisis?—Mr. SPENCER WATSON, acknowledging the rarity of primary lupus on mucous membranes, said that he had met with it on the nose; it was then a form of erythematous lupus.—Mr. CLARKE, in reply, said that the patient did not die from phthisis, but from the local mischief.

Mr. MAUNDER showed a Fatty Tumour from the Axilla of a Male, which before removal simulated a greatly enlarged mamma.

Dr. GOODHART showed a specimen of Hydatid Disease of the Heart from a male subject who, up to the time of his death, which occurred suddenly, had been apparently in perfect health. The pericardium was much thickened; its chamber contained from three to four ounces of pus, which had apparently proceeded from an old hydatid cyst lodged in the septum ventriculorum. The cyst bulged into the ventricle. Numerous hooklets and much membrane occurred in the cyst, the suppuration of which had caused the patient's death.

Dr. DOWSE showed a specimen of Syphilitic Growth in the Posterior Cerebral Sinuses. The patient, a male, thirty-nine years of age, suffered from headache, diplopia, vomiting, earache, and otorrhœa. There was neuro-retinitis, but no paralytic symptoms. Over the right frontal eminence there was a depressed cicatrix, from which necrosed bone had come away. The outer surface of the cranium was much nodulated; the dura mater was adherent posteriorly to the brain, and the sinuses terminating in the torcular Herophili were all found to be occupied by a growth having the character of granulation tissue. The disease was more advanced in the right than in the left side.

Dr. DOWSE also showed a specimen of Glio-Sarcoma of the Brain, from a case in which the symptoms commenced two years before death with right-sided convulsions. The patient had a peculiar gait, as if he wanted confidence; it was not ataxic, nor that described as characteristic of cerebellar disease, and it was shown rather in slow than in rapid progression. Intellect was clear; sight good. The optic discs were hazy. There was complete absence of paralysis. Death was preceded by a series of epileptiform fits. At the autopsy a soft pink-coloured mass was found on a level with the corpus callosum replacing the anterior part of this structure. The growth was cone-shaped, the base being directed forwards upon reaching the pineal gland, and it adhered slightly to the corpora striata. It was composed of round, oval, and spindle cells imbedded in fibrous stroma, and in parts presented calcification. It arose probably from the choroid plexus.

Dr. GOWERS exhibited a specimen of Glioma of the Brain. The tumour, which showed well the infiltrating character of such growths, was situated beneath the left superior parietal lobule, the convolutions being continued over it. It appeared on the surface at the lower part of the lobule, and was seated mainly in the middle of the radiating fibres of the corpus callosum, reaching to the roof of the lateral ventricle. Microscopically it was made up of minute fusiform and angular cells, with fine filaments constituting the matrix. The patient had been the subject of complete right hemiplegia for two months before death, and of *slight* right hemiplegia for two months before that. Each attack of paralysis came on suddenly. During the last six weeks of his life he had several convulsive seizures, the movements preponderating on the left side, which in the last few days of life became paralysed too. There was double optic neuritis. The hemiplegia was probably due to the involvement of the fibres of the corpus callosum, which would explain further the extension of the paralysis to the left side. Dr. Gowers pointed out that the sudden onset of the hemiplegia was interesting, together with the absence of any convulsions in the early progress of the disease. The patient had some loss of memory for words, but no actual aphasia.

Mr. MARSH showed for Dr. Ilott two specimens of Malformation of the Œsophagus. In each case the pharyngeal end of the gullet formed a cul de sac, a little below the cricoid, while the remaining portion of the tube ended in the trachea at its bifurcation. One of the specimens was from a child born at the eighth month, which survived four days; the other, born at full time, died in a week, some of the food getting into the air-passages. The malformation was obviously due to arrest of development. Mr. Holmes had questioned whether in such cases operative measures could be taken to restore the continuity of the tube, but the great depth of the structures would render it very difficult.—Dr. ILOTT, in reply to Mr. SMITH, said that the children were born of different mothers. One of them also presented a malformation of the vessels of the neck, the right subclavian artery being given off last from the arch of the aorta, and passing behind the trachea; and the two carotids coming off from a common trunk.—The PRESIDENT said there was a preparation in St. George's Hospital museum of a pouch-like expansion of the œsophagus, with no constriction below it. It had existed for years, and its presence was recognised during life.—Mr. DORAN also alluded to a specimen at the Royal College of Surgeons, which had occurred in a high dignitary. It had given rise to much dysphagia.—Mr. WAGSTAFFE referred to a similar case related in a recent number of the *Journal of Anatomy*.—Mr. ILOTT said his cases were purely congenital malformations, the pharynx ending blindly, but the mouth being in direct communication with the trachea and lower part of the œsophagus.

Mr. CLEMENT LUCAS showed the Air-passages after Tracheotomy, obtained from a child who had swallowed some boiling water. He had brought the specimen as it illustrated a method of operating which might sometimes be had recourse to—viz., direct incision through soft parts and trachea at the same time. No chloroform was administered. There was but little bleeding, and no difficulty in introducing the tube.—In reply to Dr. MURCHISON, Mr. LUCAS said there was no membranous exudation on the larynx, but much puckering of the glottis; and in answer to Mr. T. SMITH he said it was the first time he had so operated.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society took place on Friday, Nov. 12th, Mr. Callender, Vice-President, in the chair. There was a large attendance of members of the Society, and much interest was taken in the debate, which was generally supposed to be a continuation of the debate on antiseptic surgery which had been adjourned at the last meeting. Previously to the reading of Mr. Holmes's paper, Sir Thomas Watson, Bart., and Dr. C. J. B. Williams, F.R.S., were nominated honorary members of the Society.

Mr. HOLMES read a paper "On a case of Ligature of the Femoral Artery with Carbolised Catgut for Popliteal Aneurism." Referring to the previous meeting, he said that in the discussion on the antiseptic method then introduced, the remarks of surgeons present indicated a great uniformity of opinion that the care in dressing, the cleanliness, avoidance of the introduction of foreign bodies, especially those of a putrefactive nature, constituted the great advantages of that method. Now there was no doubt that ligatures applied to vessels act as foreign bodies, and thus hinder the closure of the wound, and that silk ligatures especially imbibe septic matters; but it seemed to him that Sir James Simpson greatly exaggerated these evil effects, and laid too great a stress on the necessity of avoiding them when he was endeavouring to introduce the methods of torsion and acupressure. The catgut ligature was beneficial from the fact that it avoided these objections, and aided primary union. He would not, however, go into the subject of the use of this ligature on free surfaces, such as stumps, but only into its application in the continuity of vessels. He would not deny that catgut was not always absorbed, but that it was sometimes absorbed there could be no doubt. He had had no large experience in the use of catgut for tying large vessels in their continuity, but the case to be related would serve to evoke discussion, and elicit the opinion of surgeons on the subject. The use of the catgut ligature and of the carbolised catgut ligature were two different things. Sir Astley Cooper, Cradbourne, and Porta had all used the catgut ligature frequently with varying results. Sir A. Cooper's results were at first favourable; subsequent failures, however, induced him to give it up. Porta's experience was of a somewhat similar character. On the other hand, those who have used carbolised catgut claim to have obtained good results. Mr. Annandale states that its use removes all the ordinary dangers of ligature of arteries. Mr. Oliver Pemberton had also recently published a case in which the result was good, and had confidence in it without the use of antiseptic dressing, believing that it was a security against all ordinary risks. Mr. Holmes's experience was limited to four cases. In the first he tied the subclavian and the carotid for aortic aneurism; he tried to use antiseptic dressings, but the patient was too restless; the wound suppurated, but closed readily, and no part of the ligature came away. The man died eight weeks afterwards from the effects of galvano-puncture. The vessels were found to be closed only by a kind of diaphragm. Two minute pouches filled with blood-clot were found in the cellular tissue, outside the carotid, the coats of the vessel having been slightly cracked, but neither was divided, and there was no danger of secondary hæmorrhage. The third application of the ligature was in the case read to-day. It was of interest from the cause of death, the patient having died precisely seven days after the operation. The knot of the ligature was found, the rest was absorbed, and the vessel was not cut. In this case free suppuration occurred, although the wound was dressed antiseptically. The patient's death was due to extreme intoxication, and the suppuration doubtless owned the same cause. The fourth case was one of distal ligature of the left carotid for aortic aneurism, in which he tied the vessel twenty-two days ago with carbolised catgut, without the antiseptic dressing, simply covering the wound with cotton-wool after the operation. This was left some days undisturbed, but on removing it, some pain having been felt, pus was found pent up behind the wound, but at the present time it was not in an irritable condition. No trace of the ligature could be found. The results were inconclusive. In none of these cases was the antiseptic method used throughout; in those cases in which it was tried it did not succeed, in others it was not tried. The results were favourable in so far that secondary hæmorrhage was avoided, and union by first intention favoured, which is impossible with the silk ligature. He thought that carbolised catgut was proved to be useful in cases of aneurism, and that the good result was favoured by drainage and by Lister's method. The great disadvantage of Lister's plan was the amount of *moisture* necessitated in the operation. He did not see why washing the wound out after the operation with carbolised lotion, and thus eliminating any chance germs, should not do as well as using spray, &c., which confused the view of the parts, and made it necessary to disturb and pull them about more than was advisable.

The case was that of a man thirty-four years of age, footman to a nobleman, and no doubt of drinking habits, as discovered afterwards, who was admitted on June 9th with a small popliteal aneurism. He had had good health; no syphilitic history. Five days before admission he noticed a swelling of the left foot and ankle, having previously had aching pain, as if the knee were tired, for three weeks. The pain increased by sitting down or by extension of the leg. On admission he was pale and of delicate look. There was a small swelling in the lower part of the popliteal space; there was no bruit and no thrill, but expansile pulsation, rather as if there were a saccular dilatation than an aneurism. Slight pressure on the femoral sufficed to check the pulsation; flexion of the limb, which was tried, only increased the pulsation. Digital pressure was tried and carefully maintained by the students for twenty-two hours continuously; then, after an interval of twenty-four hours, it was kept up for six hours a day for three days; then pressure by a weight twelve hours a day for four days; and then digital compression again; then mechanical pressure was tried, but without success. Finally ligature of the femoral was performed on Aug. 12th with carbolised catgut. The wound went on well for four days, slight pain occurring for two or three days in the course of the saphena vein, a branch of which had been cut during the operation, but this soon subsided. On Aug. 15th Mr. Holmes left town, the patient then being in a good way; but returning on the 18th, was astonished to hear of his death. He had gone on well till the 16th, when a friend smuggled in two bottles of gin. In the evening he was found in a state of furious alcoholic delirium, having drunk one of the bottlesful. From that time he rapidly sank, being in a condition of high traumatic fever till his death. No post-mortem could be obtained, but the artery was taken out. The vessel was found to be continuous, and only the knot of the ligature remained; there was suppuration around it and in the groin. The aneurismal sac was filled with a dark coagulum, but in the rest of its course the vessel was healthy. There was no gangrene, but the integuments over the heel were observed to be hard, dry, and of dark colour. The wound had been dressed on the carbolic method under spray, although the latter was not used during the operation. There was no œdema, no swelling, and no tendency to suppuration.

Mr. Holmes stated that he was unwilling to operate on account of the small size of the aneurism and its quiescence so long as the patient kept in bed, but the pain in walking and other symptoms led to the belief that a serious result would ultimately ensue. Esmarch's bandage had not been tried; if he had seen a recent paper on its use in these cases, he would certainly have given it a trial. No irritation was set up by the catgut ligature about the artery; the condition was quite different from that seen in ordinary ligature. But for the drinking, he believed it would have been absorbed, and the artery obliterated without any bad result.

Mr. CALLENDER said that the subject before the Society was one of importance to all practical surgeons, involving as it did the whole question of ligature of an artery in its continuity in cases of aneurism. The question raised by Mr. Holmes was how far carbolised catgut was applicable for ligature in such cases.

Mr. MAUNDER said that he had had some experience of the ligature of arteries in their continuity, having done it in twenty-seven cases. Of these the antiseptic ligature was employed on nine occasions, but catgut only five times. He would, therefore, confine his remarks to these five. The first two were ligature of the brachial, which was done in two cases for hæmorrhage from the hand; in these two the wounds both suppurated. One was in the hospital a long time, with the wound suppurating, and recovered, and the other died of pyæmia; in the latter the inner coats of the vessel were found to be divided, a clot was found on the distal side of the ligature, but none on the proximal. No ligature was found, the patient having died on the tenth day. In two other cases he had tied the femoral for popliteal aneurism; of these one was a spare man, thirty years of age, in whom he tied the vessel at the bottom of Scarpa's triangle, and primary union occurred in a few days. The man died six months later of internal aneurism. The second case was of a man forty years old, with much subcutaneous fat, ligatured in the same way. In this case he did not use the spray, as it frightened him, but carbolised water was used as a lotion, and his fingers and those of his assistants were dipped in the same. There was free suppuration of the wound for some time, but ultimate recovery. It was curious that these results should be in such contrast. The fifth case was one of ligature of the subclavian for axillary aneurism, carbolised catgut being used, but not the spray. He allowed Mr. Cooper to use antiseptics after the operation. The patient died on the sixth day with diffuse suppuration in the chest. In only one case, therefore, out of five, did primary union occur, and he believed that in that case it would have occurred independently of the carbolised catgut. In other cases silk was used, one after Lister's method, and in that the wound healed in ten days almost by first intention. The specimen was shown recently at his Lettsomian Lectures; the ligature was found still on the vessel. He had also used it in two other cases of aneurism. Hitherto he had used carbolic acid with good success, and he should continue to use it until some unfortunate accident, such as had occurred to other surgeons, led him to give it up. Mr. Holmes's results could not be considered successful. In answer to subsequent inquiries, Mr. Maunder stated that in the first case of ligature of femoral the ligature was not found, but the vessel was obliterated as far as the popliteal. In the case of subclavian ligature, the ligature remained on the vessel, which was occluded.

Mr. BARWELL remarked that the question seemed to be, Will the catgut ligature melt away and be absorbed? He had seen a case in which this had occurred. The fact of free suppuration in Mr. Maunder's cases was not at all derogatory to the merits of the carbolised catgut ligature. He himself had used the catgut ligature many times in the face of stumps, but in only one case did it come away with the discharge. As to the ligature of arteries in their continuity, he had tied the radial and brachial and both facial, making in all four such operations. Both the facials were tied in a case, exhibited to the Society last year, of hypertrophy of the lower part of the face; in that case each artery was ligatured in two places, and the vessel cut between. Although there was a severe attack of erysipelas, the wound only suppurated slightly, and no ligature came away. In the case of the brachial the wound suppurated; in that of the radial it healed by first intention. But the fact of suppuration occurring did not affect the question of ligature by catgut. If we could avoid cutting through the artery, and the occurrence of secondary hæmorrhage, and more especially of suppuration around the vein, the advantages gained would be sufficient. One practical point of importance was, that the catgut should not be allowed to get dry before the operation.

Mr. MYERS gave his experience in the most important case he had treated in this way,—that of a man who had aneurism of the external iliac artery. After all other means had failed, he ligatured the external iliac, putting on two ligatures, and then closed the wound; there was considerable suppuration, though not from the effects of the ligature. The man did well and was cured, and is now doing duty in his regiment. The ligature did not come away with the discharge, and the suppuration appeared to be due to the fact that the man was syphilitic and an unhealthy subject.

Mr. GASCOYEN said he had seen three cases in addition to the one just related by Mr. Myers. Two of them were of the femoral, one of the brachial. One of the cases of femoral did badly; it was that of a girl in the Lock Hospital, under the care of Mr. Lane, in whom the vessel was exposed by a sloughing bubo. There was severe inflammation and secondary hæmorrhage, which was twice repeated, and proved fatal on the second attack. No ligature was found on the tenth day. Of two other cases, one was of hæmorrhage from a popliteal aneurism in a heavy drinker. Here the femoral was tied with catgut, using all precautions, but without the use of antiseptics. The wound remained open for six weeks, a part of it uniting by first intention, but a small sinus being left, from which at last something came away, and the wound healed. The other case was one of popliteal aneurism, in which the femoral was tied, the subsequent course resembling that of the previous case, something coming away at the end of six weeks. He did not think that this something was the ligature, but a sloughing caused by the bruising of the external coat of the artery.

Mr. MARCUS BECK observed that in nearly all the cases which had been mentioned in the discussion the result was that the wound was not in any more favourable condition than it was under the old method; but seeing that the whole of the details of Lister's method of dressing were systematically neglected, this was not surprising, and it was not fair to consider these cases as having any relation to Lister's method. Lister had always held and stated that in a few hours after the ligature there was no trace of carbolic acid left in the wound, and hence there could be no reason why suppuration should not occur. The catgut ligature was as ready to decompose as any other substance, so that probably the result in most cases was that it decomposed and the artery sloughed, the result being the same as with the ordinary ligature. He had not had any experience of ligature of vessels in their continuity, but in cases where vessels were tied in a wound treated antiseptically the result was good; there was no suppuration and no discharge. But he should not suppose that it was of any use when employed in other ways. As to the question of the ligature melting away, he had seen a case in which, after six or seven days, the ligature remained intact. But if the wound were treated in the ordinary way, the mass of putrid catgut in the wound would set up suppuration. Lister had not had any case of secondary hæmorrhage among his cases.

Dr. MURCHISON remarked that he did not understand that Mr. Holmes had brought forward his case at all with the object of discussing the antiseptic system. He believed it was a well-known fact that Syme ligatured the femoral twenty-five times in succession, using the ordinary silk ligature, without antiseptics, and every one of the cases did well; he had no bad result. He had himself assisted Syme in one of these operations.

Mr. HERBERT PAGE said he had only had occasion to tie the femoral in its continuity on one occasion, and then he made no attempt to use the catgut ligature; there was free suppuration, but the result was good. He had used catgut in other cases, but he questioned whether it was not rather the way in which the vessel was tied than the material used which affected the result; quoting a saying of Prof. Humphry's, that secondary hæmorrhage was usually due to the fault of the surgeon. If he was not mistaken, Lister said that the catgut yielded very soon.

Mr. CHRISTOPHER HEATH thought that it was obvious from the remarks made by previous speakers that the catgut ligature behaved differently under different circumstances, and probably this was due to the difference of the surgeons. In the first place, the amount of force to be used is difficult to judge, on account of the elastic and yielding nature of the catgut. The source of the secondary hæmorrhage was, probably, that the artery was cut. In the first case in which he employed it, one of ligature of the carotid for aneurism of the aorta, three years ago, the patient was still living and in good health. After the ligature the wound was closed with cotton-wool, and at the end of a week it closed. The second case was one of secondary hæmorrhage after amputation, for which the femoral was tied in Hunter's canal, on account of the risk of moving a tourniquet; suppuration followed, and the patient died seven days afterwards. The ligature was found *in situ*, and there was clot on both sides of it. The condition of the patient had probably much to do with the result of the operation, especially as to the occurrence of suppuration. He had twice, since this, used this method of ligature; once on the carotid for aortic aneurism, the patient dying on the same day from the immediate effects in the brain. The last case was one of femoral aneurism in a medical man who was present. In that case, pressure having only the effect of reducing the health, the vessel was tied; free suppuration occurred, but the wound healed, except in a small track, from which something came away at the end of eighty-two days. This operation was in February last, and the aneurism, which was of moderate size, had quite disappeared.

Mr. Maunder, in reference to previous remarks, said that the nine arteries were all tied on Lister's method, with the exception of the use of the spray; and as to some of the cases which occurred in 1868, the spray was not introduced at the time. If spray was needless then, why should its use be so necessary now?

Mr. Beck replied that in 1868 Lister's method was not nearly perfected. He saw and took notes of cases in Mr. Lister's wards in Glasgow in 1868, and the number of successes was much smaller and the dressings much more clumsy than now. At that time, in Mr. Lister's own practice, decomposition was prevented in only 30 per cent. of the cases.

Mr. Macnamara had not had large experience in the method, having only used it in four cases. In one case of ligature of the brachial with Lister's method of dressing there was no suppuration, and a good result followed. The second case was one of the carotid and subclavian for aneurism, which did well till the tenth day, when there was sudden hæmorrhage and the patient died. The third, one of the femoral for wound, the antiseptic system being thoroughly employed, did well; there was no suppuration, and recovery was rapid. In the fourth, a case already published in The Lancet and in the *Indian Medical Gazette*, the antiseptic system was not fully carried out, but the patient did well. In these cases, he thought, it was important to attend to the mode of preparation of the catgut, which, if left long in carbolised oil, was apt to get brittle and less elastic. It should be kept in cod-liver or some other fish oil.

Mr. Holmes, in reply to Mr. Beck, said that he had endeavoured to state clearly that he was not talking of Lister's method. In the first case Lister's treatment was used, but its application was not maintained, and in the second the extreme intoxication and restlessness of the patient prevented its success; in the third it was not tried. He fully agreed with Mr. Beck as to the fact that antiseptic dressing was preferable to the ordinary method. He also believed, with Mr. Barwell, that the question of suppuration or non-suppuration was less important than the mode of ligature of the vessel. There were cases on record where the catgut ligature had melted away and secondary hæmorrhage resulted, but he believed that ligature with catgut was quite possible to do successfully.

Mr. Callender, in remarking upon Mr. Holmes's case, observed that Mr. Holmes wished only to bring before the Society the use of catgut ligature. The condition of wounds, when treated by Lister's method, was quite a different matter. For his own part he had every reason to be satisfied with the results obtained by his own method, which was enough for all ordinary purposes, and sufficed to ensure healing. He wished, however, to go into the question of the use of the carbolised catgut ligature. Three instances of secondary hæmorrhage had followed its use in St. Bartholomew's, two in the practice of his colleagues and the third in his own. In this case, which was very carefully observed, the patient was a young man of good habits, the only unfavourable fact being that he had slight atheroma, as was seen after death. The femoral was ligatured at the bottom of Scarpa's triangle for aneurism, the carbolised catgut ligature being employed to tie the vessel and also to drain the wound. On the fifth day, at the 130th hour, slight pulsation was felt in the artery and in the aneurism. At the 156th hour the carbolised catgut used for drainage came away in two pieces, having softened in the centre. On the tenth day there was a gush of blood from the wound. The thigh was immediately amputated; but the patient died of the hæmorrhage and shock. On examining the limb the ligature was not to be seen, and the artery was patent; but in the wall of the vessel was an opening about one-sixteenth of an inch in diameter, through which the hæmorrhage had taken place. In this case the ligature had yielded at the 130th hour; but it had produced such an effect upon the artery that the vessel sloughed. The wound had healed well. He brought the case forward only in connexion with Mr. Holmes's case, and as showing the trouble which might occur from a reliance on this method of ligature.

Mr. Hart inquired whether the instrumental pressure mentioned by Mr. Holmes was performed under the influence of chloroform or not. He thought this was a question quite as useful to discuss as that of the catgut ligature. He knew of no case where such pressure, applied under chloroform, had failed; and as we have given up the idea of stratification being needed, we need not fear immediate coagulation.

Mr. Holmes replied that, as there was complete absence of pulsation on pressure by the means employed, there could be no reason for subjecting the patient to the additional risks of chloroform.

The meeting then adjourned, the debate having come to an end.

MEDICAL SOCIETY OF LONDON.

At an ordinary meeting of this Society on Nov. 8th, Dr. Routh, President, in the chair, Mr. Spencer Watson brought forward a patient, a young woman aged twenty-two, who had been treated jointly by himself and Mr. Carr Jackson for Compound Comminuted Fracture of the Os Calcis and Dislocation of the Scaphoid, the injury being the result of a gas explosion. The astragalus and a portion of the os calcis were excised, and the patient has now a useful and moveable joint, the limb being only shortened an inch and a quarter. The discussion on this case was postponed to the next meeting, in order to give time for Mr. Jabez Hogg's paper on "Spinal Concussion."

On the 15th inst. the proceedings opened by the discussion of the cases brought forward by Mr. Spencer Watson at the previous meeting.—Mr. Carr Jackson related two cases of his own, and dilated on the *pros* and *cons* of excision of the astragalus, as compared with amputation of the foot.—Mr. Royes Bell spoke of a case of Mr. John Wood's at King's College Hospital, in which excision of the astragalus had been performed, and which had done well.—Mr. W. Adams remarked that Mr. Lund, of Manchester, had recommended this operation for club-foot; after which Mr. Henry Smith recounted the case of a lad who had fallen against an iron body, and who had been brought to him with an induration in the thigh. An abscess formed, which was opened, but the wound did not heal, and subsequently a piece of the boy's trouser was extracted.—Mr. Spencer Watson supplemented Mr. Smith's case by the relation of three instances of impaction of a foreign body.

Dr. Drysdale then read a paper entitled "For and against Animal Vaccination." He considered that in all countries where vaccination was compulsory it might be as well for the process of animal vaccination to be added to that adopted by the State, and believed it would be an enormous advantage in sudden emergencies.—An animated discussion followed.—Mr. de Méric questioned if animal vaccination was more to be trusted than the ordinary process. He recounted at some length the experiments on animal vaccination he had witnessed in Paris, which had much impressed him with regard to its facility. He had no doubt at all that syphilis can be propagated by vaccination.

He suggested that the two modes could very well be in vogue at the same time, but thought that the introduction of animal vaccination in this country required the co-operation of the Government, as it had been tried by private enterprise and had failed.—Dr. Theodore Williams thought animal vaccination would be of great use in an epidemic, as he remembered the difficulty of getting lymph during the last one.—Dr. Cook had heard animal vaccination deprecated some years ago as exciting too great constitutional disturbance.—Dr. Griffith thought syphilis could not always be detected in a child by the most minute examination, and related a case in point.—Dr. Rogers, in thirty-five years' experience, had only seen one bad case as the result of vaccination. He mentioned the strong public feeling against vaccination, and thought animal vaccination would be a great boon if accepted by those who object to the other.—After Dr. Drysdale had briefly replied, Dr. Dowse exhibited a Kidney having the semblance of a large cyst, taken from a patient who had died from disease of the brain.—The meeting then adjourned.

ENTERIC FEVER AT CROYDON.

Croydon at the present time is suffering from a widely extended outbreak of enteric fever. In the spring of the year fever made its appearance in the town, and a considerable number of persons were then affected by it; this epidemic declined during the summer months, but at no time since last April has the town been completely free from fever. Suddenly, about the first week in October, there was an increase in the number of cases, and the disease also made its appearance in the districts of Selhurst and South Norwood, which previously had been almost if not entirely free from the disease. The number of persons attacked during the last few weeks amount to between 300 or 400. The inhabitants residing in the upper part of the town having suffered most severely, the medical officer of health for the town and district, Dr. Philpot, has been busily engaged in investigating the causes which led to the outbreak, and ascertaining how far the limits of the present epidemic coincide with those of the first; the information on the latter point is not yet complete. Dr. Philpot considers that "the suddenness of the outbreak over a wide area is strong *prima facie* evidence that water is the conveyor of the disease," especially as the fever has "occurred in houses the interior of which have no connexion with the sewers." And in this opinion, after a careful consideration of the facts connected with the outbreak, we entirely agree with him.

A water-supply may become contaminated at four points: at its source, in its storage, in its delivery through the mains, and, finally, in the houses of consumers. No suspicion seems to have fallen on the purity of the water as taken from the springs, but the blame is distributed between the storage arrangements at the reservoir and the intermittent nature of the supply. The water at Croydon is stored in two reservoirs: one the low-level reservoir, and which originally sufficed for the requirements of the whole town; and the other the high-level reservoir, which was constructed at the summit of the water-tower, in order to furnish a supply of water to the tops of houses in the higher parts of the town. It is in the districts supplied by this reservoir that the majority of the cases have occurred. It has been suggested that the water contained in this tank has become contaminated through the overflow-pipe, which communicated directly with the sewer, getting untrapped, and consequently the sewer gases of the town have had access to the water-supply. Although no doubt such an arrangement is one of considerable danger, we do not think it sufficient in itself to have produced the epidemic in question, and we think the chief blame will be found, on further inquiry, to lie in a defective condition of the mains and the intermittent nature of the supply. It appears that, from want of sufficient water, the supply is still occasionally intermittent in the low-level; in the high-level the supply is more constant; but it happened that there was an intermission of some hours on the 16th of September, about fourteen days before the large increase in the fever cases occurred. At that time the sewers, it must be remembered, must have contained specifically contaminated excreta from previous cases which had been occurring in the town during the summer months, and it is not unreasonable to suppose that the strong suction action that was going on within the mains on that day may have drawn the specifically contaminated contents of the neighbouring sewers into them, to be distributed wholesale the next time the mains were charged. The two great epidemics of last year—viz., at Over Darwen and Lewes—originated in this way. At Over Darwen the typhoid excreta found their way from the privy of a house in the outskirts of the town to the water mains, into which they were sucked during the periods of intermittency, and the epidemic continued till this source of infection was discovered. At Lewes the first outbreak was traced to distinct pollution of the water at its source. The second outbreak, occurring shortly afterwards, was caused by the contents of a sewer charged with stools of the patients who had suffered during the first outbreak being sucked into a closely adjacent water-main, likewise during a period of intermittency in the supply. At Lewes, as at Croydon, it was the upper part of the town which suffered most severely. Wherever the water-supply is intermittent such a mishap is likely to occur; for it is not in the nature of either sewers or water-mains to remain for ever impervious, and sooner or later leakage is sure to take place. It is, of course, unlucky if both main and sewer chance to be defective at the same point, for then, unless the water-supply is kept at constant pressure, and the water-pipes fully charged, the contents of the sewer must be drawn into the mains. The sanitary arrangements of the houses, even of the better class, at Croydon seem extremely defective, and several of the houses have screw taps to the waterclosets—an element of considerable danger, as leading to local intercommunication between the contents of the sewers and the water-service of the house. With respect to the management of the epidemic, we strongly urge the local board of health to adopt the chief recommendations of their medical officer—to furnish the town without delay with a constant water-supply, and to make a diligent search for all possible sources of pollution.

AFFAIRS IN GLASGOW.

To the Editor of The Lancet.

Sir,—Would you have the goodness to permit me to correct your Glasgow correspondent in reference to one point in his account of the dispute between the Local Authority of Glasgow and the managers of the Royal Infirmary. He states that a "somewhat personal and hasty correspondence in the daily papers took place between the superintendent of the infirmary and Dr. Russell." The fact is, I have never written a line to the "daily papers" on the subject, or directly or indirectly taken any part in the controversy, excepting officially through the minutes of the Local Authority. Had the "superintendent of the infirmary" followed the same excellent rule, the controversy would either never have arisen, or been settled long ago in an impersonal, official way.

I am, Sir, your obedient servant,

James B. Russell, M.D.,
Medical Officer.

Glasgow, Nov. 15th, 1875.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 20, 1875.

The elaborate scheme drawn up by Mr. John Marshall for the institution of compulsory examination in Anatomy at the end of the first winter session, which was brought before the notice of the members of the Council of the College of Surgeons on the 11th inst., is a satisfactory sign of improvement and advancement. The spirit by which Mr. Marshall has evidently been actuated in making this proposal, and the interest taken in it by almost every member of the Council, are deserving of commendation, inasmuch as they show that there is some disposition on the part of the present Council to adapt itself and the College to the exigencies and requirements of modern times. The objects aimed at by Mr. Marshall are, of course, that the instruction in Anatomy shall be based on thoroughly sound principles, and that the knowledge acquired by students shall be not only useful but permanent.

It would have been surprising if Mr. Marshall, who has enjoyed rare opportunities of observing and testing the various methods of medical education and of estimating their results, had, when made a member of the Court of Examiners at the Royal College of Surgeons, failed to be struck with the anomalous state of the College examinations, especially the Primary. That he would, when fairly settled down to work as an examiner and a member of the Council, devise some valuable scheme for the amelioration of the College examinations might have been safely predicated. The anticipation has been realised in the memorandum that was laid before the Council at their last meeting.

As was announced last week, a Committee has been appointed to discuss the proposed measure in all its relations and bearings, and to report on it to the Council. What the decision of this Committee will be we cannot say. It may, however, be conjectured that, although the principle of the scheme will probably be recognised and accepted, the details will be considerably modified. Many objections to the adoption of the measure in its entirety have already been offered, and others will be sure to arise.

The principle of the scheme is briefly as follows:—

Mr. Marshall starts with the statement that under the existing system many candidates are rejected at the Primary Examination for the membership of the College; and he then alleges that, of those who present themselves, some pass extremely well, some barely succeed, whilst the remainder are so deficient in knowledge, especially of Anatomy, that they have to be referred for further study, though they have arrived at least at the end of their second year. And after all, Mr. Marshall adds in his memorandum, it has been recognised by those who conduct or watch the Pass Examination for the membership that a very large proportion of candidates retain a quite insufficient knowledge of Anatomy, often forgetting even the most simple and essential facts in that science. From these circumstances he correctly infers that the present results are not satisfactory, and that they point to the necessity of inquiry and improvement. So far most persons will agree with Mr. Marshall, but at this point many will stop, or at least part company. Mr. Marshall henceforth pursues a less certain course. He assumes that the cause of the failures at the Primary Examination at the College may be attributed solely and entirely to the students or teachers. In this he is somewhat opposed to facts. Mr. Marshall has been long enough a member of the Court of Examiners of the College of Surgeons to have noticed that, up to within a very short time, the unsatisfactory state of the College examinations has been as much due to the examiners as to the want of knowledge in the students. Many of the best students at the medical schools—medalists, honours men in Anatomy and Physiology—have been rejected at the College. Anyone who is at all acquainted with the previous training and experience of the examiners could point out several of the members of the Court who should never have taken office—at least, should never have been appointed to examine in Anatomy and Physiology. Even the Council has recognised this, and has at last consented to the appointment of special and competent examiners in Anatomy and Physiology. It is true that a little improvement has taken place within the last twelve or eighteen months, but it is too early to draw any conclusions from the results of the examinations as conducted by the present examiners. Mr. Marshall must therefore have based his opinion on the results of examinations two or three years ago, and in this he has fallen into error. In the third section of the memorandum Mr. Marshall expresses a doubt whether it is possible for any but vigorous and well-trained minds to acquire a reasonable knowledge of Anatomy in the two years now allowed for the study of that subject. Yet, notwithstanding this, the very aim of Mr. Marshall's proposal is to ensure that this reasonable amount of knowledge shall be acquired by every student. Mr. Marshall appears to have misjudged the object of the medical student's education. It is of course impossible for any man, even for the vigorous and well trained, to become skilled anatomists like Mr. Marshall in two years, and this is neither necessary nor desirable. The aim of the medical student is to qualify himself for medical practice; and desirable as an intimate acquaintance with anatomy may be, it cannot be said to be of essential importance to practitioners of medicine, who may be very successful with a good general knowledge of the subject. In the same section Mr. Marshall has gone rather wide of the mark when he contrasts unfavourably the medical students of the present day with those of former times. He says that "those who first enter upon their studies *now* are younger than their predecessors were when they began attendance upon anatomical lectures and to work in the dissecting-room; their minds are less formed, less ripe for and bent upon thoroughly practical and efficacious study, less able or likely to appreciate the value of time, the pressure of their coming future, and the fact that opportunity lost is not to be regained." Mr. Marshall cannot be serious when he contends that, under the old system of apprenticeship—when boys were taken from school before they had acquired a respectable amount of preliminary education, and made for three or four years to do the uninteresting work and too often the menial drudgery of a country practitioner's dispensary,—better trained men entered the medical schools than in these days, when students generally pass direct from the strict training and discipline of school or college to the study of anatomy and physiology.

Notwithstanding the objections that might be raised to Mr. Marshall's argument, the question to be considered by those who are interested in the improvement of medical education is whether it would be well to institute *a compulsory and authoritative elementary examination in Anatomy at the end of the first winter session,* or immediately at the commencement of the succeeding summer session. Plausible as such a proposal at first sight appears, it will on closer investigation be found to be not altogether free from error and serious evils. If Mr. Marshall were content to suggest that such an examination as that to which he refers would be desirable, or that students if they wish to present themselves for examination at the end of their first year have the opportunity of doing so, or, still better, if the elementary examinations were made compulsory at the medical schools instead of at the College, we should at once say, so let it be. But to make the examination compulsory at the College would be one of the surest means to defeat the object it would have in view. If all men's minds and dispositions were alike, if the aspirations of all were similar, such an examination might have some justification; whereas, if every student who is desirous of becoming a Member or Fellow were compelled to pass an examination in Anatomy at the end of the first winter session, a very serious blow would be given to the higher aspirations of many of the better-class students. Many young men who enter the medical schools are not obliged to complete their student career in the brief space of four years usually allotted, but are prepared to devote a much longer time to their education. They may wish, for example, to employ their first year in the study of chemistry and allied subjects, which, if not taken up in the first year, must perhaps be passed by for ever; or, what very frequently happens, those who enter as medical students may wish to devote their first year to the preparation for such tests as the Preliminary Scientific Examination of the University of London. It would be manifestly unjust to thwart the ambition of such by compelling them to pass an examination in Anatomy at the end of the first winter session, merely to ensure diligence and industry on the part of dull or idle students; for it is for them that Mr. Marshall would legislate. Besides, mere inquisitorial examinations by licensing bodies are unsound in principle, and should not be unnecessarily multiplied. Students have already many terrors to impede their course, and are seriously hampered in their efforts by the multiplicity of regulations. To add one whit to the labours of the medical students would be both unjust and unwise. The most that should be done is to afford to students who do not intend taking any other qualification than that of the Colleges of Physicians or Surgeons the opportunity of presenting themselves for the elementary examination at the end of the first year, if they wish it, the result of this examination being made to tell on the second examination in Anatomy and Physiology, as Mr. Marshall has suggested. It is certain that if such an examination were found to be productive of good results, the vast majority of the worthy students would present themselves voluntarily.

Successive telegrams from India would appear to indicate that the progress of the Prince of Wales in that country may be much impeded and his route probably considerably modified by the prevalence of cholera in some of the districts that it was proposed he should traverse. Scarcely had his Royal Highness passed beyond the precincts of Bombay before anxieties awakened by this fatal disorder became manifest in the telegrams transmitted homewards from day to day for the daily press. It is hardly likely that these anxieties will become less as he advances onwards into the endemic area of the malady, although here, as in other parts of India, his visit has been timed to fall, as far as practicable, within the period when the disease is commonly least active. The grave responsibility which rests upon the Indian Government in this matter should awaken clearer conceptions of what is required from it in reference to cholera and allied subjects. By an unhappy coincidence, the Prince of Wales's visit to India occurs at a time when men's minds have been largely unsettled there in regard to the conditions governing the prevalence of cholera, when it is gravely argued that the accumulated experience alike of India and of Europe respecting these conditions must be set wholly aside, and when vague sanitary generalities are being substituted for measures of prevention based on an intelligent appreciation of the modes actual and probable in which cholera becomes mischievous. It might have been imagined that issues so important would have aroused the serious attention of the India Office, and have induced it attentively to consider what sort of reason or unreason existed for raising them. But it contented itself with reproducing them in its annual sanitary blue-book, higgledy-piggledy with admiring comments of its own, and certain criticisms of the Army Sanitary Commission, admirably adapted still further to unsettle Indian thought on the subject. It gave no heed to the fact that if the Army Sanitary Commission was right the new propaganda was utterly and hopelessly wrong, and that if the latter was right the former must be irretrievably in error; or, if it gave heed, it must have contented itself with certain amiable platitudes of the Commission respecting the propaganda which should, apart from other obvious considerations, have suggested the probability that both were widely astray. It might have been supposed, when the Commission showed that the so-called facts upon which the propaganda raised its issues were, as to chronology, inaccurate, and, as to local conditions, so shamefully imperfect as to render it impossible for the Commission to exercise its proper function of expressing an opinion upon the practical sanitary works needed, that the India Office and the Commission alike must have seen the impropriety and mischievousness of giving any weight to what must necessarily be the crude speculations of the propaganda. But no such thing.

Data which the Commission had shown would have been a discredit to the least intelligent inspector of nuisances, are assumed by it to be sufficient for gauging certain of the profoundest questions of etiology, and for justifying doubts upon some of the most elaborate results of modern European research, the India Office virtually assenting! Nor could it well be otherwise, when the ultimate reference of the India Office in these matters is a mixed Commission of military men, engineers, and medical men, which does not include a single person who is versed in modern etiological science. Such a state of things is in the highest degree discreditable to the India Office, and detrimental to the progress of etiological research and sanitary work in India. Such work has only been successful in proportion as it has followed the strict methods of inquiry and practice in this country. But the new propaganda, neither in language nor in method, has anything in common with etiological research in Europe. It uses a language which is a tissue of fallacies; it follows a method which compasses in a few weeks, among populations of various languages counted by millions, inquiries which here, with populations counted by hundreds or thousands, having a common language and every facility for information, occupy many months. Yet the India Office has no specially appointed and sufficient means of enabling it to judge rightly of such matters, separating chaff from wheat, and at all times appears to have a curiously imperfect knowledge of European research.

If the visit of the Prince of WALES to India should awaken at the India Office a true insight into the requirements of etiological research and sanitary practice, this will not be the least of the benefits which will flow from it.

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THE debate at the Clinical Society on Antiseptic Surgery has come to a conclusion, and we may well inquire what has been the practical result gained, and what will be its outcome as regards the employment of the system in the surgical practice of the metropolis? There were many points on which light might have been thrown by the debate, and we anticipated that some new testimony for or against the system advocated by Professor LISTER would have been forthcoming. It would have been expected that the results of a trial of LISTER's method in a rigorous and scientific manner would have been contrasted with the results of the ordinary methods similarly tried; that we should have heard whether and to what extent antiseptics may be trusted to prevent suppuration, decomposition, and traumatic fever; and that a comparison of different antiseptic materials would have been instituted. But when we look at the course of the debate we find but little of all this, and what there is requires some labour to extract from the mass of irrelevant matter surrounding it.

It may indeed be a matter for question whether there has really been a discussion on the antiseptic method of dressing. It will be remembered that the debate was raised on papers by Mr. CALLENDER and Mr. PICK on cases treated with various antiseptics. The case brought forward by Mr. PICK was regarded by some as one hardly suited for the purpose, but, such as it was, it served the end of raising a discussion. Mr. CALLENDER's cases were perhaps more to the point as an inquiry into the value of salicylic as compared with carbolic acid. His paper, however, received little or no consideration from this point of view, and was lost for the purpose of discussion. The debate on these papers, continued at the meeting on Oct. 22nd, was then formally adjourned until the meeting last Friday, when, it was stated, a paper would be brought forward on the same subject. It must therefore have been a matter of surprise to some and of disappointment to others to find that the antiseptic method was not to be discussed in its entirety, but that a subject which only bore indirectly upon it was introduced. It was obvious that the subject matter of Mr. HOLMES's paper had been misunderstood, and an interpretation put upon its title which was disclaimed by the author himself. Yet the error would readily have been rectified had not the Chairman, in introducing the discussion, pointed out an entirely different subject—viz., that of the best method of ligaturing large arteries in their continuity—as the topic for consideration. Thus the course of the debate was, as if by accident, shunted on to a wrong line, and a new matter introduced; and that this was so was shown by the fact that the speakers were nearly the same as those at the previous meeting.

We sympathise with those advocates of LISTER's method who would have wished to discuss the general question and to state their own views upon it, and with those who would have been glad to hear their opinions. There was an uncomfortable feeling evinced by some speakers that the antiseptic method must somehow be brought in, and hence some curious attempts were made to piece together two totally divergent subjects. And it scarcely needed the formal protest of an advocate of the method, or an equally formal disclaimer by the author of the paper, to show that the carbolised catgut ligature, apart from antiseptic dressing, can hardly be considered antiseptic. As was forcibly pointed out by Mr. BECK, the catgut soon loses its carbolic acid, and, when it has done so, is even more liable than the ordinary silk ligature to set up irritation and to become softened. And the cases mentioned by Mr. CALLENDER showed most clearly that such a result actually occurs. The defenders of LISTER's method may be induced to apply to their opponents the dictum of PASCAL—"*Incrédules, les plus crédules,*" and to say that, whilst refusing to allow the value of the free use of carbolic acid, they place unlimited faith in a minute quantity of the same.

What, then, is the outcome of the discussion? for to an attentive observer a verdict, none the less decisive because not formally expressed, has been given, and must to some extent influence the immediate future of the use of antiseptics in London hospital practice. And, first of all, it was evident that but few of the speakers either place faith in LISTER's theory or carry out his practice in full. It would be difficult to name more than one or two who are thoroughgoing believers in the theory, and there are scarcely more who strictly and fully carry out the practice. On the other hand, there were but few who did not express their belief in the utility of some portions of the method, especially in those which relate to the scrupulous care and cleanliness of wounds, and the avoidance of external sources of irritation or putrefaction. And if, as seems to be shown by the highly successful results of Professors SPENCE at Edinburgh and

Humphry at Cambridge, almost as much can be done by such precautions as by Lister's method, they have some ground for the assumption that the success of Lister's system is also due to similar causes. Granting this, however, it may fairly be urged that, apart from the theory, his method is at least one way of securing these benefits in the most efficient manner, as it enables the surgeon to be himself, to a great extent, the custodian of the wound; and it in nowise detracts from its value that other methods should rival it in this respect. After all, the test of experience is the test which is of real value in this as in all other questions of treatment; and until this has been applied by individual surgeons in a rigorous manner to a series of cases under varied conditions of hygiene and nursing, the arguments for and against the method on *a priori* grounds will be comparatively worthless. That such a scientific trial has not been made by most of the surgeons who took part in the debate was confessedly the case; some have tried it, but have given it up from weariness of the details, or dislike of the mechanical processes needed, and especially the disagreeableness of the spray during operations, and so have come to no conclusion of any value; whilst others have resented the insistance on a theory which they could not accept on the evidence given, and without which the practice seems tediously minute and even repulsive. It is yet open to the advocates of Lister's method, by bringing forward a series of cases, to show the superiority of results gained by it to those on other methods; and they may thus raise a discussion which will be of some value, if they care to do so. But with the present state of feeling on the subject, we question whether they would gain much by so doing.

One other point which was strikingly illustrated by this as by previous debates of a similar kind is the impossibility of a really scientific debate unless the questions to be considered be more clearly stated. The absence of a common and definite ground for discussion was evidently felt, and the last meeting resolved itself into a narration of experiences, many of which had little in common, and all of which would have been of far more value if connected with some expression of opinion on the more general question. Let us hope, even against experience, that this defect will be remedied in the next discussion of the kind.

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Dr. W. W. Johnston, one of the physicians of the Children's Hospital, Washington, has contributed a paper to the last number of *Hays's American Journal of the Medical Sciences*, containing observations that are not without practical significance and bearing at the present time, when typhoid fever is unduly prevalent. The author deals with the diagnosis of mild cases of enteric fever, and specially refers to its afebrile and abortive forms. The departures from the accepted type are in two directions: either in a loss of intensity of the morbid phenomena, with a feeble development or absence of the pathognomonic symptoms; or in a considerable shortening of the attack. Embarrassments of diagnosis will occur in such mild and short cases. Dr. Johnston passes in review the symptoms most commonly associated in cases of typhoid fever infection. Those whose experience of this disease is most extensive will be the readiest to recognise the wide range in point of severity and duration and the diversity of the morbid manifestations in different cases. Easy as it is to diagnose the well-marked type of the disease, it is not by any means invariably so in cases of different and less pronounced character. After insignificant symptoms perforation of the bowel may ensue, and the same may occur where diarrhœa has been absent; tympanites may not be present, or at any rate observed; and the intestinal disturbance and abdominal symptoms may, in short, be trifling or altogether absent. The same may be said of the rose rash, enlargement of the spleen, and other ordinary concomitants of typhoid. But as regards pyrexia—undoubtedly the most constant symptom of the disease, and the best test by which we can gauge the gravity as well as determine the nature of the morbid process,—can we say that every case of typhoid disease must of necessity present an increase of animal heat? Dr. Johnston cites the experience of Liebermeister and others to show that there is a typhoid infection without fever, and refers to the fact that in Basle, where typhoid fever prevails to a great extent, it is not uncommon to find an evident enlargement of Peyer's patches in persons who have died of other diseases or from accident. Cases may be reckoned mild which have no higher evening exacerbation than 104° Fahr., or in which this point is not attained more than once or twice. Starting from this we pass from degree to degree in the descending scale until we reach afebrile states; and the author relates some cases illustrative of these low-temperature readings where there was no reason to doubt that the patient's disease was still typhoid fever. He next refers to the so-called "abortive typhoid"—a term suggested by Lebert as applicable to cases first described by Griesinger, and since by Wünderlich, Jürgensen, and others. The typhoid infective agent has a virulence which is by no means the same under all circumstances, and the limits of variability are known to be very wide. In the same house, says Dr. Johnston, may exist cases which react in very different ways to an infection which seems to be the same; and he thinks that different cities and countries may probably present peculiarities, and it is for the future to determine in what these peculiarities consist. The points in which the typhoid fever of America differs from the European disease are briefly adverted to by our author. The practical lessons connected with the recognition and study of these varieties seem to be two:—First, that the mild cases, corresponding to the typhus ambulatorius, may receive prompt and proper treatment, so that the disease be not aggravated or protracted; and, secondly, that they be prevented from becoming unsuspected sources of infection to other and healthy people.

The *Pharmaceutical Journal* publishes a short paper by Dr. De Vrij, of the Hague, on "East India Chinchona Bark." The writer calls attention to the quantity of alkaloids which can be extracted from any variety of bark by water only. By percolating one part of finely-powdered Indian red bark with cold water until eight parts of clear fluid were collected, he obtained by precipitation with an excess of caustic soda three-eighths of the total amount of the alkaloids contained in the bark. Dr. De Vrij is engaged in prosecuting further experiments in this direction.

Annotations.

"Ne quid nimis."

THE VICE-CHANCELLOR'S ADDRESS AT CAMBRIDGE.

THERE are several points of interest in the recent address delivered by the Vice-Chancellor of the University of Cambridge (the Rev. Dr. Phear, Master of Emmanuel), at the close of his year of office, which are well deserving of notice and comment. The academic year which has just passed was one of great activity and prosperity in the University. The number of matriculations for the year was the largest yet recorded, and the number of primary degrees (B.A., LL.B., or M.B.) has been 477. Of these only about two-fifths graduated in honours. Dr. Phear remarked, however, that it is likely, as greater numbers come to the University, drawn from the less wealthy classes, the proportion of the undergraduates unprompted to active study will become smaller, and the social influences which encourage industry and simplicity of life will be strengthened. The changes on the professorial staff have been great: six elections into professorships have occurred within the year. The operations of the University have lately received extension by the establishment of examinations in the department of State Medicine. The number and character of the candidates for the first examination prove how highly the degree is estimated by the profession, and the public want it supplies. Another important movement has been placed on a permanent footing—the superintendence of lectures in populous places. The details of this scheme, when first discussed at a meeting at the Mansion House last summer, were noticed in our columns at that time, and we are now glad to learn that the University, after due consideration, has accepted the responsibility of maintaining and further promoting this system of local teaching, extending to a great degree the advantages of a University training to those at present beyond its reach. For some time past great inconvenience has been felt owing to the want of accommodation in the buildings set aside for special departments. The increased number of students working at chemistry, physiology, and comparative anatomy has made the demand for increased accommodation more urgent. We are glad, therefore, to learn that the report of the Additional Buildings Syndicate is now before the Senate, and that ere long the required accommodation will be provided. Whilst on the subject of additional buildings we would venture to suggest that some step might be taken to extend the residential accommodation for students. Most of the private colleges have recently added to their buildings, but they are quite unable to keep pace with the ever-increasing number of the undergraduates. The lodging-house accommodation is hardly sufficient, and men yearly have to seek for rooms further and further off from their college, in the outskirts of the town. Moreover, the sanitary arrangements of the lodging-houses are far inferior to those of the colleges. We think the University might with advantage undertake to provide blocks of buildings, in different parts of the town, to be let to responsible persons for the special accommodation of out-college students. Lastly, Dr. Phear remarks that no one intimate with the active work of the University can fail to be struck with the evident strain now put on the senior members in residence. Lectures, syndicates, examinations, &c., have increased immensely in number and scope of late years, and the tutorial staff consequently are overworked. Dr. Phear expressed a belief that the efficiency of the University depends on all natural inducements being provided to attract and retain the mature services of more of the ablest members. It certainly has always appeared somewhat anomalous that no less than one-third of the net income of the University should be expended on non-resident members. Every year fellowships are conferred on distinguished scholars, the majority of whom leave the University, drawing from it for years a considerable income without rendering in return one particle of service. The tutorial staff at the University sadly needs enlarging, and it is only fair that its revenues should be applied almost entirely for this purpose. A reduction in the number, value, and time of tenure of non-resident fellowships is urgently called for, and this is the direction in which University reform ought to tend.

DIPSOMANIA.

OUR contemporary, the *Globe*, whose useful efforts to promote the much-needed legislation upon this subject we have before noticed, has recently commented at some length upon the able article on the subject in the current number of the *Quarterly Review*. To the instances of the abuse of alcohol which cry with keenest if not with loudest voice for interference, the writer adds another. In addition to the prevalence of the vice among women, boys are yielding to the temptation. At an age when reflection sets so few barriers against wrong, the chains of alcohol may easily be riveted before their weight is felt. It is authoritatively stated that this is the case, and that the habit of secret drunkenness is becoming common among boys at public schools, to an extent which the friends of the sufferers would willingly conceal. It may be hoped that the case is exaggerated, but knowledge of the even worse habits sometimes acquired at public schools forbids us to doubt its probability. The dissemination of precocious vice has ever been an unhappy consequence of the example of the contaminating few in large schools. Readers of a popular school-boy novel of twenty years ago will remember how powerfully this result was brought out in the delineation of the downward moral course of certain boys. It cannot be doubted that the same influences are, and always will be, at work in this and in other directions.

Our contemporary urges a milder measure of interference than will, we believe, effectually meet the necessities of the case. It points out the striking anomaly to which we some time since called attention, by which habitual drunkenness is allowed and suicide forbidden, but it urges merely the legalisation of "voluntary restraint," if the expression may be excused. It asks for a measure which shall permit the dipsomaniac in his sober moments to place himself in a restraint which he shall not leave in his unsound period, and it would merely give power to others to enforce such seclusion in the case of minors. It would further, as far as we understand it, limit such seclusion to the unsound dipsomaniac, who is urged onward to his fate by what the *Quarterly Review* calls the *vis a tergo*, and would not include the habitual drunkard, who merely yields to a temptation which he might withstand. It may be doubted how far any line can be drawn between the two classes, except that of frequency of intoxication. The *vis a fronte* and the *vis a tergo*, the temptation and the impulse, are, in reality and essentially, one in nature. Their extreme degrees are separable, but they blend. The temptation often yielded to, involves, by the alcoholisation of the system, the incapacity for resistance which in its extreme form constitutes the impulse. Compulsory privation from alcohol lessens the attraction of the temptation as it lessens the force of the impulse. We believe that the larger measure must ultimately come, and we would urge that the demand should not be restricted to the smaller instalment, even though we may ultimately have to be content for a time with the "voluntary restraint."

THE "FACING" OF GREEN TEA.

THE 1st of January, 1876, will decide the question whether "faced" or painted tea is to be regarded by the law as adulterated. We have always held that the practice of facing was objectionable, not only because it is a fraud, though generally a small one, on the consumer, who pays for tea and not for paint, but also, and more particularly, because it affords facilities for adulteration with faded leaves, lie tea, &c. That facing is quite unnecessary is proved by the fact that much excellent tea, green as well as black, entirely unfaced, is now imported and used in England, and it is indeed impossible to assign any valid reason for the continuance of the practice.

The position of tea importers is at the present time a very delicate one, and we regret to find, from a recent correspondence published in *The Times*, that the Custom House authorities are unable, or unwilling, to afford them any assistance. A well-known firm of tea importers wrote to the Commissioners asking whether, after the 1st of January next, the importation of all faced tea would be prohibited, and, if not, what amount of colouring matter would be allowed. In a subsequent letter they offered to send samples of such tea as they were in the habit of importing for the examination of the analyst, and in both letters they pointed out with perfect truth that "no merchant would venture to import an article which might, at the caprice of an individual analyst, be condemned to be destroyed." To these representations the Commissioners replied in effect that no information of the kind required would be given, but when the Act came into operation each case that arose under it would be separately considered.

It seems clear that, whether the Commissioners have made up their minds to treat as adulterated all faced teas, or whether they intend to permit a certain amount of coloration, it is equally their duty to give timely notice, and so prevent unnecessary injury to trade. As things stand now, the merchant will have equal cause to complain if he imports slightly faced tea and has it seized and destroyed, or if, having himself stopped the importation, he finds that other cargoes of faced tea are allowed to pass. It is to be feared that the authorities have not yet made up their minds in the matter.

THE SANITARY CONDITION OF BRISTOL.

DURING the past month or two the mortality returns of Bristol have exhibited most of those signs which experience warns us not to disregard as evidence of unsatisfactory sanitary condition. The death-rate has considerably exceeded that which has prevailed in recent corresponding periods; the excess has, moreover, undoubtedly been due to an unusual fatality from zymotic disease. Scarlet fever has been remarkably fatal, and the deaths referred to small-pox, measles, whooping-cough, and enteric fever have also been above the average. A belief in the intimate relation that exists between sanitary condition and the fatality from zymotic disease appears to us essential to a hopeful view of future sanitary progress, and we therefore regret to see that, in his last quarterly report, the medical officer of health for Bristol, in speaking of the present epidemic of scarlet fever in the city, says:—"Observation leads me to believe that the great fatality of this disease is but slightly, if at all, dependent upon general sanitary conditions, remediable by a sanitary authority." Epidemic scarlet fever in Bristol, as in other localities, appears to have visited different parts of the city with a widely varying fatality. During the three months ending September last, the annual death-rate from scarlet fever was but 0·3 per 1000 in Clifton parish, whereas it was 2·8 in Bedminster, 4 in St. Paul, 6·4 in St. Philip and Jacob, and 8·1 in St. Mary Redcliffe registration subdistricts. In other words, the epidemic has visited most severely the crowded parts of the city, where even in ordinary seasons an excessive death-rate invariably prevails. To ignore the fact that these continuous high death-rates in certain parts of the city of Bristol, supplemented by excessive fatality from zymotic disease in epidemic seasons, are due to want of wholesome conditions, would augur badly for the future sanitary welfare of the city. Even epidemics may be turned to good account, as their fatality affords a valuable indication of the localities in which the population is living under circumstances unfavourable to health; and these circumstances are in most instances remediable, or may certainly be alleviated by sanitary measures, in accordance with recent legislative enactments. Bristol has till recently showed comparatively low death-rates, but the evidence that the city has in its midst more than one "unhealthy area" is too strong to be safely disregarded. It may be hoped that the Town Council will recognise its responsibility under the recent Artisans and Labourers' Dwellings Act, in the same manner as the sanitary authorities of so many of our other large towns have already done.

DENSITY OF POPULATION AND MORTALITY.

THAT death-rates in various districts almost invariably bear a distinct relation to their density of population is a well-known fact. If the 629 registration districts of England and Wales were arranged in the order of their density of population, calculated by the number of persons to each acre of their area, and against each district were written the average annual rate of mortality, say in the last completed decade—1861–70,—it would be found that their rates of mortality would run in almost unbroken order from considerably less than 17 to more than 30 per 1000 persons living. This apparently inseparable connexion between density of population and death-rates has had the somewhat mischievous tendency to create an impression in some quarters that, given density of population, a high death-rate is inevitable. The special report of the directors of the Improved Industrial Dwellings Company (Limited), recently considered at a meeting at the Mansion House, contains some valuable information showing that, with judicious economy of space and the due observance of sanitary laws, health and density of population are compatible. The above-mentioned company has, since it commenced operations, housed 12,150 persons in 2199 tenements in different parts of London. The average density of population on the area occupied by the improved dwellings is 750 persons per acre, whereas the average density in the whole metropolis is but 42 persons to the acre. Notwithstanding this great density, calculated by the acre, the average annual death-rate in the Company's dwellings during the past nine years is said to have been but 16 per 1000, against 23·8 in the whole of London. These figures appear to show that one of the direct results of the dwellings erected by this Company is an annual saving of more than 100 lives on the most moderate computation, as it may fairly be assumed that the rate of mortality in the districts from which the inhabitants of these dwellings have been drafted was considerably higher than the average rate in the whole of London. The problem of how many human beings can be housed upon an acre of land without detriment to health has not yet been solved, but this statement of the Improved Industrial Dwellings Company proves that some more satisfactory means than the number of persons per acre is wanted for estimating density of population in towns. A recently published paper dealing with the housing of the population of some of the larger American cities attempts to estimate the overcrowding in these cities by stating the number of persons to each inhabited house. For instance, it is stated that in New York, Brooklyn, and Jersey City there are more than 12 persons to each house, whereas the proportion in Philadelphia does not exceed 7½ persons per house. Unless the size of the houses be taken into account, these figures give no more reliable indication of overcrowding than does the statement that the residents in the Improved Industrial Dwellings average 750 persons per acre. The amount of cubic space in houses for each person is the only true test of density of population in towns, but, failing this, the area to each person of the rooms occupied, or even the number of persons to each room, would afford a far truer indication of density than either the persons to an acre or the persons to a house. So important is the bearing of overcrowding upon health, that it would be very desirable to see adopted some more correct measure of the density of population than those now generally used, which often give fallacious results.

A MEDDLESOME "PRIEST."

It is no doubt difficult for people with missions to restrain their enthusiasm within due limits. The very belief in a commission to obey some supreme behest or carry out a supernatural purpose places its possessor beyond, or, as he would say *above*, the constraining influences of mere worldly prudence. It does not seem to occur to individuals so gifted that the fervour of their enterprise is scarcely likely to be shared by those around them, and that this circumstance calls for increased carefulness and address on their own part to prevent their ministrations being productive of resentment rather than gratitude. They forget that the exceptional character of their position must needs awaken distrust in those who do not happen to be inspired with faith or confidence. The Rev. Mr. (or "Father") Brendon, of the Monastery at Gorton, Manchester, apparently labours under this form of forgetfulness. He is intensely in earnest and boundless in his zeal. His business is to save souls, and as he happens to hold the inconvenient doctrine that children enjoy an independent spiritual existence anterior to the accident of birth, he has no scruples about resorting to the expedients of science with a view to get at the bodies in which these little souls are encased, in order that they may be baptised and so brought into a state of salvation. No doubt a considerable number of persons share the belief cherished by the Rev. Mr. Brendon, and it is clearly competent for them to perform the rites proper to their convictions; but when the enthusiasm of a "priest" so far overmasters his sober sense of right and decency as to induce him to send for a surgeon and instruct him to perform the Cæsarean section on the body of a woman just dead, without even consulting the husband of the deceased and obtaining his permission, we venture to think he must be fired with a zeal calling for restraint. Of all forms of priestly interference in the affairs of families, that illustrated by the exploit of the Rev. Mr. Brendon, if not the most mischievous, is probably the first in audacity. We can conceive of nothing more effusively paternal. Not only the adult souls in this reverend gentleman's care are under his protectorship, but all that may be added to them, whether actually numbered among the inhabitants of this world of sin and sorrow, or only probably destined to enter its gloomy portals. It is, doubtless, too much to hope that the Rev. Mr. Brendon will attach any weight to the opinion expressed by the coroner's jury at Manchester. Possibly, however, the surgeon who acted as the priest's henchman in this matter, and other practitioners who may be allured or impressed into the same kind of service, will in future remember that it is necessary to obtain the consent of the responsible friends before operating even on a corpse, and that the law of England does not recognise the friendship of ghostly fathers as of a nature to give validity to their sanction. There is always a dash of comedy even in the deepest tragedy, and in the present case it appears to have taken the shape of a discovery that the babe in whose spiritual welfare the Rev. Mr. Brendon evinced so lively an interest, was in fact a fœtus of about the fourth month.

PLETHORA AT THE PATHOLOGICAL SOCIETY.

The profession is to be congratulated upon the increasing interest taken in pathological science, as evidenced by the large number of specimens which swell the list at the Pathological Society; but it may be doubted whether this state of congestion is altogether an unmixed good. It certainly cannot be regarded as such by those members who, with praiseworthy perseverance, bring down the same specimens to two or even three successive meetings before they are enabled to exhibit them. Exception is rightly made in the case of fresh specimens, which, as retaining their natural characters unaltered by preservative reagents, are always welcome. Yet it often happens that cases of great interest are postponed, and appear on the list on two or three occasions. At the last meeting of the Society, which we report to-day, the number of specimens down on the list read by the President at the commencement of the meeting was twenty-seven, and it says much for the expedition and conciseness of the communications that no fewer than seventeen of these were "worked off" in the ninety minutes. There remain ten still to be shown, so that it is unlikely that any additional specimens will come forward at the next meeting, which does not take place for three weeks. The contrast between the present meetings and those of the old days, when two or three cases sufficed for the whole evening, is striking, and is enough of itself to account for the more lengthy and interesting discussions that used frequently to take place in the past. It is doubtless the sense of the large amount of work before the Society that deters members from making comments on cases which are worthy of more notice than they receive. It is obvious, further, that the Society should strictly keep within its proper limits, and on this account it does not seem desirable to countenance the exhibition of specimens which are avowedly brought down merely to illustrate a particular line of treatment without any reference to pathology. It does occasionally, but not often, happen that pathology has thus to give way to clinical medicine or surgery; but surely in the present plethoric, but withal prosperous, condition of the Society, the introduction of extraneous matter should be as far as possible avoided.

LEPERS IN BOMBAY.

After reading the descriptions of the gorgeous displays, the festivities, and other manifestations of public rejoicing in the East with which the Prince of Wales has been welcomed in Bombay, it is indeed difficult to realise the terrible spectacle presented by a number of wretched human beings in another part of the same city. The *Times of India* draws attention to the state of the lepers who have found a refuge in the Jamsetjee Jejeebhoy Dhurrumsala—an institution founded for the relief of the sick and destitute, and not for lepers especially, although these poor wretches are only too glad to find a refuge there from the streets of the city. Such as it is, the Dhurrumsala is the only place of the kind open to them. About 120 are lodged in it at the present moment, and they share its scanty accommodation with nearly an equal number of the halt, the lame, the blind, and the aged. They live in what are termed chawls, each room, or rather cell, of which is about six feet deep by five in width, and so full is the institution that two lepers occupy one of these cells! The description of the unfortunate creatures given by our contemporary is dreadful, and their condition is a scandal and reproach to the community at large. We call attention to it in the earnest hope that something may be done by the Government towards the mitigation of the sufferings of those who are the victims of this terrible scourge, and that means may be found for establishing asylums where they could be kept apart from the healthy community. The lepers in the Dhurrumsala have no furniture, not even cooking utensils. Every day two pounds of rice and three pice are given to each. Only those who are very much afflicted indeed can be taken into the refuge; those who are not so bad are told to go away—that is, they are in effect told to go and beg, until they become bad enough to be admitted. Within the Dhurrumsala there are men and women—and children. The latter are the offspring of the adults; they do not, as a rule, show signs of the disease till they are about fifteen, but it generally lays hold of them sooner or later. Children are born to leper parents in the Dhurrumsala; no separation of the sexes is enforced or even thought of. Yet one would counsel an inexorable separation in mercy to future generations. Men and women with their limbs wasted till only the outline of the bones remain, or else swollen out of all form of limbs, sit or lie on either hand. And for none is there either medical care or medical comforts. The two pounds of rice and the three pice for fuel to boil it, constitute their only resource. "No relative ever visits them or sends them food or money; they are cut off from their families and from the community of their native villages; no priest of any faith, no doctor—save one, whose name we are told not to publish—no man or woman goes amongst them to give material or moral consolation of any kind. They are abandoned of God and man, and were it not that the Dhurrumsala gives them the half of a six-feet cell in which to lie, and a handful of rice with which to sustain life, they would die in their sores along our streets and in our compounds."

FEEDING BY SUBCUTANEOUS INJECTIONS.

A method of forcible alimentation, which possesses at least the merit of novelty, has recently been put in practice by Dr. J. Krueg, who narrates his experience in the *Wiener Med. Wochenschrift*. It consists in the injection of aliments into the subcutaneous tissue by means of a hypodermic syringe. Dr. Krueg recalls the fact that it has been shown by MM. Menzel and Pereo that nutritious matter may be absorbed in this way; a quantity of fatty liquid, from one to eight drachms, having been taken up in forty hours, and that solutions of sugar, milk, and yelk of egg act in the same way. Peptones have also been shown to be thus absorbed by Stricker and Oser. Dr. Krueg tried the method in a case of insanity with refusal of food, in which, the patient having been nourished for twenty-seven months by means of the stomach-pump, and the introduction of the tube becoming difficult from his violence, at one time it could only be introduced once in ten days. Dr. Krueg, therefore, injected about half an ounce and then one ounce of oil daily beneath the skin, dividing this quantity between from two to five different points of injection, the operation being done gradually, and lasting about an hour. The injection was not painful, and the swelling disappeared by the next day. Beaten-up egg was not so successful, producing an abscess. For nine days at a time the patient was entirely dependent on this process for nourishment, which was subsequently repeated several times. We need scarcely say that this method of feeding is one not likely to be of much use; and, indeed, it seems to have been required in this case only because the old and barbarous method of feeding by the stomach-pump was employed, instead of the more simple and expeditious way of feeding by the nose. As a means of inducing unwilling patients to take food, the punctures required may have as much value as any other mode of torture; and, indeed, some temporary result of the kind seems to have been gained in the case narrated.

THE PRESS AND FALSE DEGREES.

After the trouble which has been taken by the authorities of the United States to expose the system of selling medical and other degrees, it is lamentable to see respectable papers doing their best to give a fresh lease to this system of fraud, by giving regular titles to persons holding these worthless certificates. A case in point is now under our notice. *The Redruth Times and Camborne Advertiser* gives a report of a very useless coroner's inquiry into the cause of death of Mary Ann Angove, the inquiry leaving the cause of death as much a mystery as it was before. The only facts elicited were, that the deceased was subject to giddiness, and shortly before her death had a draught from one "Dr." Rowe, as our contemporary calls the chemist who gave this draught, containing, as he admitted, chloral and camphor and opium. This gentleman seems to have had that convenient amount of self-respect which allows a man to buy the M.A. and Ph.D. of Philadelphia, U.S., an institution which we officially know to have "no legal or actual existence," having been deprived of its charter "on account of its notorious and shameless sale of degrees and similar rascalities." The words we quote are the words of the Acting Commissioner of the Bureau of Education, Washington. Surely our press should not perpetuate and abet the use of titles so disgraceful. The way in which, in common newspaper reporting, the reporter confers degrees indiscriminately on all medical men may be leniently regarded as a piece of carelessness, but it is a very different matter when a chemist dealing out deadly medicines on the strength of high sounding but highly discreditable titles, is styled "Dr." Rowe, without the commas, as if he were a duly registered practitioner in possession of a respectable degree. Our contemporaries can really help the American authorities, and all who represent respectable colleges, by using medical titles only in cases in which they are real and registerable, points easily to be ascertained.

CHOLERA RISKS IN INDIA.

The *World*, in adverting to the fact that the prevalence of cholera in the Annamully Hills will prevent the Prince of Wales from entering one of the finest fields for sport in India—the Annamullies being the favoured haunts of the largest elephants in India,—indulges in a computation as to the mortality of cholera, about which all we can say is that we heartily wish it were true. Our contemporary says that it is computed that one European of pure blood dies of cholera in India out of thirty-seven attacked, and that one such European is attacked to 74,000 of the natives of the country. Without claiming any special means of judging of the accuracy of these statistics, the statements, nevertheless, appear to our contemporary credible, and it proceeds to indulge in some pleasant calculations on its own account. What are the facts? The proportion of fatal cases to attacks assigned in different epidemics have varied; but the mortality from cholera in all countries is very great. The period of the epidemic influences the mortality; for, at the first onset, the larger number of those attacked die, then the mortality descends to one-half, until, at the end of the epidemic, a large proportion recover. The uniformity of this law in different cholera epidemics in different countries is very remarkable. We may state roughly that of the European troops serving in India, about one-half of those attacked with cholera perish. As is well known, officers are much less liable to contract the disease than private soldiers; but, when attacked, no great difference is observed in the mortality. The relative liability of Europeans in India to cholera as compared with the natives of that country we need not now discuss.

SCIENTIFIC OPINIONS USED AS ADVERTISEMENTS.

THE letter of "A Provincial Physician," which we print elsewhere, illustrates the danger which besets the giving of a written opinion on any article of trade. The writer, understanding that a certain prepared food was not advertised, expressed in a letter his good opinion of it. Within a week the letter was printed and circulated among the professional men of the district, to the great annoyance of our correspondent. This kind of annoyance is a very common one. Few professional men of repute would wish to see their names attached to a trade puff, and yet, if they have given a written opinion without any stipulation expressed or implied, it is difficult to see how they can help themselves. For professed analytical chemists the difficulty is of course greater than for medical men, for it is their duty to analyse and report upon every article sent to them, and very frequently they do not know the object of their client in having the analysis made. The report, once delivered, becomes the property of the client, who, in the absence of an express stipulation, is entitled to use it as he likes. The only safe course for those professional men who object to seeing their names on every hoarding in the country in connexion with nostrums and foods, is to insert in the report a stipulation that it shall not be used as an advertisement.

THE POLLUTED RIVER BASINS OF GREAT BRITAIN.

THE Sixth Report of the Rivers' Pollution Commission contains an interesting and elaborate map showing the entire area of the polluted river basins of Great Britain. The sources of pollution are severally from sewage, fibre (which includes cotton and woollen manufactures, calico and silk printing, dyeing and bleaching, and paper manufactures), chemical manufactures (including alkali works and mines), metalliferous and salt mines, collieries where coal is washed, works of China clay and metal trades, of brass founders, iron and steel wire drawers, galvanisers, file, saw, and edge tool manufactures, cutlers' grinders, and tin-plate workers. Special pollutions also include alcohol distilleries, paraffin oil, starch, and sugar refining works, and tan works. The counties that appear by this map to give least pollutions as to their river basins are Kent, Sussex, Dorset, Wilts, North Devon, Pembroke, Cardigan, Carmarthen, East Lincolnshire, and East Yorkshire. The North-west parts of Scotland are also tolerably free.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

THE epidemic on board this ship is not yet entirely at an end. Four doubtful cases occurred at the beginning of this week, and were removed to the shore hospital. A total of 43 cases are now under treatment—namely, 12 at the Seamen's Hospital, 4 at St. Bartholomew's, 23 in the Corporation's hospital-ship *Rhin*, and 4 at Purfleet. A detailed report of the rise, progress, and causes of the epidemic has been sent from Guildhall to the Local Government Board by the Port Sanitary Committee of the Corporation. For although the drinking water was undoubtedly polluted between the shore and the ship, on account of the faulty mode of conveyance, further examination has shown that the water, as delivered at Purfleet by the Grays Company, bears distinct signs of sewage contamination. This company supplies several villages in Essex, as well as a large number of isolated houses, before Purfleet and the *Cornwall* wharf are reached, so that it appears very important, in order to prevent further mischief, that the precise spot at which the pollution occurs should be accurately ascertained. We are informed that the main is more than twelve miles in length, with various branches, so that the inquiry will necessitate a great deal of care and labour, and one well worthy the attention of the Medical Department of the Local Government Board. Meanwhile the *Cornwall* authorities, hampered as to funds and the somewhat "intermittent" control of the Home Office, have but partially carried out the recommendations of the port medical officer of health. There are, in fact, several predisposing as well as exciting causes to account for the outbreak.

THE LYMINGTON GUARDIANS AND RETIRING ALLOWANCES.

IN July last Mr. Nicholas Adams resigned his appointment as medical officer under the Lymington Union, after a service of forty-seven years. As to the character of this service we have the direct testimony of the guardians that the duties had been discharged in a most exemplary manner, and "most undoubtedly to their entire satisfaction." In due time Mr. Adams very naturally applied for a retiring allowance. It will scarcely be credited that the guardians have refused it. Length and faithfulness of service are thrown away upon some employers, amongst whom we fear we must reckon the Lymington guardians. These gentlemen seem to us to be acting at least ungenerously in this matter. They are unwilling to establish the precedent of superannuating their officers. We give them full credit for this unwillingness. But the law contemplates such a course, and they refuse to take it. It is true that the law leaves the gift in the discretionary power of the guardians, and in this fact they may find an escape from the charge of breaking the letter of the law. But they not less glaringly violate its spirit and intention in a case where most men, and we will venture to say most boards of guardians, would have been eager to do all that the law permitted to testify respect for an officer. The Board has refused a second time to superannuate Mr. Adams. We hope for its own credit's sake that it will even yet reconsider its decision.

THE PRINCE OF WALES.

As we ventured to state, the projected tour of the Prince of Wales in India would be a purely provisional one, subject to any alterations that might be rendered necessary by the state of health of the inhabitants of any given district which the Prince might have to traverse. By the latest telegrams, it would appear that His Royal Highness's visit to Madras has been abandoned on account of the prevalence of cholera in that presidency. The telegrams that have reached this country have already informed us as to the health and doings of the Prince up to very recent dates, and anticipated news that would come by letters. We are glad to learn, however, that the health of His Royal Highness during the passage to India continued excellent, even in the hottest part of the Red Sea, and when the ship was in a calm. Notwithstanding that the air in the cabins was 83° to 84° F., and laden with moisture, and the seawater was as hot, or nearly so, as the air, all on board the *Serapis* were in good health, the Prince apparently the strongest of the party, and thoroughly enjoying the voyage. As soon as the *Serapis* began to meet the southerly wind, which blew strongly through the Straits of Babul Mandel, the thermometer commenced to fall, and from having reached as high as 86° in the cabins, with 6 to 7 degrees of evaporation, it fell to 79° and 80° F., and became lower still on passing the Straits.

BORACIC ACID IN THE TREATMENT OF RINGWORM.

Surgeon-Major Watson reports in the *Indian Medical Gazette* that he has lately employed boracic acid with very great success as an external application in the treatment of the dermatophyta or vegetable parasitic diseases of the skin. He was induced to try this remedy from witnessing its employment as an antiseptic in the Edinburgh Infirmary wards. The diseases in which he has hitherto used boracic acid have been the different forms of tinea (T. tonsurans and circinata), and in that very troublesome form of the disease which affects the scrotum and inner side of the upper part of the thighs of many Europeans in India. Dr. Watson declares that the external application of a solution of boracic acid acts like a charm in such cases. An aqueous solution of boracic acid of a drachm to the ounce, or as much as the water will take up at ordinary temperatures, is employed. The affected parts should be well bathed with the solution twice daily, some little friction being used, and it should not be wiped off, but allowed to dry on the part. The remedy is said to be so simple, cheap, and efficacious, that it has only to be once used to be preferred to all other remedies of the same class.

ARTIFICIAL SKATING.

The rapid multiplication of skating rinks is a proof that artificial skating meets a real want and makes a useful addition to our modes of exercise and recreation. After some personal experience of it we desire to record our high sense of its value. There are in our climate a large number of cold and dull days in the course of the year, in which skating on ice is not practicable and yet skating on wheels is most enjoyable. It is as good for girls as it is for young men. If they do not learn quite so quickly, they make up by greater ultimate proficiency and grace. Without denying that a little of the attractiveness of the rink is due to opportunities it affords of a little quiet flirtation, it deserves support as a means of exercise and a stimulus to active locomotion. The care to maintain perpendicularity is wonderfully expulsive of other cares. Of course there is a risk in it, as there is in every game worth playing at; but with care and a little more provision for good teaching, the risk is very slight for any persons adapted to the exercise. One point is very important—that the rink should be open. In other words, the skating should be in the fresh air. With this qualification we hail artificial skating as a most brilliant and useful addition to our forms of exercise, and the means by which the sensations of youth are conserved.

EDINBURGH UNIVERSITY CLUB.

The quarterly dinner of this Club was held on Wednesday evening, the 10th inst, at the St. James's Hall Restaurant. Sir William Fergusson, Bart., LL.D., occupied the chair, and about forty members and guests were present. Several new members were elected, and some new names were proposed for election. The usual toasts were given from the chair, and that for "The Visitors" was replied to by Lord Theobald Butler.

The annual general meeting will be held in February next, before the quarterly dinner; and it is hoped that the President of the Club, H.R.H. the Duke of Edinburgh, may occupy the chair at the dinner in May.

SCARLET FEVER IN LONDON.

During the last month sixty-three persons suffering from scarlet fever were admitted into the London Fever Hospital, and at the present time the number of applications for private rooms exceeds the accommodation provided in that institution. A few patients have been admitted into the general ward, while waiting until private rooms become vacant. The necessity of the isolation of fever patients is becoming so fully recognised by the public, that the private rooms in the London Fever Hospital are sure to be freely used during the present epidemic.

THE CONJOINT SCHEME.

Dr. Acland and Dr. Rolleston have been appointed to represent the University of Oxford at the conference of examining bodies to take again into consideration the formation of a Conjoint Board for England, and Dr. Philipson and Dr. G. Y. Heath have been delegated by the University of Durham to represent that body at the conference. There has been as yet no meeting of the conference.

EPSOM COLLEGE.

The Report of our Sanitary Commission on Epsom College will appear next week. In the mean time it will be satisfactory to the parents of the boys there to state that no fresh cases of scarlet fever have made their appearance. Of the five boys originally attacked, four are convalescent, whilst one is still suffering from the sequelæ of the disease.

Those of our readers who are interested in the study of comparative pathology and epizootics—studies which are growing in importance in connexion with epidemiology and what may be termed medical philosophy—will find much valuable information from time to time in the *Veterinary Journal*, a new publication, conducted under the auspices of Mr. George Fleming, of the Royal Engineers, whose scientific and literary labours in connexion with comparative pathology and other subjects of an allied character are well known. The numbers of the *Veterinary Journal* that have come under our notice have contained several excellent articles, some of which have possessed considerable interest for those outside the circle of veterinary surgeons.

Scarlatina appears to be very prevalent in the military, as well as the civil population at the present time. Owing to an outbreak of that disease at Colchester Camp it was, quite recently, not deemed prudent to allow the drafts of the 18th and 96th Regiments, under orders for India, to embark in one of H.M.'s troopships, and they were detained accordingly. At Aldershot, also, we learn that the disease is prevalent in one of the camps, and that some of the schools there have been temporarily closed in consequence; and cases of the same disease have made their appearance at other camps and garrisons.

According to the latest information, the cholera had diminished in Madras and Mysore, although at Madras itself it had somewhat increased. The disease has been confined to the native races. In the Bengal Presidency the disease was still prevailing in various districts to a certain, though slight, extent, and notably at Lucknow, Delhi, Allahabad, Morar, Meerut, Umballa, and a few other places.

We understand that Mr. Jonathan Hutchinson has accepted the invitation of the Council of the Pathological Society to open a discussion on Syphilis, to take place in January next.

We gather from a paper read before the New York Medical Society by Dr. Fordyce Baker, whose name is familiar enough in this country, that the surgical wards of the Bellevue Hospital in New York were recently thoroughly disinfected by chlorine gas and ozone, the process of purification being conducted on a most extensive scale. For generating the chlorine five thousand pounds of the black oxide of manganese, twenty-five sacks of salt, and one hundred and sixty pounds of sulphuric acid were used, while the requisite amount of ozone was obtained by the employment of one hundred pounds of manganate of soda and the same quantity of sulphate of magnesia. The result of this cleansing was markedly beneficial. The fatality from septic diseases had previously been alarmingly great in the wards, while but one case of pyæmia, and that a very doubtful one, has occurred since the disinfection of what Dr. Fordyce Barker calls "nosocomial malaria."

In London last week 1449 deaths were registered, including 1 from small-pox, 43 from measles, 116 from scarlet fever, 12 from diphtheria, 49 from whooping-cough, 20 from different forms of fever, and 24 from diarrhœa. Scarlet fever was especially fatal in Hammersmith, Islington, Bethnal-green, Bermondsey, Battersea, Peckham, and Deptford. The deaths referred to diseases of the respiratory organs amounted to 349, which number, although greatly in excess of the mortality of the preceding weeks, was below the corrected average. It is interesting to learn at this time that the latest returns from Indian cities give the following death-rates :—Bombay, 25 ; Calcutta, 35 ; and Madras, 38. In the latter city 62 deaths occurred in one week from cholera.

Our contemporary, the *Indian Medical Gazette*, lately informed its readers that quite a panic had taken place in Calcutta in consequence of the supposed existence of parasites in the commonly eaten and favourite water fish. The sale of this fish was prohibited, and the health officer of Calcutta was ordered to make a special inquiry into the matter. It was found that the fish was wholesome enough, and that what had been mistaken for lumbricoid worms were spinal nerves ! In one instance a piece of nerve had been sent to an expert for the purpose of having the identity of the parasite determined. The fish fed in the dirty Ganges is not, we suppose, very delicate.

The encouraging results that have followed the method of treatment of leprosy by gurjun oil, which we have more than once noticed, seem to be attracting attention. We learn from the *Madras Mail* that a piece of ground has been given by the Directors of the Monegar Choultry to the superintendent of a lazaretto on the recommendation of the Deputy Inspector-General of Hospitals, who intends erecting sheds for patients to enable him to experiment with the gurjun oil on a large scale.

We understand that a circular has been issued to certifying surgeons under the Factory and Workshops Acts, requesting a statement of the amount of pay received by them within the last twelve months in the discharge of their duties. The information is for the use of the Royal Commissioners on the Acts. There is an intention to make these Acts more comprehensive in their scope.

More than one of the smaller towns in Devonshire have recently suffered from severe epidemics of scarlet fever or typhoid fever, or both ; and in every instance they have been clearly traced to sanitary apathy and the grossest disregard of the necessity for pure air and water to the health of man.

The want of a hospital for the reception of patients with infectious disease in Stockport has been felt for some time. Small-pox has been more or less prevalent in the town since the autumn of 1874, but hitherto little attempt has been made to isolate cases of the disease. The neglect of th authorities has at last roused the attention of the Local Government Board, and they have addressed a letter to the guardians urging them to provide the required accommodation. The guardians have referred the matter to the Town Council, who in all probability will pass it back again to the Local Government Board.

Some very severe and peculiar cases of pneumonia continue to occur among the native Indian regiments forming our Punjab frontier force. It has rather puzzled a few of the medical officers who happened to treat the disease, and is compared to the pleuro-pneumonia of cattle in this country. Comparative experiments are being made to prove the communicability of pneumonic disease, and few will doubt that this is a direction in which work might be prosecuted with the most hopeful chance of good results.

We have already reported a severe outbreak of enteric fever in Crediton, a small town with a population at present estimated at about 4300. The memorial of the inhabitants may be taken as a protest against a long course of inaction on the part of the urban sanitary authority of Crediton, whose estimate of the value of public health is exceedingly low, if we may judge from the fact that they have fixed the salary of their medical officer of health at £7 per annum !

The weather on Sunday last, the day appointed for the collection on behalf of the Dublin Hospital Fund, was most unpropitious, there being all the morning a constant downpour of rain ; and, as an extreme instance of the severity of the weather, it may be stated that the clergyman who preached in Clontarf Church on that day was obliged to reach the building by means of a boat.

On the 20th (this day) the election by the Fellows of the Royal College of Surgeons in Ireland will take place of a Vice-President of the institution, in the room of the late Mr. John Hamilton. Dr. George H. Kidd, late member of the Council, and obstetric surgeon to the Coombe Lying-in Hospital, is a candidate, and it is considered probable that he will be elected without opposition.

The adjourned inquiry into the circumstances connected with the death of Mary Jane Bell was held last Wednesday before Dr. Hardwicke, when the jury returned a verdict, "That the deceased, Mary Jane Bell, had died of tubercular disease and disease of the kidneys, accelerated by her removal from King's College Hospital by her friends."

Two ships, from the East Indies and South America respectively, have arrived in the Thames with cases of scurvy on board. Five men were landed from the former ship at Queenstown, and five also from the latter at Falmouth. The Board of Trade have directed official inquiries to be made as to the cause of the outbreaks.

Surgeon John Neesom Stone, R.N., has been specially promoted to the rank of staff-surgeon for services in the recent expedition against pirates up the river Congo. He was the senior medical officer in charge of the force landed.

Professor Hebra has lately been failing in health. He has been granted leave to appoint a substitute for this winter's lectures, and will take this opportunity of recruiting his strength.

We would this week call the attention of our readers to the Ranald Martin Memorial Fund, which will soon be closed. Further subscriptions will be received by Mr. Pollock, 36, Grosvenor-street; Mr. O'Brien, 35, Lancaster-road, Westbourne-park; and Messrs. Herries, Farquhar, and Co., 16, St. James's-street.

Dr. Frankland, F.R.S., reports that the Thames waters supplied last month by the Grand Junction, Southwark, and Lambeth Companies were slightly turbid, those of the two last named containing "fungoid growths." The Kent Company's deep well water was found to be of excellent quality.

The City Commission of Sewers have determined to expend a sum of over £58,000 in the improvement of a most unhealthy district on the southern side of Ludgate-hill, under the provisions of the Artisans' Dwellings Act. The scheme was unsuccessfully opposed by the Ecclesiastical Commissioners.

Mr. W. E. Gladstone has been unanimously elected a member of the Board of Trustees of the Hunterian Collection of the Royal College of Surgeons, in the vacancy occasioned by the death of Sir Charles Lyell.

Seven surgeons in the Royal Navy have been recently promoted to the rank of staff-surgeons in vacancies caused by death or retirement in the higher ranks of the service.

OPHTHALMIA IN THE METROPOLITAN PAUPER SCHOOLS.

During the month of December, 1873, a comprehensive paper on this subject from the pen of Mr. Brudenell Carter was published in The Lancet. This paper was read at a Conference of Chairmen and Vice-Chairmen of Boards of Guardians, and we may assume that in consequence of the interest thereby created, as well as the intrinsic importance of the subject, an official examination of all the metropolitan pauper schools was ordered by the Local Government Board in the autumn of last year. This examination was performed by Mr. Edward Nettleship, and his report, now before us, is by far the most exhaustive and painstaking piece of work on this subject that has as yet been published.

The inspection was made within six weeks, and included seventeen schools that accommodated collectively at the time 8798 children, including 119 then at the Margate Infirmary. Of the total number, 12 per cent. had at the time of inspection more or less conjunctival discharge, about 30 per cent. had granular lids of considerable severity (although without any discharge or other discomfort), and it was calculated that 15 per cent. (i.e., 12 per cent. with discharge, and 3 per cent. with other symptoms) were suffering from active ophthalmia requiring isolation and more or less active treatment. A total of 579 children, or about 6·5 per cent., were in the infirmaries at the time of the visits, so that 8 or 9 per cent. were still at large in the body of the schools. The number of children with healthy eyelids throughout the schools was equal to 15 per cent. of the whole number, and 35 per cent. of the children were found whose eyelids were in a condition of slight disease, "or were in general terms predisposed to obstinate and relapsing ophthalmia." A total of 793, or 9 per cent., were found with ophthalmic corneal damages, both eyes being affected in 353, and one cornea only in 440 cases. As regards the permanence of these opacities, no accurate classification could be made. The author places them in six divisions, which comprise 44 children with one or both eyes lost, 66 severe damages, 229 moderate damages, 358 slight damages, 78 very slight damages, and 21 with no damage—i.e., eyes with opacities and irregularities which from their position could not interfere at all with sight. The total number of non-ophthalmic corneal damages from all other causes was 59, or ·66 per cent. of all the children.

In a general review of the subject, we may omit special mention of the ophthalmic state of the schools separately, to which Mr. Nettleship gives an elaborate chapter of statistics; nor is it necessary to specify the worst or the best schools, for, as the author remarks, it is difficult to say which school is worst as to ophthalmia, if we include past and present conditions. In passing on to notice the relation between the ophthalmic state and life in these schools, the author, in remarking upon the value of ascertaining the ophthalmic state of a large number of poor children living at home in London and in various parts of the country, records that the only contributions on this head are found in the London Orphan Asylum at Watford, where in 1873 nearly 50 per cent. of the children had well-marked sago-grain eyelids (although no ophthalmia had existed in the institution); in the examination of 256 national school children in a small town and village in Oxfordshire, where the same predisposing conditions existed in at least 35 per cent.; and in a third group of 86 children in two workhouse schools in the same county, in which sago-grain eyelids were found to the extent of 50 per cent. of all the children. The conclusions drawn from the statistics above quoted are, however—(1) that the number of bad granular lids varies directly as the length of time during which the children have lived in these schools; (2) that the number of ophthalmic corneal damages varies directly in the same way; (3) that the number of ophthalmic corneal damages varies directly as the number of badly granular lids. The actual state of the children under one month and one year in the schools respectively shows that "the risk of getting ophthalmia is very far greater in the metropolitan pauper schools than outside them."

In considering the relations between ophthalmia in these schools and the age and sex of the children forming them, it is recorded that children below seven or eight years of age are practically far more dangerous as sources of contagion than boys or girls. Corneal damages are most abundant and most severe in the girls; discharge from the eyes is commonest and most profuse among the infants, and next among the boys; and the boys are much less, and the infants somewhat less, liable to lose their sight by violent ophthalmia than the girls. In discussing the influence which conditions independent of school life have on the ophthalmic state of the children in these schools, it is reported that the London children are, practically speaking, worse than the country children; and hence that predisposition to the disease bears a somewhat direct proportion to density of population; that Irish children are more liable to ophthalmia than English children; and that, as a rule, the eyelids are worse in orphan and deserted children than in those with parents.

The last and, practically speaking, the most important section of the inquiry related to the possibility of getting rid of ophthalmia without abolishing the schools. Mr. Nettleship very justly says: "It is impossible to form a precise estimate of the extent to which the disease, as it occurs in the metropolitan schools, injures the prospects of those who suffer from it." No less than 55 per cent. of all the children in the schools have had at least one attack of eye-disease requiring treatment, and relapses are the rule rather than the exception. Separate probation wards and quarantine establishments have been suggested, the latter being, in the opinion of the author, by far the better plan. But every child should be kept in that so-called quarantine for atleast a fortnight after leaving the workhouse before being allowed to join the body of the school, and some want a much longer time. The management of ophthalmic cases actually in the schools need not be discussed, because we write for the future rather than the present aspect of things. But the points that require alteration refer categorically to—(1) general overcrowding; (2) bad ventilation; (3) deficient and defective provisions for exercise in the open air; (4) defects in the infants' schools and junior boys' schools; (5) want of cleanliness; (6) food; and (7) size of schools. All these defects do not exist at all the institutions under consideration; for example, in the *Goliath*, off Grays, though the cubic space is small, the ventilation is particularly good. But increased artificial warmth in the buildings, grass fields for exercise, and a larger staff of officers are required, particularly as regards the infants and forward boys. "The commonest means of contagion are the children's fingers, not used purposely, but rubbed, accidentally or in play, over the child's own face and eyes, or over those of its companions." As to preventive measures, an abundant supply of clean water and towels is of course essential, and a great many valuable remarks are offered as to the manner and "stuff" of the clothing adopted in these schools.

The report concludes with some observations on the size of these schools, which are noteworthy. Mr. Nettleship remarks, in effect, that though there is no positive evidence as to the sanitary disadvantages of a large as compared with a small institution, the common sense view of the question is very much in favour of the latter. Small numbers are of course more manageable, but very much of success hinges on the capacity of the superintendent.

We have of course omitted much in the way of detail that is both useful and interesting, and must refer our readers to the report, the able character of which has seldom been excelled.

Correspondence.

"Audi alteram partem."

MEDICAL EDUCATION.

To the Editor of THE LANCET.

SIR,—In your report of the meeting of the Council of the Royal College of Surgeons, I observed a suggestion by Mr. Marshall of a compulsory examination at the end of the student's first winter session, or immediately after the commencement of the succeeding summer session. I trust that the expression of an adverse opinion will not be considered by the Council an act of presumption on my part, but I cannot think that the multiplication of examinations can prove beneficial. What with frequent *vivâ voce* and occasional written class examinations, prize examinations, and, at some schools, even *test* examinations, it would appear that our students are already over-examined. It is true that the examination proposed would be more authoritative, but we are not told what would be the result in the case of those who failed to pass it, or how long in such an instance the Primary Examination proper would be postponed.

The blot in our present system, now that so much is required of our students, seems to be that men are allowed, and even required, to attend hospital practice and lectures on the practical subjects while they are working in the dissecting-room and physiological laboratory. Students who seek the degrees of the University of London, or who intend to remain at a medical school four years, are careful to avoid this overlapping of subjects, but still they are obliged to put in an appearance in the wards to comply with the College requirements. On the other hand, the majority of students adopt the plan of crushing through all their hospital practice and lectures in two years and a half, or at most in three years, and present themselves badly prepared for all their examinations. See what this means in one of these student's second winter session. If he be industrious, he endeavours to attend lectures on anatomy and physiology, to work in the dissecting-room and physiological laboratory, to read up for his Primary Examination, and perhaps for a prize or two in his own school. One would think that this was sufficient for an ordinary brain to inwardly digest; but no, he is not content. He further vainly tries to profit by attending lectures on medicine and surgery, and by an *assiduous* attendance in the medical and surgical wards, on clinical lectures, and at post-mortem examinations and demonstrations; and I have even heard of a man taking a dressership. Can it be wondered at that a student should be somewhat bewildered on presenting himself for the Primary Examination?

In my humble opinion, and I have already given expression to it, the remedy is—to separate entirely the curriculum for the *Primary* Examination from that for the *Pass* Examination, the latter to be commenced after the Primary Examination has been passed. I am aware that reasons are given for maintaining the present system, but I am quite sure that the objections to it far outweigh these reasons. The knowledge of anatomy and physiology can be kept alive by testing it in its practical bearing upon medicine and surgery at the Pass Examination, and the result would be more satisfactory than at present if an uninterrupted study of those subjects had been previously secured. I believe that if our examining bodies enforced such a change as I have suggested, the "number of rejections" would rapidly diminish, and that "many would be diverted from" what is now too often an "idle and profitless course of study."

I have the honour to be, Sir, your obedient servant,

GEORGE COWELL.

George-street, Hanover-square, Nov. 13th, 1875.

ECCHYMOSIS OF THE SCROTUM.

To the Editor of THE LANCET.

SIR,—*Apropos* of Mr. Savory's lecture on this subject, I have at present a case of injury to the abdomen and scrotum under treatment, which is resulting so favourably that I think an account of the means employed may interest your readers.

A young man, aged nineteen, a miner, was engaged at his work in the coal-pit, when a large mass of stone from the roof fell upon him, inflicting severe injury upon the lower part of the abdomen and scrotum. I saw him shortly after the accident, when he was suffering from shock, the entire surface pale and cold, the scrotum somewhat swollen and slightly discoloured. He complained of severe pain in the right iliac fossa. He was ordered hot brandy-and-water, with hop fomentations to the parts injured. The following day general peritonitis had set in, and the scrotum was swollen to the size of a large cocoanut, blue-black in colour, and very tense. He was now ordered a dozen leeches to the abdomen, with calomel and opium internally. The scrotum was supported upon a folded napkin pinned round the hips, and swathed in a bandage saturated with a warm lotion composed of one ounce of tincture of arnica and one ounce of ammonium chloride to a pint of water. In two days the peritonitis had subsided. The lotion to the scrotum was continued, and with such good effect that to-day (the tenth since the accident) its appearance is perfectly normal, soft, and corrugated, without a trace of the residual fibrinous hardness so frequently seen in these cases.

I am, Sir, yours truly,

ALFRED GINDERS, M.D.

Normanton, November 16th, 1875.

SCIENTIFIC OPINIONS USED AS ADVERTISEMENTS.

To the Editor of THE LANCET.

SIR,—A few weeks ago I received through the post a specimen of prepared food from a chemist at some distance, with a letter asking my opinion of it, giving the composition of the food, and stating that it was not advertised. I made a careful trial of the preparation, and found it satisfactory, and wrote a letter in reply to the one I had received stating my good opinion of the food. I was induced to do this contrary to my usual custom, because the food was not advertised. Within a week it accidentally came to my knowledge that my letter was printed and circulated among my professional brethren in the district. I at once took steps to stop this unauthorised use of my letter, and obtained a promise that it should be forthwith discontinued.

I send you this little history in order that others may be warned by my unlucky experience, and may avoid, under any circumstances, giving favourable written opinions of drugs or foods, even to proprietors who do not advertise. May I also ask why it is that the names of distinguished members of the profession are still paraded in our newspapers, by means of testimonials in favour of certain electrical apparatus, and light-brown and pale cod-liver oils, not to mention a score of other articles which the student of the advertising columns of our daily and weekly papers might easily mention?

I am, Sir, yours truly,

Nov. 6th, 1875. A PROVINCIAL PHYSICIAN.

Medical News.

Royal College of Surgeons of England. — At an ordinary meeting of the Council held on the 11th inst., Mr. John Birkett was elected a member of the Board of Examiners in Dental Surgery, in the vacancy occasioned by the resignation of Mr. Hancock.

At the same meeting the following Members were elected Fellows of the College:—

Briscoe, John, L.S.A., Broad-street, Oxford.
Burroughs, John Beames, L.S.A., Clifton, Bristol.
Flower, Thomas Bruges, L.M. Dub., Bath.

The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on Tuesday and Wednesday last:—

Allen, Richards G., Belper.
Amphlett, Edward, Leamington.
Angove, William T., L.S.A., Bessborough-gardens.
Aplin, Alfred, Exeter.
Archer, Robert K., L.S.A., Highgate.
Bacon, Alfred T., L.R.C.P. Ed., Leeds.
Bigger, Samuel F., Belfast.
Blake, Henry, L.S.A., Bedford.
Bower, Ernest D., Leeds.
Bowling, Charles J. L., Ramsgate.
Brock, Charles de Lisle, Guernsey.
Carrington, Robert E., Brixton.
Chant, Thomas, L.S.A., London-road, Lowestoft.
Dennis, Augustine, L.R.C.P. Ed., Burnham, Westgate, Norfolk.
Edwards, Frederick S., St. Peter's-park.
Evans, Thomas, L.S.A., Pwllheli.
Godfrey, Charles Walter, Romsey, Hants.
Harvey, Thomas P., L.R.C.P. Lond., Pyrland-road.
Harvey, Henry Frederick, L.S.A., Gower-street.
Heard, Charles G., L.S.A., Truro, Cornwall.
Hicks, Henry, L.R.C.P. Ed., Wakefield.
Hutchinson, Joseph, L.R.C.P. Ed., Luton, near Manchester.
Iles, Alfred R., Fairford.
Jacobs, Henry Ralph, Aberdare, South Wales.
Jenkins, Aneurin, L.R.C.P. Ed., Longlwes, S. Wales.
Johnson, William B., L.S.A., York-road.
Kellard, James T. W. S., L.S.A., Stoke Devonport.
Kidd, Walter Aubrey, Blackheath.
Leigh, Reginald H., L.S.A., Aberdare, South Wales.
Livy, Ferderick Y., Bolton.
Manden, Horace, L.S.A., Marlborough.
Mason, John W., M.B. Aberd., Grantham.
Morgan, Evan A., L.K.Q.C.P.I., Liverpool.
Morshead, Ernest G. A., Sidmouth.
Musgrave, Reginald V., L.S.A., Finchley-road.
Patmore, Tennyson D., Hastings.
Phibbs, Robert F., L.R.C.P. Ed., Boundary-road.
Pilkington, Henry, Liverpool.
Randle, James, L.R.C.P. Lond, Lizard, Cornwall.
Shain, William F., Liverpool.
Simon, Robert M., Nottingham.
Steil, George R., L.R.C.P., Shepherd's-bush.
Truman, Charles Edwin, Old Burlington-street.
Whitby, Edward V., Birmingham.
Wilkins, Gilbert H., L.S.A., Brixton.
Woodward, Frederick E., Coventry.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 11th:—

Harper, Robert Russell, Oakden-street, Kennington-road.
Roth, Bernard Mathias Simon, Wimpole-street.
Thompson, Harry Young, Newport, Monmouthshire.

The following gentlemen passed the Primary Professional Examination on the same day:—

Arthur Alexander Blakiston, University College; Walter Strover and John Todd, Guy's Hospital; Charles Jerome Woollett, Charing-cross Hospital; William Clarke Whitfeld, Bristol Infirmary.

Mr. T. Kirsopp has obtained the Jeaffreson Exhibition of £20 per annum for two years at St. Bartholomew's Hospital and College.

Coroners' Inquests.—Last year there were held in England and Wales 27,184 inquests, the cost of which, including coroners' salaries and allowances, was £82,533 15*s.* 1*d.*

Mortuaries in the Metropolis.—The motion of Dr. Joseph Rogers for the appointment of a deputation to wait upon the President of the Local Government Board regarding the establishment of mortuaries in the metropolis, was carried at the Strand Board of Works last Wednesday.

The Court for the Consideration of Crown Cases Reserved on Saturday affirmed the conviction of John Robert Downes, one of the "Peculiar People," who at the Central Criminal Court was found guilty of manslaughter for having neglected to supply his child, two years old, with medicines and medical aid when it was sick, from the want of which the child died.

Mr. W. A. Ryder, a grocer in an extensive business at Bicester, was, at the Bicester Sessions, sentenced to seven days' imprisonment for refusing to have a child vaccinated, and declining to pay 20*s.* and 10*s.* costs. The defendant is known as a public speaker against vaccination.

The Stockport magistrates on Saturday imposed the full penalty of £5 on a woman who had sold some of the clothing of a son who was suffering from small-pox. The result of the defendant's indiscretion was that several other persons were attacked by the disease.

Last week the Alcester magistrates imposed a penalty of £5, and 19*s.* 6*d.* costs, upon a journeyman carpenter for exposing a child whilst suffering from scarlet fever. The child was sent to the Grammar School, Studley, whilst in the state of infection. Eight persons in the schoolmaster's household contracted the disease, and one of his children died from it. Great culpability on the part of the defendant was shown.

Testimonials.—A testimonial in the shape of an elaborately carved inkstand was lately presented to Mr. R. T. Warn, of Highgate-road, by the members of a club, as a token of the esteem in which he is held, and in appreciation of his services as medical officer.—Dr. Charles Fryer, on his removal from Openshaw to Sherburn, E.R., Yorks, has been presented with an elaborate timepiece bearing the following inscription:—"Presented to Dr. Fryer, by the members of Court Hero of the Baltic, 3528 A.O.F., for valuable services rendered as medical officer during the past four years. Sept. 18th, 1875."

Bequests, &c., to Medical Charities. — Mr. James Houghton bequeathed to the medical charities of Liverpool as follows:—To the Southern Hospital £5000, to the Royal Infirmary £500, to the Northern Dispensary £250, to the Southern Dispensary £250, and to the Medical Mission £100. The Doncaster Infirmary has received £3000 under the will of Mr. A. Barber. Mr. Peter Ormrod, of Halliwell Hall and Wyersdale-park, Lancashire, bequeathed £2000 to the Bolton Infirmary and Dispensary. The General Hospital, Nottingham, has received £200 under the will of Mr. John Gibson. The Drapers' Company have voted an additional donation of twenty guineas, and the Clothworkers' Company an annual subscription of ten guineas, in aid of the Royal National Hospital for Consumption, at Ventnor. An anonymous donor has given £500 to the funds of the Old Men's Asylum, Dublin.

Medical Appointments.

Brown, A., M.B., C.M., has been appointed a House-Surgeon to the Glasgow Western Infirmary, vice M'Calman, resigned.

Brown, J. L'Oste, L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Sheriffhales District of the Shiffnall Union, Salop.

Cantlie, J., M.B., has been appointed Resident Surgical Officer to the Charing-cross Hospital.

Conolly, Mr. P. B., has been appointed Assistant Surgical Officer to the Charing-cross Hospital.

Cope, W. H., M.R.C.S.E., has been appointed Resident Medical Officer to the Leicester Amalgamated Friendly Societies' Medical Association.

Cotton, H., M.R.C.S.E., has been appointed House-Surgeon to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary, vice Macpherson, resigned.

Cunningham, C. L., L.R.C.S.Ed., L.M., has been appointed Medical Officer and Public Vaccinator for the No. 3 District of the Hastings Union, vice Cumming, resigned.

Drysdale, Dr. A., has been appointed Certifying Factory Surgeon for Dunfermline, vice Douglas, resigned.

Dudley, W. L., M.D., F.R.C.S.E., has been appointed Physician to the City Dispensary.

Green, E. F. S., M.B., C.M., late House-Physician at the Western Infirmary, Glasgow, has been appointed Medical Officer and Public Vaccinator for the Bentham District of the Settle Union, vice E. Tatham, M.B., C.M., deceased.

Greenwood, J. W., M.R.C.S.E., L.M., has been appointed Medical Officer for the Hanley District of the Parish of Stoke-on-Trent, vice Burn, resigned.

Hamill, J. W., M.D., C.M., has been appointed Resident Surgeon to the Worksop General Dispensary and to the Cottage Hospital, vice R. A. Skinner, resigned.

Harrison, T. W., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Doneraile Dispensary District of the Mallow Union, Co. Cork, vice Reardon, resigned.

Hill, P. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Crickhowell District of the Crickhowell Union, vice Evan Parry, M.R.C.S.E., resigned.

Kendall, J., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer and Public Vaccinator for the Conistone District of the Ulverstone Union, Lancashire, vice Bolton, resigned.

Loudon, J., M.D., has been appointed Medical Officer to the Police, Hamilton, Lanarkshire, vice Naismith, deceased.

M'Calman, D., M.B., C.M., late House-Surgeon, has been appointed a House-Physician to the Glasgow Western Infirmary, vice Green, resigned.

M'Kelvie, R. B., M.D., has been appointed Medical Officer to the Lorn Combination Poorhouse, and Parochial Medical Officer for the Parish of Kilmore and Kilbride, vice M'Gillivray, deceased.

Miller, T., M.B., C.M., has been appointed a House-Surgeon to the Glasgow Western Infirmary.

Moffatt, R., M.B., C.M., late Assistant-Surgeon, Hexham, has been appointed a House-Surgeon to the Glasgow Western Infirmary, vice M'Kellar, resigned.

Morris, H., M.B., F.R.C.S.E., L.R.C.P.L., has been appointed Surgeon to the Bloomsbury Dispensary, vice Cooper, deceased.

Murrell, W., L.R.C.P., M.R.C.S., has been appointed Demonstator of Physiology at University College, London.

Owen, Mr. W. G., has been appointed a House-Physician to the Glasgow Western Infirmary.

Parsons, H. F., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Goole Urban Sanitary District, for one month, pending further arrangements.

Potts, Mr. L , has been appointed Assistant Medical Officer to the Charing-cross Hospital.

Protheroe, S. D., L.R.C.P., has been reappointed Medical Officer of Health to the Pembroke Urban and Milford Port Sanitary Districts.

Rigden, W., M.R.C.S.E., has been appointed a Surgeon to the Chelsea, Brompton, and Belgrave Dispensary, vice Whitmore, resigned.

Rodwell, E. M., L.S.A.L., has been appointed Resident Medical Officer to the Charing-cross Hospital.

Sewell, W. R., M.B., C.M., late House-Surgeon at the Glasgow Royal Infirmary, has been appointed a House-Physician to the Glasgow Western Infirmary, vice Wallace, resigned.

Sutherland, W., M.D., C.M., has been appointed an Hon. Physician to the Hartlepools Hospital, vice Reid, deceased.

Taylor, E., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Assistant to the Resident Physician and Governor, State Criminal Asylum, Dundrum, Co. Dublin.

Turnour, H. E., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Tealby District of the Caistor Union, vice Read, resigned.

Walker, T. H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the High District of the Longtown Union, Cumberland, and Medical Officer of Health for the Longtown Rural Sanitary District, vice Hunter, appointed Medical Officer to the Teesdale Medical Union.

Woollett, C. E., M.R.C.S.E., has been appointed Resident Obstetrical Officer to the Charing-cross Hospital.

Births, Marriages, and Deaths.

BIRTHS.

Buzzard.—On the 9th inst., at Grosvenor-street, the wife of Thos. Buzzard, M.D., of a son.

Clarke.—On the 11th inst., at Coleraine-terrace, Salford, the wife of Alex. Carson Clarke, M.D., of a son.

Hewetson.—On the 7th inst., at Roscrea, the wife of M. J. Hewetson, L.R.C.S.Ed., of a daughter.

Ranger.—On the 7th inst., at Meadow Croft, Lower Sydenham, the wife of W. G. Ranger, M.R.C.S.E., of a daughter.

Scott.—On the 15th inst., at Marford, near Wrexham, the wife of R. R. Scott, L.K.Q.C.P.I., Surgeon-Major Army, of a daughter.

Stevens.—On the 16th inst., at Stoke Newington-road, the wife of Alfred Felix Stevens, M.B., of a son.

Stoker.—On the 9th inst., at York-street, Dublin, the wife of Wm. Stoker, F.R.C.S.I., of a son.

MARRIAGES.

Allt—Webb.—On the 10th inst., at St. Barnabas Church, Pimlico, Dr. Terence Thomas Allt, of Oaks House, Beckley, Sussex, to Catherine Elizabeth, eldest daughter of Dr. Edward Lowe Webb, of St. George's-road, Eccleston-square, S.W.

Archer—Bellis.—On the 3rd inst., at Jersey, E. G. Archer, M.R.C.S.E., to Harriette Constance, daughter of the Rev. R. Bellis.

Fry—Burrell.—On the 11th inst., at Frimley, Augustin B. Fry, M.R.C.S.E., to Emily Elizabeth, daughter of J. F. Burrell, Esq.

DEATHS.

Beaumont.—On the 12th ult., at Glenhurst, Toronto, Canada, Wm. R. Beaumont, M.D., F.R.C.S.E., aged 72.

Brett.—On the 16th inst., at Ladbroke-grove-road, North Kensington, John Brett, M.D., Deputy Surgeon-General (retired list) Madras Army, aged 57.

Fowler.—On the 30th of Sept., at Camberwell, Wm. Fowler, L.R.C.S.Ed., aged 39.

Griffith.—On the 8th inst., at Woodpark, Rathmines, Walter Griffith, F.R.C.S.E., of Guildford-street, Russell-square, aged 77.

Jameson.—On the 14th inst., at Sturry, Kent, Wm. Jameson, M.R.C.S.E., aged 78.

Lawless.—On the 1st inst., at Dublin, P. H. Lawless, Surgeon, aged 72.

Lees.—On the 10th inst., at Hodnet, Salop, B. Lees, L.S.A.L., aged 64.

O'Neill.—On the 10th inst., at Birkenhead, E. D. R. O'Neill, M.R.C.S.E., aged 40.

Palmer.—On the 12th inst., at Cheltenham, T. G. Palmer, L.D.S. R.C.S.E., aged 64.

Walker.—On the 7th inst., at Middleton House, Lee, Wm. Holmes Walker, M.R.C.S.E., aged 39.

Willson.—On the 6th inst., at Warwick-gardens, Kensington, G. Willson, M.R.C.S.E.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

The Law about Life-saving.

We are glad it has at length been settled that the natural guardians of a child under fourteen years of age may not with impunity allow it to die for want of medical assistance, because they happen to entertain an opinion that "what is to be will be," and "Heaven alone can save." It is strange that any doubt should have lingered in the minds of lawyers after the passing of 32 Vict., cap. 122, s. 37—a statute enacted expressly to remove any uncertainty on the subject. It would be just as reasonable to leave the offence of starving a child to death, without a penalty, as to allow that of permitting him to die without the use of proper remedies, to go unpunished. If individual members of society are to do just what is right in their own eyes, and nothing more, the interests of the community cannot fail to be sacrificed. Helpless children are especially under the guardianship of the State, and its authority must be invoked for their protection whenever those who stand in the closest relations with them neglect or refuse to discharge their duty. The decision of the Court for Consideration of Crown Cases Reserved has happily destroyed the last vestige of an excuse for not putting the law in full force against those very Peculiar People, who, claiming the privilege accorded to fanatics outside the walls of a lunatic asylum, affect to "live by faith," and under that pretence leave those who are dependent on them for succour in sickness to die without the hope of relief by medicine. We trust there will no longer be any hesitancy in the practice of the Courts. What has always been an offence against humanity is now happily declared to be a crime in the eyes of the law. A rigorous administration is alone necessary to make the obligation which justice recognises extensively felt, and to ensure its being universally vindicated.

Mr. J. Griffiths (Treforgan, Cardigan) is thanked for his courtesy.

Size and Weight of English Children.

To the Editor of The Lancet.

Sir,—Will you allow me to appeal to the profession for assistance to complete a series of observations on the height, weight, and chest girth of our English race. I have already collected about 15,000 observations made on boys and men of all classes of society between the ages of 5 and 30 years. As my statistics vary considerably with the social position, occupation, &c., of the persons on whom the measurements were made, I have divided them into two series: one for the wealthier classes, whose physique has not been influenced by manual labour either of the children or their parents, and who have been well fed and nurtured; the other consists of the labouring classes and their children. Of the first series, which may be considered the standard of our race, I have collected about 6000 observations between the ages of 8 and 30 years from public and middle-class schools, universities, &c.; and of the second series I have obtained many thousands of observations between the ages of 6 and 30 years from primary schools in town, factory, and agricultural districts, from training ships, and from army and navy schools and recruiting depôts; also a number of measurements of infants at birth, supplied to me in reply to a former appeal to the profession through your columns. My standard series is incomplete from the period of birth to the age of eight years; and as children of this class are rarely sent to schools during this period, I must depend on a few observations from a large number of sources, and I shall be glad if I can induce some of the members of the profession to furnish me with the measurements and weights of some of their own children, or of others of the same social class who come immediately under their notice and care. My observations on the children of the labouring classes are incomplete between the ages of 1 and 5 years inclusive; but some of these may be obtained from infants' schools and from public institutions. As it is quite possible that many English statistics of this kind may have escaped my notice, I shall be glad to receive any references to them. I am, of course, aware of the existence of Belgium, German, Italian, and American statistics of a similar kind; but they are obviously of no use for my present purpose.

The exact information I require is the age last birthday, the sex, and the social status as distinguished above. The height is to be taken without shoes, the weight in ordinary in-door dress, including shoes, and the empty chest girth. This latter measurement should be taken with a tape passed round the nipples, and including the lower portion of the scapula, the arms hanging down by the sides. The child should be made to take a deep inspiration, and count ten in a loud voice before the measurement is determined. Children who are deformed, or suffering from any disease which would invalidate the measurements, should not be included; but none should be excluded for being merely under- or over-sized. My object is to get an average of the healthy population.

I am, Sir, yours &c.,

2, Bolton-row, May-fair, Nov. 9th, 1875. Charles Roberts, F.R.C.S.

Perkins' Metallic Tractors.

W. W. N.—Perkins was an American surgeon, practising in London. The "tractors" consisted, we believe, of small pieces of steel strongly magnetised, and were gently moved about on the surface of the skin of the affected part. To prove that the cures said to have been wrought by the tractors were due, principally at all events, to the exercise of imagination on the part of the patients, some persons had precisely similar instruments made of wood, painted and fashioned so as to resemble the original. These (the story goes) were publicly tried upon five hospital patients suffering, one from gout, and the others from rheumatism of one or more of the joints. All under this treatment are stated to have declared themselves much relieved!

Burns and Scalds.

Dr. Nitzsche, surgeon to several factories of Austria, stated at the Gräz Congress that he had noticed the workmen who met with burns obtaining much relief from the application of varnish. The latter forms a protective covering in the absence of epidermis, and granulation and cicatrisation are favoured. Dr. Nitzsche thought he could improve upon this, and tried to keep away Pasteur's germs by adding first carbolic acid, and subsequently salicylic acid, to the varnish. He considers that he thus succeeded in many cases in effecting prompt healing. These burns were probably in the third degree, with complete loss of epidermis. Another kind of burn where the epidermis is preserved, but much serum is secreted underneath, has fixed the attention of Dr. Marin, of Geneva. This physician grounds his treatment upon Dutrochet's law of exosmose, and thinks that the diminution of the serum effused under the epidermis should be obtained without the destruction of the latter. This is effected by the application of thick fruit jellies, say of quince, raspberries, &c. Compresses of lint should be soaked in the jelly, so as to become considerably thickened. The serum transudes into the compress, and when after a day or two it is removed, the epidermis is found shrivelled up, and the parts beneath protected from inflammation and ulceration. Dr. Marin insists upon the rule that when pieces of clothing are adherent to the burned surface, they should not be removed, for fear of dragging the epidermis with them. The compress should be placed on the clothing material, and the exosmosis will eventually go on just as well. Dr. Marin quotes, in a pamphlet on the subject, several cases well calculated to recommend this kind of treatment, concerning which he is very enthusiastic. It is well known that a long time ago jams and syrups were used in France, *empirically*, in cases of burns. Louis XIV. having met with a burn on his hand, his valet de chambre plunged it immediately into a jar of jam with much relief.

Police Courts and Medical Fees.

To the Editor of The Lancet.

Sir,—A feeling pervades the profession generally that while the remunerations for the services of a medical man are various and somewhat doubtful when taken in connexion with the general public, those fees which are legally claimable for services rendered to the State are definite and sure. Such an impression, no doubt true in the main, is not without its exceptions, which, if made only to prove the rule, are none the less obnoxious to those who may be the subject of this occasional irregularity. An instance fresh in my own experience prompts me to lay the brief particulars before you and my professional brethren.

On the 17th of August my attendance at the Marylebone Police Court was requested by a police officer. My evidence on a case of assault was taken, and the prisoner committed to the sessions, when, after waiting four or five days "in durance vile," evidence was again taken, and the case terminated. In the usual course the fees were paid. Mine for attendance at the sessions were at the customary rate; while the sum of half a guinea only was allowed for my attendance at the police court. My residence is *three miles* from the Marylebone Court, and upon this fact rests the grievance which is brought to your notice. A protest to the paying clerk was, of course, useless. There it was down on the expense sheet, and he must abide by it. So also was a letter to the magistrate who heard the charge. This evoked no reply at all. As a last resource, an application addressed to the Secretary of State on the 3rd inst., giving particulars as to date of attendance, and especially distance travelled each way, obtained the following unsatisfactory answer.

Whitehall, 12th November, 1875.

Sir,—With reference to your letter of the 3rd inst, asking for 10*s.* 6*d.* beyond the amount you received as your fee for attending to give evidence at the Marylebone Police Court, I am directed by Mr. Secretary Cross to inform you that the fee which you have received is in accordance with the authorised scale, and that he is unable to order any addition to it.

I am, Sir, your obedient servant,
Edward Shoppee, Esq, Old Chapel House, A. F. O. Liddell.
233, Kentish-town-road, N.W.

It has not been my intention to dwell on the inconveniences medical men are constantly put to in being compelled to waste their time at the different courts they have to attend days before their evidence is required, nor on the inadequate fee they receive, but simply to show the difficulty there exists in obtaining redress even when the claim is, or should be, incontrovertible. That a magistrate's clerk should make an error in the scale of fees laid down by law is not a marvel; but that those in whom high authority is vested should fail to discharge their obligations to private individuals, and mete out common justice, is, to say the least, a matter of regret.

I remain, Sir, your obedient servant,
Kentish-town, Nov. 17th, 1875. E. Collett Shoppee, M.R.C.S. Eng.

⁂ Let us hope that the recent marriage of equity and law will quicken in the authors of "authorised scales" the sense of justice, and reduce the amount of that unalterableness which is so discreditable a feature of many of our own laws, as it was of the laws of the Medes and Persians. The authorities of our Colleges should make joint representations of such grievances to the Home Secretary. We would suggest to our correspondent to draw up a memorial, to be signed by several members of his College, asking the Council of it to make such a representation as we have indicated to the Home Secretary.—Ed. L.

The Artisans' Dwellings Act.

Dr. Tidy, the medical officer of health for the parish of Islington, has reported to the Sanitary Committee of the vestry, for the information of that body, that he deems it desirable to have the provisions of the Artisans and Labourers' Dwellings Improvement Act (1875) applied to no less than 306 houses in the parish, chiefly situated in the courts and alleys adjoining High-street, Islington.

Mare's Milk.

The composition of asses' milk, though deficient in fat by 2 per cent., has always been considered the nearest to that of woman's milk. From Langaard's analysis in Virchow's Archiv (lxv., i.) there seems to be a considerable difference in the casein of the cow's and of the mare's milk. The former is nearly insoluble in water; the latter, especially when in the fresh state, much more so, though not in an equal degree to woman's milk. The chemical reaction on different kinds of acids also shows the casein of mare's milk to be more like that of the human female. Trials of artificial digestion proved both much more digestible than cow's casein. Though the use of mare's milk for infants may be connected with difficulties, the superiority of koumiss made of it over the preparation from cow's milk seems to be pretty clearly demonstrated by the different characters of the two kinds of casein.

J. W.—Our correspondent will find Dr. Johnson's views on bloodletting in inflammatory affections in a lecture published in The Lancet for 1866, vol. ii., p. 685. The work by Dr. Markham is entitled "Bleeding and Change in Type of Diseases" (London, Churchill, 1866), being the Gulstonian Lectures for the year 1864.

The Indian Medical Service.

To the Editor of The Lancet.

Sir,—I observe in your number of the 6th inst. a letter from "A Bird caught with Chaff" on the above subject. I have no personal interest in the question; but as I have lately strongly advised one or two young friends to enter the department in preference to that of the army or navy, it is very likely such letters will be pointed out to me, and some explanation asked as to the assertions therein contained. I have consequently read it over carefully, and would request the favour of being permitted through your columns to say a few words in reference to the subject to young men who are entering the profession.

I would first remark that the writer has no sentimental grievances. They are all reduced to the single category of pay and allowances. I mention this to point out, and emphatically too, that whatever grievances of this kind there were have ceased to exist, or at least do not make themselves felt. As to the money question, it really seems that nothing would content the writer short of the Government guaranteeing him £600 a year for the rest of his life from the date of his landing in the country, together with all additional pay and allowances for length of service. The "unemployed pay" which he speaks of with such contempt is about 10 per cent. less than the Indian pay and allowances of British medical officers of the same standing, and his main grievance is that at intervals for the first four or five years he is reduced to live on that rate of pay. The truth is, that junior men are sent about to supply the vacancies caused by seniors going on leave, until in their turn they secure an appointment for themselves. Again your correspondent states that when furlough is due he can hardly afford to take it. There is an excellent standard to judge this statement by—viz., the pay of British medical officers of the same standing. Accepting that he may be fully two years on "unemployed pay," there are still six years of employed pay before the furlough is due. During this time he will have received from 50 to 60 per cent. more pay than his *confrères* of the army, amounting at the very least to £200 a year surplus—that is, £1200 for the six years,—a very fair sum to find his passage home and out again. The writer omits reference to the half-pay and allowances while on furlough, about £1 a day. So also he says nothing of the huge pickings of a surgeon of the department in India: allowances for railways, civil surgeoncies, lock hospitals, gaols, police, and generally a large private practice. There is just one timid hint at these good things in the complaint of favouritism to natives and half-castes in granting appointments. It shows at least that there are such enviable appointments, and that a man's prospects are by no means limited to the scale laid down in the Government prospectus. The fact is, the prospectus gives only the minimum, and no one of the department is quite satisfied till he gets something better, and, I may add, there are very few who do not. The pensions are certainly small, but only small from an Indian point of view. As men on pension are no longer in active service of Government, they are not paid the tentage, horse allowance, &c., which form large items in Indian receipts, and perhaps, too, the rates are a remnant of the olden time, when they were largely supplemented by pension funds. They are, however, much larger than those of the British medical service. I append a table of rates per diem for comparison.

	After 17 yrs.	After 20 yrs.	After 25 yrs.
Indian medical service ...	12*s.* ...	16*s.* ...	20*s.*
British do. do. ...	Nil. ...	10*s.* ...	16*s.* 9*d.*

Your correspondent's comment is rather amusing that £220 pension will not keep a bachelor in moderate comfort. But who ever expects that the Government would undertake to keep him in affluent circumstances for the rest of his life after fifteen years' actual duty in India, besides paying him very well all the time?

I am unwilling to intrude on your space any reference to the bright side of the picture, and will end by saying, briefly, that those who enter the department have a wide career before them, and the chance of making lots of money; and when they at last retire fairly well off, they will probably find they have not had a day's more foreign service than the average of their *confrères* of the army and navy, who retire with nothing but their small pensions to look to.

Yours respectfully,
November 12th, 1875. Half-pay.

The Meeting of Corpulent Men in America.

The papers of the United States give a description of this meeting, which took place at Gregory's Point on the 25th of August last. If the details are not a little exaggerated, monstrous individuals to the number of about one hundred assembled together, some being brought in carts, as no ordinary vehicle would carry them. The consumption of food at the dinner was, it is said, "miraculous." 100 barrels of oysters, 10 casks of potatoes, 300 lb. of carps, 100 lb. of eels, 300 lb. of lobsters, besides mountains of meat of various kinds. The beverage was beer, of which 300 barrels were drunk. Would not these people be highly benefited by a course of "Banting"?

The Insane in the Department of Seine.

This department, of which Paris is the capital, had to provide in 1801 for 946 insane persons. On the 31st of December, 1874, they had increased to 7072, being sixfold the former number, whilst the whole population had augmented only threefold. For the last ten years the mean increase of the insane has been 200 per annum. Up to 1860 the female sex was in the majority; from that period the men have outnumbered the women. At the present time there are, out of 1000 insane, 542 men and 458 women. Among 2177 patients who were admitted in 1874, 882 were single, 855 married, and 348 widowers or widows. As regards the callings of these patients, we find that 853 were engaged upon manual labour, 332 had no occupation, 302 were servants or in the employment of others, 263 carried on trades or commerce, 120 belonged to the liberal professions, 36 were landed proprietors or independent, and 19 belonged to the army and navy. Among the causes of insanity, intemperance amounts to 37·22 per cent. of all the cases. In the year 1874 the insane of the department of Seine cost £163,096.

Epsom College.

To the Editor of The Lancet.

Sir,—Will you have the kindness to extend the ægis of your protection over the medical officers of the above institution, and, by publishing the enclosed letter, spare us if possible from a similar infliction in future.

My partner, Mr. Jones, of Epsom, and myself were recently appointed medical officers to the Royal Medical Benevolent College at Epsom, and having one or other of us devoted between two and three hours each day to its duties, I can conscientiously say that neither attention, time, nor *medicine* have been spared—even to the sacrifice of private work—in fulfilling them. If in the management of such a simple affair as a case of chicken-pox we are not only to have our treatment questioned, but are expected to write to parents in self-defence, the duty would be endless, and too irksome to be encountered.

I forbear to comment on the letter itself.

Yours very truly,
November, 1875. Geo. R. Barnes, M.D.

[copy.]

———, November 11th.

Dear Sir,—Hearing that my youngest boy at Epsom College was suffering from chicken-pox, and had been confined to the room for a week, I went down to see him, and I was surprised to find that he had no medical treatment, and that during the fortnight he was up there he had not had any medicine given him. Now, I consider if he had the usual medicine given in these cases, he would have recovered more quickly, and I certainly do not approve of *this do-nothing treatment*, when I think a little medicine would have greatly relieved; even gentle aperient doses, with saline and diaphoretic medicine, I consider very much relieves the skin affection, and I frequently find it leaves children weak for some time afterwards, requiring a tonic medicine. I now hear that he has been obliged to leave the school again, in consequence of a boil or abscess on his neck. I should be glad to hear from you what it is, and if I find his health in a bad state I must consider whether I shall take him away from the school. It is most inconvenient to me to come so long a journey just now; therefore I am anxious to know what is being done.

Yours truly,
To Dr. Barnes. * * * * *, F.R.C.S. Lond.

Overseers' Orders on Medical Officers.

To the Editor of The Lancet.

Sir,—I shall be glad if you will kindly give me your advice on the following subject. On March 31st, 1875, an overseer of my district gave an order for me to attend a man. I found him suffering from fractured leg (tibia). I attended him, and he went on well. On rendering my half-yearly account of extras to the guardians, they refused to pay this item, alleging that the patient himself was in a position to pay. Now, Sir, whom must I sue for my fee—the guardians, the overseer, or the patient?

I am, Sir, yours faithfully,
Whitwick, Leicester, Nov. 15th, 1875. C. J. B. Johnson.

*** An overseer can give an order only in cases of *sudden* and *urgent* necessity, and the medical officer is only required to attend upon the overseer's order in such cases. If he attend upon any such order, and the case be not of that nature, the medical officer may have a claim against the overseer, but has none against the guardians. Cases of fracture, supposing the patient to be very poor, seem to come fairly under the category of sudden and urgent cases, and we should advise our correspondent to press his claim on the guardians, unless, indeed, the man's circumstances clearly indicate his own ability to pay, in which case we should advise that the overseer be sued, leaving him to recover from the patient. At the same time we advise all medical officers under the Poor Law not to receive overseers' orders, except in cases at once urgent and sudden.—Ed. L.

"Amocque."

To the Editor of The Lancet.

Sir,—The disease termed "amocque," which Dr. Adams refers to in your last number, and described by the captain of a ship as "a form of ringworm attended by madness of more or less severity," was, in all probability, that form of homicidal mania produced by the inordinate use of haschish, bhang, or Indian hemp (Cannabis indica). This form of madness has of late years been frequently described in medical journals and books of Eastern travel, and its Malay name has been Anglicised to denote a mad indifference to the result of bad actions (seen sometimes nearer home than Siam)—viz., "running a muck"! (amocque).

The "ringworm" I look upon as no essential part of the disease, but was probably that parasitic affection called "dobie itch," well known to Europeans on the China station, and which, in the natives, becomes sometimes so intolerable as to induce them to take large quantities of "bhang" in order to obtain relief.

I am, Sir, yours faithfully,
Gosport, November, 1875. Robert Nelson, Staff Surgeon, R.N.

The Royal Society.

The award of the medals in the gift of the Society for the present year, by the Council, is as follows:—The Copley medal to Prof. A. W. Hofmann, F.R.S., for his numerous contributions to the science of chemistry, and especially for his researches on the derivatives of ammonia; a Royal medal to Mr. William Crookes, F.R.S., for his various chemical and physical researches, more especially for his discovery of thallium, his investigation of its compounds and determination of its atomic weight, and for his discovery of the repulsion referable to radiation; a Royal medal to Dr. Thomas Oldham, F.R.S., for his long and important services in the science of geology.

N. S. P.—Apply to Letts and Co., Cornhill.

Low Death-rates.

To the Editor of The Lancet.

Sir,—In the "annotations" in your issue of Nov. 6th, I notice your remarks on a supposed Hygeiopolis in Wiltshire, wherein you demolish the figures of the medical officer of health for Bradford-on-Avon; but to show that it is possible to come near such a low death-rate (and without the possibility of demolishing my figures), I am pleased to state that our death-rate for the three months ending Sept. 30th, 1875, was at the annual rate of 9·6 per 1000, our population being 11,111, with 27 deaths in the three months; and I am the more gratified in being able to do so, because I feel that certain erroneous ideas existed concerning the general salubrity of this town in consequence of its late unfortunate epidemic, which, by-the-bye, happily left us five months ago. That the town is a healthy one may be gathered from several circumstances—viz., the many instances of extreme longevity among the inhabitants, the comparatively low infant mortality, the freedom from epidemics (the late one being the first in the recollection of the oldest inhabitants), and the generally low death-rate, 18·24 being the average for the three years 1872–74, that for 1872 rising only to 16·47.

I am, Sir, yours obediently,
J. G. Braden,
Lewes, Nov. 11th, 1875. Medical Officer of Health for Lewes.

To the Editor of The Lancet.

Sir,—In your impression of the 6th inst. you refer to a supposed Hygeiopolis in Wiltshire, with a death-rate of 7·5 per 1000. I have one in my combined districts of only 6·7 per 1000 per annum for the quarter ending Sept. 30th, 1875. During the same period the birth-rate was 43·1 per 1000. The population in 1871 was 3341, and I estimate it for the middle of 1875 as 3550. It is the urban sanitary district of Warley, situated near Halifax, in the West Riding of Yorkshire, the inhabitants of which are principally engaged in mills. I am, Sir, yours faithfully,

Thos. Britton, M.D.,
Halifax, Nov. 12th, 1875. Medical Officer of Health.

Nuisance from Gas.

Dr. F. E. Wilkinson medical officer of health for the district of Lewisham, in a report recently issued, describes a somewhat unusual nuisance which came under his observation last year:—

"There was a most offensive nuisance in November last for several days, causing great alarm in the neighbourhood of St. Germain's-road, Catford, and Lewisham. It was occasioned by large volumes of sulphuretted hydrogen gas which escaped from the sewer in the night, and were traced along the Ravensbourne and Sydenham main sewer, in the Bromley and Lewisham road, from the turning to Ladywell to the 'Black Horse' public-house, Rushey Green, and from thence along the Catford road to the Crystal Palace Gas Works, Bell Green. This gas entered the houses along the line of sewers through the sink traps and pipes, and discoloured the white paint in many houses and turned the silver black, and some of the inhabitants had to turn out into the streets. As soon as this disgusting nuisance was traced to its source, proceedings were taken to stop it, both by the Metropolitan Board of Works and the Lewisham District Board of Works, against the Crystal Palace Gas Company. The directors of the Company denied that anything had been done at their works to cause a nuisance; but upon being served with notice of the Lewisham Board's intention to apply to the Court of Chancery, the nuisance immediately ceased; and on the hearing of a summons, issued by the Metropolitan Board against the Company, the magistrate inflicted a fine upon the Crystal Palace District Gas Company of 40*s.* and costs."

Physiologist, (Birmingham.) — Our correspondent probably refers to the observations of M. Paul Bert, which are noticed at some length in The Lancet of May 30th, 1874.

Treatment of Incontinence of Urine.

To the Editor of The Lancet.

Sir,—In the treatment of incontinence of urine I have found that belladonna acts well for very young children; but with boys over eleven or twelve years, who have retained the infirmity, no treatment has answered so well as a combination of belladonna with creasote, in the form of a pill, as follows:—Extract of belladonna, twelve grains; creasote, twenty-five drops; oil of cinnamon, four drops: made into a mass with bread-crumbs, and divided into fifty pills, of which one should be taken after dinner, and one shortly before going to bed. I have never known this to fail with boys, who are generally cured in about three weeks from the time they begin the medicine. Yours obediently,

Marlborough College, Nov. 16th, 1875. Walter Fergus.

Calabar Bean.

To the Editor of The Lancet.

Sir,—A leading oculist has told the friends of a patient who is using an eye drop of Calabar bean (one to thirty of water) for neuralgic (?) headache with great benefit, that such treatment is dangerous to the eye. Since reading Dr. Munro's cases of tic cured by this method, I have had unvarying success in several obstinate cases, and have never seen ill-effects. Still, as the oculist in question considers the treatment eccentric and dangerous to the eye, I should be glad to elicit the opinion of the profession upon the subject. Yours &c.,

November 13th, 1875. M.D. Lond.

A New Danger.

Dr. Whitmore, medical officer of health and analyst for Marylebone, reports that he very recently analysed the colouring matter contained in four pieces of tarlatan, a material worn by ladies as evening dresses. Two of the pieces were of a bright green colour, the other two of a pale or apple green. Those of the bright green colour contained arsenic in considerable quantities, one of the pale green contained a minute trace of it, but in the other none could be detected. He was induced to make these analyses from having heard that two young ladies had suffered from symptoms of arsenical poisoning in consequence of having worn dresses of this description at an evening party, and he proposes to make further analyses of a similar kind, the results of which will be given in his next quarterly report.

A Dangerous Lunatic at large.

To the Editor of The Lancet.

Sir,—Will any of your readers be good enough to advise me how to act in the following case.

A powerful man, in a neighbouring village, has been confined eight separate times in the County Asylum (as a pauper), and each time after a few months' residence has been discharged "cured," to be returned in a few months as a dangerous lunatic. The last three times before he was removed he kept the village in terror for hours, once stalking up and down it, armed with a loaded double-barrelled gun and a meat-chopper, and the two last times inflicted considerable damage on the relieving officer before he could safely lodge him in the asylum; so much so that when he removed him six weeks ago he was much bruised about the head and face, and has still a swollen and stiff finger. Even at his best times there is generally something in his manner which marks him as not quite sane, and, in my opinion and in that of my partner, he ought to be permanently confined. Can any steps be taken to attain this object, and, if so, how must I proceed?

Yours faithfully,

Eye, Nov. 17th, 1875. Edgar G. Barnes, M.D. Lond.

Mr. Young again.

Mr. Charles Young is not yet happy, as the following advertisement from the *Western Gazette* shows:—

> "Charles Young, Surgeon, Chilton Polden, although endeavouring to obtain another practice, hopes to attend his patients until he leaves, and to have the privilege of remaining, should he desire it, which is most likely."

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from — Prof. Parkes; Mr. Bryant, London; Mr. Simon, London; Mr. Teevan; Mr. Rivington, London; Dr. G. MacLeod, Glasgow; Mr. Braden, Lewes; Mr. Griffiths, Cardigan; Mr. J. Farrar, Bradford; Dr. Philipson, Newcastle-on-Tyne; Dr. Neate; Dr. Griffiths, London; Mr. Whines; Mr. G. Cowell, London; Mr. C. Holmes, Oxon; Mr. Elliott, Bristol; Dr. Senftleben, London; Dr. Mickley, London; Mr. Skaife, London; Mr. Hewetson; Dr. Moore, Dublin; Mr. Humphries, London; Mr. Bell, London; Mr. Rowland, Wembury; Mr. Forbes, Kirkby Stephen; Dr. Pettigrew, St. Andrews; Mr. Wills, Bootle; Mr. Murrell, London; Mr. Frost, Ironsville, Queensland; Dr. Rayner, Hanwell; Dr. Davidson, Liverpool; Mr. Alderson, Hammersmith; Mr. Hill, Crickhowell; Dr. Sheen, Bentham; Dr. Webb, Wirksworth; Dr. Barnes, Epsom; Rev. C. H. Colbyn, Wirksworth; Mr. Neve Foster, London; Rev. J. D. Mereweather, Venice; Dr. Russell, Glasgow; Mr. Johnson, Whitwick; Mr. Lane, London; Dr. L. Winslow, London; Dr. Hamill, Miles Platting; Mr. Teale, Leeds; Mrs. Minschull, Holloway; Messrs. Salt and Son, Birmingham; Mr. Melson, Gosport; Mr. Fergus, Marlborough; Dr. Ginders, Homerton; Dr. Sheen, Cardiff; Mr. F. Scott, Manchester; Mr. R. Moffatt, Glasgow; Mr. Doran, London; Dr. Duckworth, London; Mr. Bedford, Amersham; Mr. Groves, London; Mr. Incledon, London; Mr. Britton, Halifax; Mr. Sawkill, Sherburn; Dr. Edes, London; Mr. Keith, Folkestone; Mr. J. Evans, Walsingham; Mr. Russell, Neath; Dr. M'Kelvie, Oban; Mr. B. Brainwall, Newcastle; Dr. Ashworth, Bourn; Mr. Whall, Worksop; Mr. Phillips, London; Mr. Murphy, London; Dr. Harris; Dr. Barnes, Eye; Dr. Wara, London; Mr. Welch, London; The Director-General of the Medical Department of the Navy; Half-Pay; Enquirens, W. J.; Omicron; Common Sense; Testus; The Registrar-General of Edinburgh; Matron; A Yorkshireman; N. S. P.; Medicus; M.D., Halifax; An Old Practitioner; H. F.; E. G.; A Subscriber; &c. &c.

Letters, *each with enclosure*, are also acknowledged from — Mr. Parr, Alrewas; Dr. Lush, Weymouth; Mr. Olliver, Harrogate; Mrs. Humble, Birkenhead; Dr. Davies, Wrexham; Mr. Chitty, Shaftesbury; Dr. Hart, Tullow; Dr. Oswald, Scarborough; Dr. Cheeseman, Kingsbridge; Mr. Bennett, Worksop; Mr. White, Cashel; Dr. Macadam, Edinburgh; Mr. Hole, Tiverton; Mr. Symon, London; Mr. Townsend, Exeter; Dr. March, London; Mr. White, London; Mr. Martin, Bow; Mr. Sutton, Smethwick; Mr. Smith, London; Mr. Drury, Worcester; Mr. Savage, Goole; Dr. Stevens, London; H. B.; L.R.C.P., Ventnor; E., Swansea; L. M., Bedford; Epsilon, Cardiff; Medicus, Halifax; Humerus; A. Y. Z.; Medicus, Chorley; Alpha, Leeds; M.D., Barnsley; T. N. A.; Alpha, Bridlington; A. M.; R. S. L.; J., Kendal; J. G.; T. C.; Medical; M.D.; Medicus, Brighton; B. A.; S. M., Stamford.

Daily Bristol Times, Wrexham Guardian, Staffordshire Daily Sentinel, Wrexham Advertiser, Newcastle Chronicle, Welshman, Liverpool Post, Local Government Chronicle, Western Morning News, Manchester Guardian, Cork Constitution, Record, Sheffield Daily Telegraph, Derbyshire Times, and *Hampshire Telegraph* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

The Lancet Office, Nov. 18th, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 12	29·82	N.W.	40	42	...	51	39	...	Overcast
„ 13	29·76	S.E.	44	45	...	58	41	0·33	Raining
„ 14	29·14	N.W.	46	50	...	51	44	...	Raining
„ 15	30·24	N.W.	37	39	...	49	36	0·50	Foggy
„ 16	30·12	S.W.	42	45	...	53	38	...	Foggy
„ 17	30·05	W.	44	45	...	56	43	0·33	Overcast
„ 18	30·06	W.	51	54	...	...	44	0·06	Fine

Medical Diary for the ensuing Week.

Monday, Nov. 22.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Medical Society of London.—8½ p.m. Dr. de Havilland Hall will exhibit a Pathological Specimen of Tumour of the Liver; Dr. Thorowgood, a Specimen of Cirrhosis of the Liver in a Child, and a new Inhaler and Respirator by Mr. Carrick, of Glasgow.—Dr. Brunton, "On the Rational Treatment of Tapeworm."

Tuesday, Nov. 23.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Royal Medical and Chirurgical Society.—8½ p.m. Dr. Pavy will exhibit a Specimen of Sugar obtained from Healthy Human Urine, and prove its existence by the appropriate tests. — Mr. F. H. Welch, "On Aortic Aneurism in the Army, and the conditions associated with it."

Wednesday, Nov. 24.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1½ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Thursday, Nov. 25.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Friday, Nov. 26.

St. George's Hospital.—Ophthalmic Operations, 1½ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Clinical Society of London.—8½ p.m. — Dr. Murchison "On a Case of Acute Cancer of the Liver, with Pyæmia, in a Man aged twenty-four"; "On two Fatal Cases of Acute Pyelitis and Nephritis apparently consequent on Gonorrhœa."—Mr. Berkeley Hill, "On a Case of Amputation at Hip-joint for Fibro-plastic Tumour."—Mr. Geo. Lawson, "On a Case of Melanotic Tumour of Orbit."

Saturday, Nov. 27.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

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Agent for the Advertising Department in France—

Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.

PART OF A

Lecture

INTRODUCTORY TO THE COURSE GIVEN AT

UNIVERSITY COLLEGE HOSPITAL,

Delivered on November 15th, 1875.

BY SIR HENRY THOMPSON,

SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE HOSPITAL.

(*Reported by* MR. G. BUCKSTON BROWNE.)

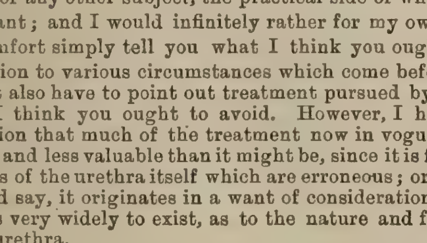
AFTER a few words of introduction, expressive of the pleasure which it gave the lecturer to return to the scene of his former labours for a short time, he defined the nature of the course and its scope, alluding to various minor points in connexion with it. He then said:—

In view of a consideration of the more important affections of the urethra, with which I shall naturally commence, I desire to depart from my usual habit a little to-day, and to speak more at length on a topic which I always allude to slightly, but not otherwise, because it is not part of my plan to teach anatomy and physiology here. But I find it necessary to complain of what I will speak of as the "too mechanical method" of treating urethral diseases, which I think has been obtaining of late in some parts of the Continent, and perhaps in America. What I mean by that will appear as we proceed. I always protest against it in this course of lectures, but something more than this appears to me now to be desirable. I dislike to be polemical in this or any other subject, the practical side of which is so important; and I would infinitely rather for my own peace and comfort simply tell you what I think you ought to do in relation to various circumstances which come before you, and not also have to point out treatment pursued by others which I think you ought to avoid. However, I have the conviction that much of the treatment now in vogue is imperfect and less valuable than it might be, since it is founded on views of the urethra itself which are erroneous; or rather, I should say, it originates in a want of consideration, which appears very widely to exist, as to the nature and function of the urethra.

The treatment of urethral disease of which I complain has its origin in the notion that the urethra is a mere flexible tube, closed at or near its junction with the bladder by some kind of muscular apparatus, sphincteric or otherwise, through which fluids will pass indifferently in either direction. No idea, however, can be more erroneous, and treatment founded on it must be defective.

At the outset, then, let me say that it is absolutely essential that you should have a tolerably accurate knowledge of the nature and functions of this so-called tube.

I draw for you on this board the kind of diagram usually supposed to represent the bladder and male urethra. This diagram has something to answer for in producing the erroneous views I refer to. It represents the urethra as a tube, and as more or less open.

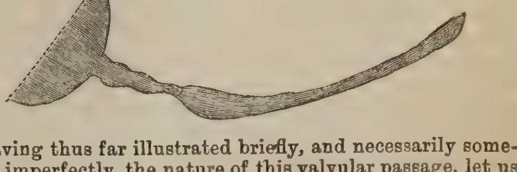


Let me give you an illustration of my meaning, and not an unimportant one. I believe I am correct in stating that almost every patient who presents himself for treatment of a urethral discharge, when advised to use an injection, gets some such advice as this, when the manner of doing it is explained, as it ought to be, in detail:—He is told to inject a certain quantity of liquid into the passage by means of a syringe of some kind, and in doing so he is always admonished to make pressure on the line of the urethra, some four inches from the orifice, in order to prevent the fluid from passing beyond that point, and so perhaps enter or irritate the ducts which open into the prostatic portion, and occasion irritation of the neck of the bladder or a swelled testicle—an idea which is far from correct; and such advice simply demonstrates that the person giving it is not really acquainted with the structure or function of the part he is treating. Want of thought originally has produced, and the influence of ancient tradition perpetuated, the error which vitiates much of our treatment in its various forms.

First, let me assure you that the urethra is not a tube at all, in any sense in which we employ that word. It is not like a gas-pipe, or an india-rubber tube, or even a flaccid tube of any membrane whatever.

It is rather *a continuous closed valve, capable of transmitting fluids and solids in one direction only, and transmitting nothing whatever in the opposite direction, except in obedience to applied force.* Its length in the male makes us think of it as a tube, but this is a mere accident of sex. An inch or less is amply long enough for its urinary function, as in the female; and all the length it possesses above that is quite useless *as a urethra*, and renders it liable to disease and accident—the price, and a heavy one, let me tell you, which the male pays for his specially distinguishing feature. In illustration of this, I have but to refer you to the innumerable difficulties and dangers associated with stricture, retention of urine, and calculus, which are almost unknown in the other sex. It is, then, in the male simply a long valvular chink, traversing soft and most delicate vascular and nervous tissues, always firmly closed, and never opening except for a few seconds, during which fluids have to be transmitted from the body. Then, for a few seconds, it is distended more or less, and becomes a tube if you please, for this short time and this only, equalling, perhaps, at most three minutes in the twenty-four hours. All the rest of the time it is firmly closed, and not one drop of fluid can pass from the bladder. Of course, oozing of liquid which is generated in the walls of the tube, or which enters it by ducts may escape, but always, inevitably, in the outward direction only.

Now, during these few seconds, when the valve may be said to occupy the form of a tube, I have next to observe that it is a tube of very varying diameter in its different parts; it is, in fact, very differently distensible at different places, being surrounded by different structures. This fact has long been known and generally recognised. I will show you illustrations of this from the works of Sir Everard Home and of Mr. Guthrie, who made casts of it in wax and other materials. This point is scarcely of less importance than the preceding one. The annexed diagram is reproduced from Sir E. Home's work.*



Having thus far illustrated briefly, and necessarily somewhat imperfectly, the nature of this valvular passage, let us see how far the ideas which I want you to acquire relative to the urethra affect two important points in practice. First, that simple matter of making an injection into the urethra. You have to introduce a fluid for the purpose of therapeutic contact with the walls of this closed passage; you have to distend it, and some little force is necessary; not a single drop can enter, much less run down into it, unless the liquid is forced in by a piston, while the orifice of the urethra is carefully closed around the tube of the syringe introduced. The walls of the passage lying closely applied to each other become opened only by the pressure of the fluid driven in, and they are distended just so much and so far as the quantity employed determines. Thus you may safely reckon, as the result of my observation, that a syringe containing one fluid drachm is amply sufficient, and that it will distend the urethra for three and a half or four inches. A half-drachm syringe often suffices. Here is one of each size, and it is scarcely necessary to say that these small instruments are much more easily managed by a patient than larger and longer ones. But most patients, unless specially taught to use the syringe, never introduce any injection at all. Unless the orifice of the urethra is carefully closed at the time, the fluid simply leaves the end of the syringe and flows out by the external meatus; and in every case after the injection has been made, the moment the orifice is unclosed the fluid is rapidly expelled by the contractile force of the urethra, and no appreciable quantity remains within. So much, then, for any fear of its running down to the neck of the bladder. Of course, if an injection is too strong—in my opinion a very frequent occurrence,—the anterior part of the urethra is inflamed, and extension backwards may easily take place; but that is no part of our subject now. But let me further say that, so far from your being able, even with the power of the syringe, to send an injection into the prostatic part of the urethra, you cannot do so by any ordinary force, unless you can at the same time voluntarily relax the muscles which surround the membranous urethra, and so allow the fluid to pass—a thing perfectly possible with very little practice to accomplish. Thus it is that you cannot inject the bladder except by passing an instrument into its cavity. In fact, this valvular passage stoutly resists all intrusion from without, and admits no fluid except in obedience to pressure which it is unable to resist.

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* Practical Observations. By Sir E. Home. Vol. I. London, 1805.

I must just remark, in order to anticipate a possible objection to my statement relative to the valvular action of the urethra, and its power to transmit bodies in the outward direction only, that it is well known that certain foreign bodies have been able to pass inwards when introduced by the external meatus. I refer to two typical ones, both of which have been occasionally known to reach the bladder after being fairly lodged within the urethra. I refer to an ear of barley or of rye, both of which you will recollect are bearded, and also to a common hair-pin, which is wedge-shaped. Either of these bodies, if completely introduced, and also in such a manner that the beards or the points are directed outwards, will traverse the urethra in the direction inward. These, however, you will doubtless at once see are not in the least degree exceptions to my statement. It is an old schoolboy's paradox to put an ear of rye in his jacket-sleeve, when, with slight movements of his arm, although directed downwards, the ear soon finds its way upwards to his shoulder. If the arm was kept perfectly motionless there would be no change of place in the ear of rye. So, when introduced within the urethra, the involuntary movements of the urethral muscles, designed to expel the intruder, act on the ends of the bearded corn, or on the ends of the hair-pin, and drive it on in the only direction it can travel—namely, inwards. I am not sure that it was necessary to mention this, but I have known the peculiar action of these bodies referred to as militating against the uniformity of the action of the urethra referred to, while in fact they do but illustrate its existence. If the urethra submitted tranquilly to the intrusion, and made no expulsive effort at all, the foreign bodies would not travel; as it is they must move, and can only do so in one direction. Of course it is due to this function of the urethra that gravel and small calculi are expelled in great number, and that the morbid excretions in gonorrhœa, &c., always issue externally, and never go backwards to the bladder.

The second point of importance in which the structural function of the urethra which I have described should affect our practice is associated with treatment of stricture of the urethra. I do but allude to this now, and shall reserve what I have to say on this head until a future lecture, when I shall enter fully on the subject.

From the Report on the Sanitary Measures in India in 1873–74 we learn that the general death-rate in the European army in India in 1873 was 15·3 per 1000, a lower rate by upwards of 2 per 1000 than any previously recorded. If deaths of invalids returned to Netley are added, the rate is 15·8 per 1000.

Introductory Lecture
TO THE WINTER COURSE OF
CLINICAL SURGERY.

Delivered at the Western Infirmary of Glasgow
(University Clinic),

By GEORGE H. B. MACLEOD,
REGIUS PROFESSOR OF SURGERY, SURGEON AND LECTURER ON CLINICAL SURGERY IN THE INFIRMARY.

Gentlemen,—It is desirable that at the outset of our clinical work I should explain to you the nature of the study we are going to engage in, and the system of teaching it which I pursue. Within the University I have already made known to you the aim and scope of my course of instruction in systematic surgery, and now here, in our practical school, I desire to point out what further duty devolves upon me as your teacher. As Professor of Surgery in this school, my business divides itself into two parts. These are not distinct or independent, but, on the contrary, form one whole, and that consists in a complete course on the science and art of surgery. One half of my function I perform within the University, and the other half here in the hospital. No systematic course can be complete without its practical part in the clinical school, no more than systematic anatomy or chemistry can be efficient without dissecting room and laboratory. On the other hand, no bedside instruction can avail without preliminary education in the class-room. I am desirous of placing thus clearly before you this entire affinity and relationship between what is termed the theoretical and practical departments of my subject, as attempts are occasionally made to dissever them, and even to exalt the one at the expense of the other. That of late years a strong disposition should have manifested itself to depreciate "lectures" and all mere oral teaching, and to commend "practical" instruction, need not astonish us when we remember how terribly lecturing was abused in days not long past. It appears to us now almost incredible that anatomy, chemistry, and botany should at one time have been taught without practical illustrations, but there is no doubt they were so. It must be borne in mind, however, that such practical instruction in surgery as can be given here is only capable of supplying you with a certain amount of that learning which you require. It alone cannot possibly equip you for the exercise of the surgical art. You cannot do without it, yet you cannot do everything by it. It is requisite that you be first instructed in the principles on which the practice seen here is founded. You must be made conversant with the terms used at the bedside. You must know in some measure the nosology and pathology of the diseases brought before you, as well as the usual influence exercised by those conditions which are special to the patient, and the effects which are produced by remedies. Systematic surgery is, after all, the sum of clinical experience. Such a course is made up of the conclusions or generalisations drawn from a multitude of bedside observations reduced to order and systematised. Clinical surgery can thus never wholly take the place of systematic, but must ever be auxiliary and subsidiary to it. The two branches must be entwined, and then they will mutually support and illustrate one another. If you have been well instructed in principles you will come half taught to the bedside, and be capable of profiting by what you there see. To learn practical surgery, however, is not easy, and will demand all your attention. Give it as much time as you can. It is by it that you must come to fulfil the chief end of your professional career, the alleviation of suffering and the saving of human life.

Clinical study, then, aims at applying the rules and doctrines of the class-room to actual cases of disease. In the hospital we see the living illustrations of those affections which we have heard or read of, and in many cases we are able to compare the relationship which exists between certain signs seen during life and the state of textures and organs after death. It is in clinical research, properly conducted, that we gain that accuracy in the employment of the special senses which is so desirable, and learn to exercise the judging and reasoning faculties in sifting evidence and separating what is accidental and immaterial from the essential and important in those facts or signs which are presented to our observation. Careful attention, patience and diligence, truth and candour in observing and applying facts to theories, accuracy in generalising or deducing principles, these are qualifications which are requisite in a true clinical student.

In this school, as in most others, clinical instruction is conveyed both by lectures and bedside teaching. Once a week a more formal lecture is given by each medical attendant, and on several days you receive instruction in the wards. Both these methods are advantageous when combined. In some schools the bedside work is neglected, and the lecture becomes the main or sole means of teaching, while in other hospitals the reverse is the case, and ward lessons are alone employed. The traditions and usages of the school, or the means and time at the disposal of the teacher, appear in many cases to determine the choice. I do not think that in many schools this practical work has been so zealously cultivated as it has been for some years here. You will soon find how strictly attendance is enforced. At five minutes past nine in the morning, whether it be at lecture or in the ward, the roll will be called, and every absentee must give a satisfactory account of himself. I shall endeavour this session, as in the past, to be at my post every morning to a moment, and to allow no private engagement to interfere with this important duty, and I shall expect from you like diligence and punctuality. I want no sluggards here, and none who, by careless attention, disturb the application of others. Every man of you must act as dresser, either now or in summer. I will give every facility for a long continuance of that service. It is as a dresser that you will come to have a true interest in the patients, to observe their cases with care, and feel some part of the difficulties and responsibilities of the work.

After studying the various plans of clinical teaching followed in other schools at home and abroad, the method I have been led to adopt is this. On Monday, my friend Dr. Knox (one of our assistant-surgeons, and able demonstrator) will give you in the side ward minute instruction in bandaging, dressing, and the application of surgical apparatus. This duty I used myself to perform, but I am glad to have it taken up by younger and abler hands. What is there shown you will individually have to repeat before your instructor, and afterwards in my presence, in the fulfilment of your duty as dressers. All dressings of any consequence, as well as apparatus for fractures &c., are applied either by you or in your presence by myself or my house-surgeon. It is quite impossible that any accident can prevent, as too often happened in my own time, a student who attends the wards regularly from seeing all the usual fractures and dislocations frequently dealt with in all their details. On Tuesday I meet you in the theatre and "lecture." By this I mean that I then dwell upon the lessons derivable from a series of cases of the same affection which either at the moment are or quite recently have been under treatment before you; or a wider and more general view than can be taken by the bedside is given of some of those accidents or diseases we have been studying,—a view checked and regulated, however, at every point by the example of it we have been dealing with. At other times the causes, nature, and results of an operation recently performed, or some more general affection affecting the sick under our care, are taken up. Cases of the same disease in different wards are, as it were, collated and compared, and what practical lessons they teach enforced. In this part of the work pathological specimens and drawings are occasionally employed; yet it is most desirable, even in these more formal meetings, to avoid controversial and critical discussion as much as possible. On Wednesday, Thursday, and Saturday we meet in the ward. Friday being the lecture day of my colleague, you are excused attending with me (as his students are on Tuesday), in order that you may be present at his "lecture."

My ward work is thus conducted. We have a side room, well heated and lighted, fitted up with seats and a bed, into which all those patients who can be moved are brought on a light, noiseless, easily-wheeled couch. If a patient cannot leave his bed, then we visit him in the ordinary way; but I much prefer having patients taken into the side room, because they can be there seen and examined with more care and attention. Every student, being seated, can give his full attention to what is doing, and can take notes accurately and comfortably. The patient is placed on the bed in the full view of all, and his ailments are systematically inquired into. You will observe that I put each question in a loud voice, and that I repeat the reply, so that you can all follow what is doing. After a little initiatory practice, you will each be called upon to take my part and examine the patient. I shall in any case try to show you how best to obtain and apply information; and I shall, by examining you on what you see and hear, know whether your comprehension follows the work performed. Explanations can be given regarding each case both before the patient enters and after he leaves. All remarks which it is undesirable that he or his fellows should hear can thus be freely given utterance to, and so all fear of wounding his feelings avoided. The harm, too, which so frequently is done to weak and nervous patients by the rush of an eager crowd into the ward is prevented, and thus the interests of both patients and students are promoted. The lesser operations I also perform at these meetings; and as you are close to the patient, and each step is explained, you will, I think, get more good from them than is usually attainable. Great and dangerous operations unfortunately require not unfrequently to be undertaken, but these you will see performed in the theatre on Saturday. In this hospital I hope you will not find any of that ill-placed sensationalism regarding operations which, to the great detriment of students and the profession, is too often indulged in. Our aim should always be, to diminish the number and lessen the risk of those operations which mark surgical practice.

The cases we shall chiefly deal with in our ward work are the common and every-day surgical ailments, not the rare and curious, which seldom occur in actual practice. The more usual an ailment or accident, the more claim it will have upon our attention. Each morning we will only take up a very few cases, and these typical and well-marked examples of their kind. The great point will be to secure a clear comprehension of a few ailments at a time, and the principles deducible from them. All risk of such confusion as would arise from dealing with too many, and, above all, unrelated cases, must be avoided. Here we have always abundant material from the large and busy city around us. I shall try to be as simple and elementary as possible in conveying information, remembering that the receptivity of first-year's hospital students cannot be great; and I shall also aim at rendering the whole teaching as conformable as possible to a system, so that by the end of the session we may have compassed a fair summary of surgical practice. We must so group our cases as to make them afford the greatest amount of instruction, and at the same time secure order in our work. To accomplish this effectually, two things are provided. I have put into your hands a short guide to case-taking, in which you will find an outline of the chief points to be observed, both as regards cases in general and special ailments. By following this a uniform system will be attained. The other acquirement to orderly procedure is that I keep a daily register of what we do in the wards, so that an easy control is maintained, and, in a great measure, a definite arrangement followed out. I shall expect every dresser to have an intimate acquaintance with his cases, and occasionally I shall ask for written reports from him, besides questioning him at the bedside. Rewards (medals and certificates) are given for diligence and proficiency, and the house-surgeonships are bestowed (if the applicants are otherwise eligible) on those who attain the highest place in this department.

But, besides the junior class, to whose studies I have been hitherto referring, I have been induced by the spontaneous request of the senior men (those who have passed on to the medical side of the hospital) to meet them once a week for clinical purposes; and I would here for a moment speak of that class, as it is a voluntary one, and beyond doubt the most useful I have ever conducted. This is the third year of its existence, and this session it contains the great majority of the most advanced students. The hour of meeting is after the usual visits on Thursday, and for their instruction I chiefly employ the out-door patients who come to my ward for advice. In the side room we hold our conferences, which are as nearly as possible the same as they would be in private practice. Each student in turn examines a case, and gives an account of everything connected with its anatomy, physiology, pathology, and surgery. Not only do they in this way get their knowledge corrected, but they discover what subjects they are ignorant of, and so are led to supply the deficiency. The utmost frankness of communication is cultivated. These students have also, at my suggestion, organised themselves into a society, which meets on Saturday. Two examiners from their own numbers are appointed for the subsequent meeting, whose duty it is to prepare themselves thoroughly on some medical subject which has been within the range of their study, and for half an hour each presides and examines the rest. Of course he does not let the subject he is going to take up be known beforehand, and his authority for the time is strenuously maintained.

Now, gentlemen, in all this I have frankly laid before you the plan of clinical teaching I pursue, but it will prove fruitless unless it receives your most cordial support. The knowledge you seek must be conquered by yourselves. All I can do is to point the way as best I can, and try to awaken your observing faculties and lead you to reflect. I cannot give you perseverance and attention, but I can and will give you an example of industry and punctual attention to my duty. It is essential to your advancement that you keep yourselves abreast of the cases. You may visit the wards freely during the morning; and the ward journal, in which all changes in the condition of the patients are noted, is open for your inspection; and I shall at each visit tell you carefully of everything which has occurred during the interval since our last meeting. Everything done is open to your most minute inspection. Every error or oversight made you have the amplest means of discovering, and I promise you that they will be frankly admitted and discussed. Candid criticism is the best security against the repetition of mistakes, and gives a guarantee for future improvement.

To get the utmost good from your hospital work, you should read up at home on the different diseases examples of which have been shown you in the morning; and to facilitate this I will at the end of each day's demonstration mention to you the subjects you should thus seek further information on.

It is no use to begin all this work which I have outlined to you with spirit, and let the effort soon die out. The early enthusiasm must be sustained. Steady perseverance is far better than spasmodic application. The sooner students begin to get accustomed to hospital work the better, and the longer they keep to it the more they will like it. I have always regretted that foolish craving for "settling down" in practice which seizes so many of our men after they have graduated. It is just then, when they are free from the phantoms of examinations, that hospital attendance becomes really valuable; and a year of quiet study at that time, in such an institution as this, would, as a mere commercial venture, repay them well, putting out of account the incalculable satisfaction it would prove in after years.

Every morning, I may add, I shall remain fully two hours with you, and nothing will afford me more pleasure than to answer any questions you have to put, or to assist you in any difficulty. My staff of assistants is more than usually numerous, and on their aid you can always rely.

In what time remains to me, I propose to give you a brief outline of the history of clinical surgery, and explain to you the present position of the teaching in this school.

As might be expected, very little is known of the early history of clinical teaching. It is generally said Hippocrates took his pupils to the bedside for instruction; and his careful annotations of disease at least prove him to have been a careful clinical observer. In the Alexandrian school Herophilus and Erasistratus get the credit of having given bedside lessons; but nearly all trace of such teaching is lost from that early time down to the end of the sixteenth century. True, it is said that Thessalus and Symnachus during the first century, and the teachers in the school of Salernum in the twelfth century, attempted such instruction; but our knowledge of its exact nature is too slight to enable us to form any opinion concerning it. For a brief period at the end of the sixteenth century clinical teaching was pursued at Padua and Pisa, but it was soon abandoned; but afterwards, in 1764, a Clinical Chair was established at the former school. In the sixteenth century Medicine was much oppressed by the authority of the ancients. The dogmas of the "Fathers"—Hippocrates, Galen, and Celsus,—held men's judgments in all-powerful fetters till the awakening which followed the Reformation, and the discovery of printing stimulated medical like all other knowledge. Anatomy was in a great measure born, and her eldest child—Surgery—grew to a certain degree of vigour, mainly through the guidance of Ambrose Paré (a pupil of Fallopius), who had the courage to think for himself, and to add his own observations and reflections to the traditional teaching of the schools. He, though, like most of his distinguished contemporaries and successors, a "barber-surgeon," gave surgery somewhat of a scientific position. He established a school of surgical practice which for a hundred years governed France, and, in fact, Europe. The seventeenth century marks the division between ancient and modern practice; and, under the influence of the philosophy of Bacon and Descartes, men's minds began to open, and the all-powerful effect of authority was abolished. Harvey and a host of able anatomists in all countries by their discoveries greatly advanced medical science, while Leeuwenhoek opened up the vast field of minute anatomy by the application of the microscope to histological purposes.

In the middle of the seventeenth century Boerhaave (a pupil of Pitcairn, of Edinburgh) taught clinically and with great *eclât* at Leyden; and to Dr. John Rutherford and De Haen, his pupils, the Edinburgh and Vienna schools owe the introduction of the teaching of practical medicine. In 1754 the celebrated Van Swieten was ordered by Maria Theresa to establish a clinical school at Vienna, and De Haen became the first professor. At the period I speak of it was in Italy and France that surgery chiefly progressed; but Wiseman in England, and Purmann in Germany, gathered, in the bloody tumults of the time, many important surgical axioms.

The Royal Academy of Surgery, founded by Louis XIV., gave a great impetus to surgery; and in the Institution of the Garden of Plants, Dionis found a field for his great talents. He began clinical teaching in France; and after him Saviard, Mareschal, and others pursued it at the Hôtel Dieu. The College of Saint-Côme and the Royal Academy of Surgery gave a life—though often a very stormy one—to surgical discussion and research. Ledran, Louis, Garengeot, and, before all others, J. L. Petit, gave a prominence to French surgery at the beginning of the eighteenth century, which was increased and extended by their successors Desault, Sebatier, Chopart, Anel, Pouteau; and after them in succession Bichât, Dupuytren, Boyer, Roux, and Nélaton, all of whom have been the chief surgical teachers of Europe. It is, perhaps, Desault's chief glory that he established permanently clinical teaching in Paris (in 1750), and to his clinic Chopart, Bichât, Dupuytren, and Boyer in succession followed.

The Edinburgh Infirmary was established in 1736, and in 1748 Rutherford was busy teaching clinical medicine. I have seen it stated that before that date Monro had undertaken clinical surgery, but I have been unable to verify this. Rutherford tells us his plan was—(1) to give a history of the disease in general; (2) then to inquire into its cause; (3) next to give his prognosis; and (4) lastly to lay down indications for cure. In the hands of Cullen (who succeeded Rutherford), and afterwards from Gregory and Alison, clinical medicine in Edinburgh secured a high reputation; while at the end of last century Mr. Russell was appointed Professor of Clinical Surgery, though the anomalous position in which he was placed as regards hospital wards made it impossible for him to succeed. Mr. Russell had no patients assigned him for the illustration of his course, but, on obtaining the permission of the Professor of Anatomy and Surgery (then conjoined), he was allowed to comment upon the cases under the treatment of his colleagues; but he could at any time be debarred by them from access to the wards. When anatomy and surgery were disjoined, the right to teach clinically was by an error attached to the former chair, and thus an opportunity was afforded for the establishment on a truer basis of that department of instruction which has been so ably developed by its more recent incumbents. The exclusive rights now attached to the clinical chair of surgery in Edinburgh have, as is well known, occasioned much heartburning in that school. Nowhere else are students compelled to attend the teaching of one professor. To get this arrangement abolished has been strenuously but futilely tried by the Royal College of Surgeons. So long as the chair is filled by an eminent man, perhaps no harm is done; but such exclusive privileges might be productive of the greatest harm under other circumstances.

In 1782 Richter began at Göttengen the first of those admirable cliniques which have made many of the German schools famous; and now at nearly all the medical centres there exists a most elaborate system of bedside teaching.

In 1792 Sir Astley Cooper began to employ his hospital cases to illustrate his surgical lectures. The effect of this, he tells us, was most gratifying. While in 1791 his class only numbered seventy-three, the year he made this change it increased to one hundred, and the steady augmentation to four hundred and six in 1824 he ascribes to this clinical method of instruction. In 1792 some arrangements for teaching clinical medicine appear to have existed at the London Hospital. In 1813 Sir Benj. Brodie began to give regular bedside lessons.

In Dublin, wards were set aside for clinical purposes as early as 1785, and by degrees a practical school of great eminence arose; for while Crampton, Smyly, and Porter taught clinical surgery, Marsh, Corrigan, Graves, and Stokes brought practical medicine to great distinction.

In our own city clinical teaching appears to have existed as early as 1787, as a ticket for a course of "Lectures on the Cases of Patients in the Town's Hospital, Clyde-street, by Robert Cleghorn, M.D.," is in the possession of my colleague, Professor Cowan. The Royal Infirmary was established in 1793, and shortly afterwards bedside teaching was to some extent pursued, but it was not till 1829 that such instruction obtained a permanent or important place in the instruction of students. No proper or efficient system of teaching could be pursued by the general practitioners of that day, who were elected to serve in the hospital for two years at a time, and who were only in actual charge of patients for three months in each year. In later times, in the hands of Macfarlane, Lawrie, Andrew Buchanan, Moses Buchanan, Lyon, and Fleming, clinical surgery in Glasgow was more carefully cultivated. The teaching has always been quite open, and at no time has this been the case more than at present, when every surgeon in charge of wards in either hospital is placed, as regards the recognition of his teaching, on precisely the same footing, and students are at perfect liberty to choose any of them as their instructor. In order to fulfil the necessary course, each student attaches himself to two teachers, and he is compelled to divide his time between them, attending the "lecture" of both every week, but confining his visits to the wards of one for three months at a time. He has thus the opportunity, during the six months' session, of watching the practice of two men, and yet following to a termination the cases treated.

Before the clinical teaching was transferred from the Royal Infirmary, Professor Gairdner and myself were the only representatives of the University engaged in clinical teaching. When this institution was opened last year, two of our former associates as clinical teachers in the Royal Infirmary joined us here, and to them the University gave the well-earned status of professors. In this way Drs. McCall Anderson and George Buchanan were associated with Dr. Gairdner and myself in this very important and laborious work; but their appointment and official position as Professors of Clinical Medicine and Surgery has in no sense changed the relation in which Dr. Gairdner and myself stand to the teaching, nor has their appointment in any way narrowed or restricted the choice which you are allowed to make of your teachers. These appointments have brought augmented force to our school, but they have conferred no exclusive position on their holders such as was pointed out existed elsewhere.

The conditions favourable to the healthy development of clinical teaching have greatly improved of late years in our school. The division which now so markedly exists between medical and surgical practice, and the restriction to consultation work which several of the teachers have imposed on themselves, have allowed more time to be devoted to hospital duties, and has enabled them to concentrate their attention on special departments; and to this circumstance more than any other do I ascribe that increased vigour which has marked the teaching of later years, and the rapid increase of our school which has followed. The prolonged hospital appointments permit such improvements to be made in practical teaching as were before impossible, and to no event of my professional life do I look back with more satisfaction than the part I took in that reform. The almost complete severance which existed between the University and the hospital up to a few years ago was a total bar to the development of the clinical teaching.

Gentlemen, in closing these remarks I would only add that the duty demanded of us teachers is most anxious and responsible, whether viewed with reference to you or the patients. It is a very grave affair to be charged with the instruction of others in any matter; how infinitely more serious is it when the issues are so momentous and far-reaching as those embraced in medical education! We are entrusted with the practical education of men who go to all quarters of the earth wherever the British name has penetrated. Your knowledge and skill may affect the health and happiness of innumerable families, and any error you imbibe here may be multiplied in endless ways. Yet, on the other hand, all good and true lessons will have a wide circuit for their action, so that the clinical teacher is, as it were, the centre from which far-reaching waves of good and evil may spread. It is also a most anxious duty we have to perform, as we have, as it were, to think aloud before an intelligent audience, and to recognise disease, foreshadow results, and direct treatment almost on the spur of the moment. If this is most trying to a teacher's reputation, there is at least a compensating gain both to himself and his patients, as it must needs render him careful in his words and actions, and in this augmented attention and caution the patients secure a further guarantee for their prudent treatment. All of us, whatever our experience may be, are too likely to err and fail, but if each strenuously endeavours to do his best, he has a right to rely on the loyal support of every true student.

CASE OF NYSTAGMUS OCCURRING IN A COAL-MINER, ASSOCIATED WITH PALPITATION AND PROFUSE SWEATING.

By BYROM BRAMWELL, M.B.,
PHYSICIAN AND PATHOLOGIST TO THE NEWCASTLE-ON-TYNE INFIRMARY.

THOMAS L——, aged thirty-eight, a pitman, married, was admitted to the Newcastle-upon-Tyne Infirmary on the 10th of June, 1875, complaining of dimness of sight, palpitation, and debility.

Previous history. — He has worked as a coal-miner for twenty years, and has been particularly healthy. Has never had syphilis nor rheumatism. For the last four years he has suffered occasionally from palpitation. Eighteen months ago he first felt his sight dim, and noticed when he looked at an object intently that it seemed to move quickly backwards and forwards. The palpitation and dimness of sight have been worse since March, and since this date he has felt short of breath on exertion. He thinks the dimness of sight was brought on by the glare of the lamp which miners use. The pitmen, he says, often complain that the light hurts their eyes; he never, however, knew anyone affected in the same manner as himself.

The family history is unimportant.

Present condition. — He is a pale man, tolerably well nourished, but not muscular. The pupils are equal, contracted, and sensible to light. When he fixes the eyes on an object, the eyeballs oscillate quickly backwards and forwards with a slight rotatory movement. The oscillation is greatest when he looks upwards or to the right. It is also increased by looking at distant objects. It is not increased by a dim light, and is not worse when he assumes a stooping position. He states that the nystagmus is worse since he left off work. When at work he used to look chiefly downwards and to the left. On ophthalmoscopic examination the fundus is seen to be normal.

The thorax is well formed. On palpation a very marked systolic thrill is felt in the first and second left interspaces, just outside the sternum. The percussion note is impaired over the same area, the dulness being best marked between the second and third left costal cartilages. On auscultation a loud systolic murmur is audible over the area of thrill. Its point of maximum intensity is at the middle of the sternum, on a level with the third costal cartilage; from this point it is propagated upwards over the area of thrill to the left sterno-clavicular articulation. The murmur is unaccompanied by a second sound. At the second right costal cartilage and over the course of the aorta, the murmur is heard, but much less loudly. There is no venous hum in the neck. Pulsation and thrill can be faintly felt when the finger is placed deeply in the suprasternal notch. The murmur is just audible in the left suprascapular region. The radial pulse numbers 72; it is equal in the two wrists, full and regular. There are no pressure signs. Every three or four days, sometimes more frequently, the patient is attacked with violent palpitation; the attacks last from a few minutes to half an hour; they occur at all times of the day, and without any apparent cause. The slightest exertion causes profuse sweating. The sweating sometimes comes on when he is at rest, and always follows the attacks of palpitation. The appetite is fair; tongue clean. The temperature in the axilla is 97° F. The other systems and organs are normal. There is no enlargement of the thyroid.

Five minims of tincture of digitalis and ten minims of the tincture of the muriate of iron were ordered three times a day.

June 21st.—Since patient's admission it has been noted that the pupils are frequently unequal, the right being sometimes smaller, sometimes larger than the left. The sweating is sometimes confined to the left side of the face. The temperature on both sides is the same. His general condition is unchanged.

July 3rd.—An attack of palpitation came on to-day in my presence. It commenced at 12.30. The eyes became slightly prominent; the pupils considerably dilated; the cardiac pulsations numbered 144 in the minute. The face was slightly livid; the extremities cold. The patient stated that the attack was a very slight one. At 12.35 he said he would try and "put it away." He took two deep breaths and said, "It is away." At the same moment the pulse fell from 150 to 60 in the minute. Slight pain over the front of the chest was complained of while the palpitation lasted. The patient says when it goes away he feels the heart give a sudden jump, and the pulsation immediately ceases. He can always "put it away" by taking one or more deep inspirations. Sometimes the attack continues for half an hour before it is stopped. The digitalis and iron to be discontinued. To take two minims of liquor arsenicalis thrice a day.

15th.—Was made an out-patient to-day as he had to go home to attend upon his wife who is ill. The liquor arsenicalis has produced no effect, although the dose has been increased. To discontinue it, and to take half a drachm of the liquor ergoti instead.

Aug. 26th.—Was readmitted, as he has been much worse of late. The palpitation and sweating have been most intense; the oscillation of the eyeballs is less; he can now look steadily forwards, downwards, and to the left; when he looks upwards, or to the right, it always commences; when the eyes are at rest, vision is good; his physical condition is otherwise the same. To take one-eightieth of a grain of sulphate of atropia three times a day, and twenty grains of bromide of potassium every six hours.

Sept. 10th.—A violent attack of palpitation came on at 11.10 to-day; the cardiac pulsations numbered 174; the murmur was inaudible, its place being taken by a short rapid pulsation; the radial pulse was small and thready; the extremities cold; the eyes were prominent and staring, the pupils dilated; the respirations numbered 28. He made several attempts to "put it away," but did not succeed till 11.20. He then said "It is away." The pulse at the same moment became full and steady (72 in the minute); the murmur at the same time became loudly audible; no irregularity nor intermittency was observed before the fall. To take half a drachm of the bromide three times a day.

25th.—Says he feels a good deal better; the attacks of palpitation are less frequent and less severe; he has gained four pounds in weight since his readmission; he feels weak and shaky about the legs, but otherwise well; the sweatings are much less profuse. To inhale nitrite of amyl during the paroxysms.

Oct. 1st.—The patient went out to-day greatly improved. The nitrite of amyl completely controls the paroxysms. He said on his discharge, "I wish I had had that medicine sooner."

Remarks.—In THE LANCET of June 12th, Dr. C. Bell Taylor, of Nottingham, reported several cases of nystagmus occurring in coal-miners, and stated his belief that the oscillation of the eyeballs was in these cases a sort of chorea, brought on by strained efforts of vision in an imperfect light. This case agrees with those reported by Dr. Taylor, in so far as the patient is a miner and that he suffers from nystagmus. It differs, however, in the following essential points:—1st. The nystagmus is associated with other symptoms—viz., palpitation, loud systolic murmur, and profuse sweatings. 2nd. The oscillation of the eyeballs is not increased by an imperfect light, nor when the patient stoops. 3rd. It is worse when he looks at distant objects, and when he looks upwards or to the right. 4th. It is not easily curable; for it still continues, although he has been off work for seven months.

We know so little as to the cause of nystagmus that it is impossible to say whether the oscillation of the eyeballs, the palpitation, and the other symptoms of this case were associated as a mere coincidence or not. I am inclined to think their relation was not merely accidental.

In some particulars the case resembles exophthalmic goitre—a disease in which there is good reason for believing the cervical sympathetic to be at fault. Certain facts in this case point in the same direction, and show that the palpitation was due to stimulation of the accelerators of the heart, and not to suspension of the inhibitory functions of the vagus. These facts are—1st. The variable state of the pupils, the right being sometimes larger sometimes smaller than the left. 2nd. The profuse sweatings, sometimes unilateral. 3rd. The condition of the patient during the attacks of palpitation—notably the prominence of the eyeballs, dilatation of the pupil, and coldness of the extremities. 4th. The marked benefit which resulted from the use of nitrite of amyl—a drug which acts by dilating the vascular system.

It is a remarkable fact that the patient was able to "put away the beating" by taking a few deep breaths. This was no doubt due to réflex stimulation of the vagus. Here again is another fact in support of the theory that the palpitation was due to stimulation of the accelerators, for it is unlikely that the vagus would be so readily aroused if its inhibitory functions were suspended.

The instantaneous manner in which the attacks of palpitation ceased is worthy of note. The pulse, from being 174, thready, and almost imperceptible, became *all at once* full, regular, and of normal frequency. There was no stoppage for several beats, no irregularity before the fall took place—facts which were observed by Dr. Farquharson in his lately published "Case of unusually Rapid Action of the Heart."

The characters of the murmur were peculiar. At first I was of opinion that it was hæmic, and in the pulmonary artery. Against this view were the dulness on percussion, the very marked character of the thrill, and the absence of venous hum. I am now inclined to think that the murmur was due either to organic disease of the pulmonary artery or more probably to some congenital malformation.

CLINICAL ESSAYS.

By T. PRIDGIN TEALE, M.A., F.R.C.S.,

SURGEON TO THE GENERAL INFIRMARY AT LEEDS.

No. VI.—ON THE TREATMENT OF VESICAL IRRITABILITY AND INCONTINENCE OF URINE IN THE FEMALE BY DILATATION OF THE NECK OF THE BLADDER.*

THE discussion at the late meeting of the British Medical Association at Edinburgh on Dr. Duncan's paper "On the Examination of the Female Bladder by Dilatation," and his testimony to the benefit resulting from the proceeding, and the extract from the *New York Medical Record*, Aug. 14th, 1875, "On the Cure of Cystitis by Dilatation of the Neck of the Bladder,"—warn me that it is time that I brought before the profession the observations I have made on the subject of this essay during the last eight years. The substance of the essay was read before the Leeds Medical Club in November, 1870, before the West Riding Medico-Chirurgical Society at Leeds in February, 1873, and before the Yorkshire Branch of the British Medical Association at a meeting at Scarborough in November, 1874.

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* Read before the West Riding Medico-Chirurgical Society at Leeds, February, 1873.

About eight years ago the following case, of which unfortunately I cannot find any record, was under my care at the Leeds Infirmary:—A healthy-looking middle-aged woman had been for some time under treatment for great irritation of the bladder, accompanied with the passage of mucus tinged with blood. Having failed to relieve her by the usual means, I decided to dilate the urethra in order that I might introduce the forefinger into the bladder, and search for some explanation of the pain and bloody discharge, such as an ulcer or villous growth. No definite lesion was discovered; but, to my surprise, in the course of a few days, I found that she was completely relieved. She left the hospital, and I have not heard of her since.

This case struck me forcibly as parallel with the immediate relief which generally follows forcible dilatation of the anus for fissure and spasm of the sphincter; and I determined to profit by the hint. The result is, that during the last eight years the operation of dilating the neck of the female bladder as a means of cure of a distressing and unmanageable malady has been adopted in thirty or forty cases by myself and my friends.

In bringing the subject forwards I am met by three difficulties: the first, that I am proposing to treat *a symptom*, "irritability of the bladder," associated with a great variety of causes, and that, in applying a remedial operation, but little cognisance is taken of the cause of the symptom; the second is a consequence of the first, that the operation does not succeed in every case, and sometimes fails entirely; the third difficulty is this, that I have not yet been able to establish any rule to guide us to the selection of the exact cases to which the operation is suitable. My justification, however, for proposing the operation in the face of such difficulties lies in the fact that it deals with cases which defy all other known methods of relief, which cause intense, prolonged, and often permanent suffering to the patient, and constant disappointment to the medical attendant, and that in a fair proportion of the cases, *perhaps in one third*, absolute cure has been obtained, not in my hands alone, but in the hands of many of my medical brethren who have adopted the operation. It is a sense of these difficulties, the not infrequent failure of the operation, and my own inability to define exactly the cases in which success is probable, which has made me hesitate hitherto to bring the subject before the profession.

A.—Cases in which the Operation may be performed.

The *cases* calling for the operation are those in which there has existed for some months pain at the neck of the bladder and too great frequency of micturition, with or without pus, mucus, or blood in the urine; or incontinence of urine, with a full bladder unable to empty itself completely, or with a nearly empty bladder which is intolerant of the presence of urine. The *time* for doing the operation is when all ordinary means of relief have been tried in vain, whether general or specially directed to the bladder, uterus, rectum, or kidney.

This definition may be said to embrace a very wide range of disorders, having in common the one symptom—irritability of the neck of the bladder. The fact is, the operation has been tried and has succeeded in a great variety of cases. In some successful ones there have been pain and excessive frequency of micturition, giving rise to a suspicion of stone in the bladder, with urine perfectly healthy, and in which, at the time of the operation, the finger failed to detect any fault in the mucous lining of the bladder. In other cases the urine has contained altered pus and mucus and blood, such as is usual where there is vesical calculus, and yet the operation has cured. In others, again, there has been an abundance of unaltered pus, settling in large quantities to the bottom of the vessel, which was afterwards proved to have been derived from a suppurating kidney or other extravesical source; and even in these the operation has given substantial though perhaps temporary relief. More than one case has proved this fact—*that pus from a source external to the bladder may give rise to distressing irritability of the bladder, with pain and excessive frequency of micturition, the bladder itself being apparently sound;* and that the vesical irritability may be cured—for a time, at any rate—by dilatation of the neck of the bladder, although the original cause of the irritability remains in force.

Vesical incontinence.—In two cases (Mr. Scattergood's and Mr. Horsfall's) a perfect cure, and in one of my own cases very great mitigation, of vesical incontinence has resulted from dilatation. In these cases I suspect that there is an over-sensitive state of the mucous membrane at the neck of the bladder, which, the moment an attempt is made to empty the bladder, sets up spasm of the vesical sphincter, and arrests the act of micturition after the escape of a very small quantity of urine, the bladder remaining nearly full and ready in a very few minutes to induce another painful and equally ineffectual attempt at micturition. Thus an overflow of a bladder disabled from correct micturition by irritability of its sphincter becomes an incontinence. Thus also the operation I have proposed by rendering the irritable sphincter vesicæ powerless for spasm, perhaps temporarily incompetent, allows the bladder to empty itself completely, and the cervical mucous membrane to recover its tone.

B.—Operation.

The patient being under the influence of an anæsthetic, Weiss's dilator is introduced into the urethra and dilatation continued until the urethra is distended so as to admit two fingers. The dilator ought to be passed as far into the bladder as possible, otherwise the branches of the instrument yield too much to the resisting neck of the bladder. It is desirable to dilate slowly, so as to avoid, *as far as possible*, laceration of the mucous membrane of the urethra. In many cases this laceration occurs, although due care has been taken, and much more after-pain results in consequence during the first day or two.

Sometimes instead of Weiss's dilator I have used the conical probe-gorget, designed by my father for median lithotomy, as a guide for the finger, by which the remainder of the dilatation is effected. On the withdrawal of the dilator it is generally found that the urethra still grasps the finger. The dilatation thus attained enables the surgeon to explore the interior of the bladder. Generally the bladder has appeared to be perfectly healthy, being soft and velvety to the touch throughout. Occasionally portions have been raised and indurated, as if ulcerated, but I have thought this sensation might be deceptive, and produced by the corrugations of an empty bladder. I cannot say that I have undoubtedly detected ulceration by the finger in any of these cases. In two or three instances it has turned out that the bladder was permanently contracted to a cavity little larger than a thimble.

C.—Objections to the Operation.

(1) *Fatality.*—In three instances death has occurred within a short time of the operation. The first was a patient of my own and of Mr. Hodgson Wright of Halifax, who was excessively worn down by the sufferings of several years. The operation gave her much relief from pain, and was a great comfort to her, but her failure of health was progressive, and she died in about five weeks. At the autopsy it was discovered that the bladder was healthy, but that the pus in the urine came from the kidney. The second, a case of Mr. Wheelhouse's, was a child about four years of age, who had been relieved a year before by this operation, Mr. Wheelhouse having introduced the finger into the bladder for the purpose of exploration, and having thereby arrested the symptoms from which the child was suffering. A year later the child returned to the hospital with a relapse of the vesical symptoms. The operation was repeated, this time as a means of cure, not of diagnosis, and the child died in a day or two. At the post-mortem it was found that the bladder was healthy, and that the pus causing the symptoms came from a diseased kidney. The third fatal case was under Mr. Jessop. A young woman, worn down by vesical trouble and incontinence of urine that had existed since childhood, was submitted to the operation. The introduction of the finger found the bladder contracted to the size of a large thimble. She died in the course of a few days, and at the post-mortem strumous degeneration and suppuration of the kidney was found. I think I have heard of another fatal case, but I am not certain.

It may be said that these fatalities are an argument against the operation. To me they seem to be the reverse—

a reason why cases of this class ought not to be allowed to drift year after year into this broken-down condition, in which a comparatively trivial operation can extinguish the feebly sustained vitality. It rather raises the question suggested by Mr. Charles Smith, of Halifax, whether the disease of the kidney may not have been induced by the prolonged vesical irritation.

(2) Another objection may appear in the possibility that *the source of the irritation may not be in the bladder itself,* but may be pus entering the bladder from the kidney or some other extraneous source. The fatal cases of my own, and of Mr. Wheelhouse, already referred to, prove that the discomforts of the irritability of the neck of the bladder may be suspended or relieved by the operation, although the irritability may have originated in a cause external to the bladder.

(3) A third objection may be raised in the *danger of producing incontinence of urine.* My first idea about the operation was, that by producing *temporary incontinence of urine* we might so set at rest the vesical structures that any ulcerated or abraded surface might heal, that morbidly irritable or hypertrophied sphincter-fibres might lose their excessive irritability, and that any unhealthy condition of urine resulting from an imperfectly emptied bladder (as occurs in the male from enlarged prostate) might, by its freedom of escape, regain its normal character. This was my original idea—namely, to producd incontinence. And I was induced to believe that any incontinence would be temporary by what I had seen of the removal of large-sized calculi in the female with rapid recovery of vesical competency. It has happened, however, that the operation was rarely followed by any incontinence of urine, and many of the most rapid and most complete cases had not even temporary incontinence. On the contrary, instead of relieving the bladder every few minutes or every hour, they were able to retain their urine the greater part of the night immediately following the operation. Other cases, again, had incontinence of urine for a few weeks. One case for a few months had very little power of retaining urine and then recovered completely, the pain and irritability having been relieved from the first. Two cases that I know of have suffered from permanent incontinence of urine. It does not, however, appear that the liability to permanent incontinence depended upon the degree to which the dilatation was carried.

(4) *Relapses.*—In Mr. Wheelhouse's case the cause of relapse—suppuration of the kidney—was revealed by the post-mortem. In one of my own cases the operation of dilatation had been performed by Dr. Bell, of Bradford, to the extent recommended in my paper read at Leeds, but without relief. A few months after Dr. Bell and I dilated again more freely to the extent that would admit three fingers. After some days of incontinence she recovered power over the bladder. From passing urine every ten minutes or a quarter of an hour with groans, she was able to relieve herself without pain, and though not cured, she is only disturbed five or six times each night. In two other cases the operation was repeated, and I believe both are comparatively well, having occasionally slight attacks of pain, with increased frequency in micturition. This, however, may be said, *that a relapse* or *the failure of a first operation ought not to deter us from giving a second trial.*

D.—Literature.

I have failed hitherto to find any authors who have proposed this or any similar treatment for affections of the female bladder. The nearest approach to it is the proposal of Sir James Simpson (mentioned shortly after his death by Mr. Lawson Tait) to cure irritable ulcer of the bladder—in other words, severe vesical irritation—in the female, by establishing a temporary vesico-vaginal fistula. His object was to obtain, what I aimed at by dilatation—physiological rest for the distressed organ. In works on female diseases the treatment of this distressing condition is generally dismissed in a few words. From the article referred to at the beginning of this paper it is clear that the Americans are at work in the same direction, and the case quoted is a strong confirmation of the correctness of the principle of treatment here advocated.

No less a confirmation is the advocacy of Dr. Duncan of dilatation of the neck of the female bladder as a means of exploration, and the testimony of his patient to the direct benefit derived from it. Further confirmation of this principle may be drawn from the fact that Mr. Syme treated somewhat similar cases in the male by incising the neck of the bladder as if for lithotomy, and from the rapidity with which the inflammation of the bladder produced by a calculus subsides under the free drainage established by lateral lithotomy.

(To be continued.)

CASE OF

CONGENITAL HARD CANCER OF THE LEG IN AN INFANT;

AMPUTATION DURING THE FOURTH MONTH; RECOVERY AND PERMANENT CURE.

By KELBURNE KING, F.R.C.S,
SURGEON TO THE HULL GENERAL INFIRMARY.

On the 28th of March, 1871, I was consulted regarding a male infant about two months old under the following circumstances. At its birth, on Jan. 31st, 1871, Dr. Robert Savile, who attended its mother in her confinement, observed a tumour on the outer side of the right ankle, about the size of a filbert. It was not painful, nor did it seem to cause any inconvenience, but it gradually increased in size. When I saw it it was about as large as a walnut, was closely connected with the lower end of the fibula, from which it seemed to spring. The skin covering it was quite healthy, having no appearance of vascular excitement. The tumour was gradually lost in the surrounding healthy parts, from which it was not separated by any distinct boundary. By its size and pressure the foot was forced inwards, and the tumour occupied to some extent the position of the foot. It was hard to the touch and adherent to the skin, which was incorporated in the firm fibrous mass of which the tumour seemed to consist. It was firmly fixed, and could not be detached from the surrounding parts. There was no feeling of softness or of elasticity; it was throughout firmer and harder than any natural tissue except cartilage and bone. The child was thin and delicate-looking.

Although hard cancer is exceedingly rare in infants—in a tolerably extensive surgical experience I have never seen it before,—I concluded from these physical signs that there was no doubt—firstly, of the malignant nature of the tumour; secondly, of the necessity of its removal; and thirdly, of the impracticability of removing it by itself so as to save the limb. Accordingly, but very reluctantly, I gave it as my opinion that no proceeding short of amputation of the leg would meet the circumstances of the case; and, as the child had an anæmic appearance, I did not press this extreme measure, and felt rather relieved to hear in a few days from Dr. Savile that the parents declined to submit their child to the chances of an operation.

In the first week of May I heard again from Dr. Savile that the child had passed safely through an attack of whooping-cough, that its health was improved, but that the tumour was becoming larger, and the parents were anxious to have something done for it. I saw it again on May 10th, and was much struck by the change in the child's appearance. He had grown much, was fat and well nourished. But the tumour had doubled in size; the skin over a portion of its surface had ulcerated within the last few days, and there was a discharge of serous fluid mixed with blood. Under these circumstances I had no hesitation in recommending immediate amputation.

With Dr. Savile's kind and able assistance the following operation was performed:—The knife was entered just over the head of the fibula, and a semilunar incision was made through the skin over the front of the leg. A similar incision was made on the posterior aspect, the knife was passed into the tibio-fibular articulation, so that the whole of the fibula was removed, and then the tibia was sawn across a little below its anterior spine. The popliteal artery was divided before its bifurcation, a ligature was placed upon this vessel and two small arteries, and the operation—performed under the influence of chloroform—was completed without the loss of one teaspoonful of blood.

Dr. Savile, who from that time took charge of the case, informed me that the sutures were all removed by the 19th of May; the ligatures came away on the 22nd, and the stump was almost healed on the 26th, at which date the child was in vigorous health.

I happened to be consulted the other day by a patient who lives close to this child's parents, and who told me that the boy has had no return of disease, but is a remarkably fine healthy little fellow, and hops about most actively on his one leg.

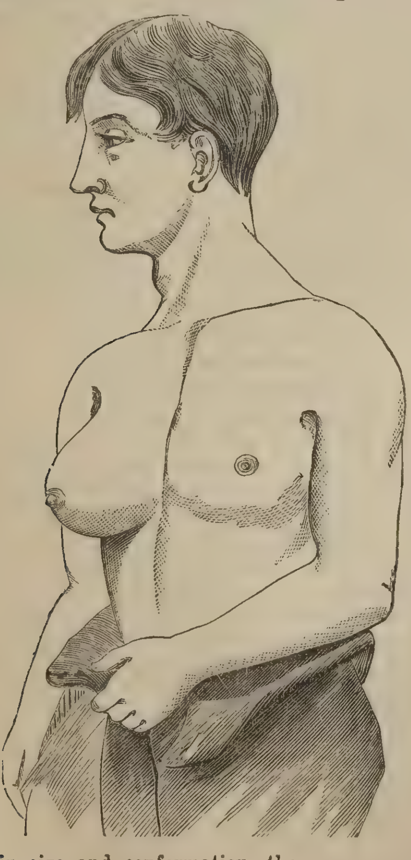
On microscopical examination the tumour was found to consist of a mass of caudate cells of rather small size and possessing but one nucleus. Histologists might refuse to call it by the name of cancer. But it was harder than any structure of the healthy body except bone and cartilage; it grew rapidly, encroaching on and displacing the normal parts; and it finally ulcerated and discharged bloody fluid. It possessed, therefore, all the usual physical signs of hard cancer of the most malignant kind, and would doubtless have soon led to the death of the patient.

Hull.

CASE OF ABNORMAL DEVELOPMENT OF THE RIGHT BREAST IN A SEAMAN AT THE AGE OF PUBERTY.

BY DEPUTY INSPECTOR-GENERAL MORGAN, C.B.,
ROYAL NAVAL HOSPITAL, HONG-KONG.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)



A. B., aged twenty-one, ordinary seaman, was admitted into the Royal Naval Hospital, Hong-Kong, on May 14th, 1875, with what was said to be a chronic enlargement of the right breast. On examination, the right mamma presented, in size and conformation, the appearance of the well-developed breast of a full-grown woman, lobulated, with an enlarged brown-coloured areola. The nipple, however, corresponded in size with that of the left breast. The man states that he first observed the right breast to be larger than the left about the age of sixteen and a half years. Since that time it gradually increased in size until it attained its present dimensions. There has been no kind of secrĕtion from the nipple at any time. He has not experienced any pain or uneasiness in the breast except, when drilling aloft, it has come in contact with ropes, and necessitated his presenting himself as a candidate for the sick-list with a slight contusion. The genital organs are fully and well developed.

The accompanying drawing, for which I am indebted to Staff-surgeon Siccama, of H.M.S. *Modeste*, is a very accurate and faithful representation of the case.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF COMPOUND FRACTURE OF THE LOWER END OF THE HUMERUS.

(Under the care of Mr. CHRISTOPHER HEATH.)

THE following cases of serious injury to the elbow-joint are favourable for comparison, since the accidents occurred within a few hours of each other, and the patients lay side by side under precisely similar circumstances, and were treated in the same way, but with very different results. The first case appeared to be the more serious at first, both on account of the extent of injury and the age of the patient, yet he recovered without having any bad symptoms after the first few days. The second case ended in excision, from which the patient recovered. It is difficult to suppose that any better result could have followed the use of "antiseptic treatment" in the first case than occurred under the old-fashioned plan of applying a piece of lint dipped in blood; and the disorganisation of the joint in the second case seems to have been set up by a loose fragment of bone which no external treatment could have reached. The question of primary excision must necessarily arise in cases of injury to the elbow-joint, and where the amount of damage is great there can be little doubt of its advisability; but where the injury is confined, as in this case, to a single bone, with no positive proof of the joint being involved, most surgeons would agree in waiting for more precise indications before submitting the patient to a serious operation.

For the following notes we are indebted to Mr. A. P. Gould.

On June 22nd, W. M——, aged fifty-two, was knocked down by a cab, the wheels of which passed over his right elbow. He was at once taken to the hospital. On examination, he was found to have a transverse fracture of the shaft of the humerus close to the lower end, and the lower fragment was evidently split, as the inner condyle could be moved apart from the outer, and this produced crepitus. There was a wound, about a quarter of an inch long, just above the inner condyle, leading down to the fracture, evidently produced by the projecting lower end of the shaft; from this there was a free escape of blood. The patient was at once admitted, and the arm was put upon an angular splint; a piece of lint dipped in the blood was applied over the wound, and an ice-bag was applied.

26th.—There is considerable swelling all round the elbow, with a good deal of tension; skin is marked with a slight red flush; not much pain in the part. From this date the redness, swelling, tension, and pain gradually decreased.

28th.—Swelling much less; no pain; suffers from constipation and flatulence, which are treated by the usual means.

30th.—Bowels have been freely open; there is a good deal of bruising all over the back of the elbow; he complains of a little rasping pain in the joint.

July 4th.—Splint changed to-day; a similar one put on. No redness or tension; very little swelling; the wound is now a superficial sore.

17th.—There is swelling and pain in the position of the left external iliac vein, and œdema of the leg and foot. Ordered to have the leg and foot slightly raised, and to take a saline mixture.

20th.—No pain in the groin; swelling and œdema much less.

24th.—Patient left the hospital to-day. It is noted that the wound has quite healed, that the bones have united, but no passive movement has been applied. He is to attend as an out-patient for this purpose. There is still slight œdema of left leg; no pain or swelling in the groin.

On June 23rd, J. A——, aged twenty-two, ostler, was riding on a horse, when he fell heavily on his right elbow. Finding he was severely injured, he came to the hospital, and was admitted at once. The humerus was found to be broken across at the lower end transversely, and the internal condyle was broken off. The forearm and lower fragment were displaced forwards. Over the lower end of the upper fragment was a wound an inch and a half long, through which the bone could be seen. The displacement was easily reduced by extension and manipulation. The patient appeared to be a fairly strong man, but of unsteady habits. The arm was placed on an angular splint, dry lint placed over the wound, and ice-bags applied.

24th.—Temperature 100·2°; pulse 88. Slept well; much less pain.

25th. — Temperature 100·6°; pulse 100. There is a good deal of swelling about the parts, and there is more pain in the joint.

29th. — There is considerable swelling and tension about the joint. On the surface are two or three blebs, which have become purulent. Temperature 100; pulse 88.

July 2nd. — There is great tension, redness, and pain up along the back of the arm; pus can be squeezed out of the wound from as far as four inches above the joint. Temperature 100·2°; pulse 96.

4th.—An incision about an inch long was made vertically up from the wound. About an ounce of pus came away. Dressed with an oakum poultice.

5th. — No bagging of pus, which is escaping freely; less redness.

16th. — Since the 5th inst. the temperature has ranged from 100° to 101°; the patient has evidently been losing ground. To-day it is noted that he is pale, perspires much at night, his pulse is weak, tongue slightly furred, and appetite poor. There is very considerable swelling round the joint, both above and below; suppuration is free, and pus flows from the wound when pressure is made over the outer condyle. He was ordered sulphate of quinine and sulphuric acid, fish, and four ounces of wine.

20th. — Temperature 101°; pulse 106. The granulations at the wound form a fungus, which protrudes an inch above the surface. There is more discharge, and the swelling round the elbow has considerably increased the last two days. Fluctuation is distinct over the front and outer side of the joint.

21st.—This afternoon the patient was placed under the influence of nitrous oxide gas and ether, and, in Mr. Heath's absence, Mr. Erichsen proceeded to excise the elbow-joint by a longitudinal incision, about nine inches long, over the back of the limb. The humerus was first sawn off an inch and a half above the line of fracture, which was an inch above the condyles; but as the anterior part of the bone was bared of periosteum a little higher up, the healthy periosteum was stripped up and another three-quarters of an inch of bone removed. The broken ends of the bone were surrounded by pus, and pus was burrowing up the limb, and had extended all round the elbow-joint as well as inside. The articular cartilages were eroded. The ends of the radius and ulna were then removed in the usual way. The limb was put on an angular splint, and the edges of the wound brought together above and below, a drainage-tube being inserted in the middle. An oakum pad was applied over all. Extending down from the transverse fracture in the humerus was a vertical fissure running into the joint, and separating the two condyles; in addition a small fragment of bone was found lying loose in the cavity bathed in pus.

22nd.—Has passed a good night. Perspires much. Temperature 103°; pulse 124.

23rd.—Temperature 102·4°; pulse 120. The arm is more swollen; there is diffused redness all round the joint. There is some serous discharge from the drainage-tube. He sleeps better; sweats less; appetite good. Wound dressed with carbolic lotion. In the afternoon the sutures were removed, a fresh drainage-tube put in, and the part was irrigated.

24th.—Limb less swollen; redness decidedly less. Temperature 100·2°; pulse 112. Evidently improved.

30th.—The parts have healed except at two points, the original wound and where the drainage-tube is inserted.

August 1st.—Irrigation stopped. Dressed with red wash.

9th.—The general condition of the patient has wonderfully improved; the swelling of the arm has much subsided; there is almost no tenderness and no redness. The forearm is being gradually drawn up nearer to the arm.

17th.—Union is much firmer. Passive motion to be begun. Temperature 98·4°.

31st.—Swelling about joint much less. The muscles of the limb are wasted, especially the deltoid, and this allows the head of the humerus to drop slightly. The length of the arm cannot be accurately determined. There is very free motion between the arm and forearm, the bones of which appear to be about two inches apart. Patient has no power of movement at the elbow; he can move his wrist slightly, and also the thumb and two outer fingers; there is no movement in the ring and little fingers. Sensation is perfect except in little finger and inner side of next digit, where it is imperfect.

Sept. 2nd.—There is considerable swelling, induration, pain, and tenderness about the inner part of the arm. A poultice was ordered.

3rd.—As no relief has been afforded, Mr. Heath enlarged the upper of the two sinuses, and evacuated a quantity of pus, which greatly relieved the patient.

18th.—There are two very small, superficial, granulating, healing wounds over the back of the elbow. There is very free movement in the joint, but no voluntary power. He can now feel almost perfectly in the inner two digits, and can move them a little. The power of movement in the thumb is very free. If the fore and middle fingers are held he cannot move the two others at all. Discharged from the hospital to-day to Eastbourne.

The patient returned from the seaside at the end of a month with the incision of the operation perfectly healed, but with the sinus on the inner side still open. The motion in the elbow is very free; but the patient has as yet but little power in the limb, which is still somewhat swollen.

CASHEL UNION HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. LAFFAN.)

We are indebted for the following notes to Mr. James O'Dwyer:—

Amputation of the Penis for Epithelioma.—In the following case amputation of the penis was performed after the method proposed by Mr. Tyrrell of Dublin, which is as follows:—Before amputating, a strong pin is inserted through the crura of the penis in front of the pubis, and the pin is allowed to remain in that position for several days afterwards. After the organ has been removed, the urethra is slit up for half an inch, and its mucous membrane is stitched to the skin. The advantages claimed for the operation are that it prevents retraction of the stump of the penis, and that it greatly lessens the difficulty of dealing with subsequent hæmorrhage; and, lastly, that there is no liability to consecutive urethral contraction.

T. M——, aged fifty-five, unmarried, a tailor by trade, was admitted on May 17th, 1875. The previous history was as follows:—He stated that he had enjoyed very good health up to September, 1874, when he noticed a little spot and hardness in the region of the glans penis. He also felt a pain in the arch of the foot. This pain, to use his own words, was accustomed to run up to the groin and out along the penis. He denied having had venereal disease, but admitted that he had not been of cleanly habits. He stated he was not a drunkard. On admission, the glands in both inguinal regions were slightly enlarged. He passed a large quantity of water, and had frequent calls to micturate. The penis presented a very ugly appearance, being greatly enlarged, indurated, and ulcerated through in many parts. The case being clearly one of epithelioma in an advanced stage, removal was resolved on. On May 18th the patient was placed under ether, and amputation at the pubic arch was performed. Very little bleeding occurred in this case. The mucous membrane of the urethra and skin united in a few days. No stricture ensued, and he left hospital on June 28th following perfectly well, and continues so up to present date.

Necrosis of Circular Piece of Front of Tibia.—J. H——, aged thirty-two, married, a labourer, came to the hospital on July 20th, 1874, with disease of the leg. The disease, which occupied the diameter of about a crown-piece, and extended half an inch in depth, was caused by a blow of a stick whilst hurling. The man was strong and robust; but as the reparative processes had hitherto been all but stationary, and so much time would be required for the complete throwing off of the dead part, Mr. Laffan deemed it advisable to save time by operative interference (a point of very much consequence to a poor day labourer). He therefore resolved to gouge away the dead bone, which was accordingly done on the 30th August. Antiseptic dressings were employed. The situation of the necrosed bone did not admit of any covering of soft parts being provided from neighbouring tissues. It was interesting to observe how this want was supplied by the perfect coat of granulations thrown out by the cut surface of the bone. Another point of interest was the death of a small rim of periosteum, which was left around the margin of the bony cavity, and the shooting up of granulations by the underlying bone. The cavity left by the removal of the dead mass filled up after a few weeks in a complete manner; and the patient left the hospital well, and continues so up to the present time.

Spermatorrhœa.—Several cases of the above-named affection have presented themselves, and the same difficulties have been encountered in their treatment as have beset most practitioners in dealing with similar cases. The entire success which attended Trousseau's compressor in one of these cases makes it worthy of special mention.

J. R——, aged twenty-eight, a policeman, had suffered for six years from seminal emissions, which were brought on by the usual causes. He had been under treatment a long time, but without benefit. Mr. Laffan, under whose charge he then came, also tried for some weeks various remedies, but with a like unsatisfactory result. He then ordered a compressor, which was to be worn every night. This did its business so admirably that on no night on which it was worn did any discharge whatever occur.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the ordinary meeting of this Society, held on the 23rd inst., Sir James Paget, President, in the chair, an interesting debate took place upon the relation of syphilis to aneurism. In the paper on Aortic Aneurism in the Army, by Mr. F. Welch, it will be seen that the author has arrived at the conclusion that a very large number of cases of this affection result from a specific change in the inner wall of the vessel —a change which is due to the syphilitic virus. The paper, which was full of interesting facts, and embodied the results of most painstaking research, was cordially received, although it will be seen that the majority of the speakers declined to adopt the conclusions of the author.

Previous to the reading of the paper the President announced that Dr. Pavy, having succeeded in obtaining a large quantity of sugar from the urine of healthy persons, had brought some specimens of the sugar to exhibit to the Society.

After a brief communication had been read by the secretary, in which Dr. PAVY pointed out that hitherto the existence of sugar in the urine had been doubted by many physiologists and denied by most, he proceeded to show that the slight and variable reaction obtained on boiling healthy urine with the copper solution was mainly due to the presence of urates. In his experiments he had been careful to take samples of perfectly healthy urine, which had yielded no reaction with copper, and had extracted the sugar by means of acetate of lead. When urine is treated with this salt, the whole of the urates and urea are precipitated. The filtrate is then treated with ammonia, and more of the lead salt added until precipitation ceases. The sugar is carried down in this second precipitate in combination with the lead, from which it can be liberated by oxalic acid or sulphuretted hydrogen. The latter reagent is the best for the purpose, although the process is a tedious one. Dr. Pavy then showed a sample of sugar so obtained, and performed a series of tests upon it—viz., Moore's (liquor potassæ) test, Boettger's (bismuth-reduction) test, the test by reduction of copper (the solution used consisting of sulphate of copper, tartrate of potash, and caustic potash), and lastly the fermentation test. The reactions obtained by all these processes were very marked. Referring to the fermentation test as a crucial one, Dr. Pavy showed the products of fermentation—viz., carbonic acid and alcohol, the former by absorbing the gas in the collecting-tube by means of caustic potash, and the latter by means of bichromate of potash and sulphuric acid. In order to succeed with the fermentation test, it was necessary to neutralise any free acid that might be present in the product obtained from the urine.

The paper of the evening, on "Aortic Aneurism in the Army, and the conditions associated with it," by FRANCIS J. WELCH, F.R.C.S., Assistant Professor of Pathology at the Army Medical School, Netley, was then read. The following is an abstract of the paper:—The object of this paper, in view of the discrepancy of opinion on the causation of aortic aneurism, is to endeavour, by deductions made from a series of post-mortem examinations conducted at the Royal Victoria Hospital, Netley, to place certain features of causation and pathology of this vascular lesion upon a basis of stability. The average death age was thirty-two years; average period of service performed by the soldier twelve years; average duration of the lesion a year and one-twelfth. In five instances the dilatation of the vessel was multiple, the largest number of aneurisms in any one case being four; and in two instances an innominate aneurism was superadded to the aortic sac. The lesions (otherwise than the sac itself) observable in the bodies were capable of being arranged under two heads—(*a*) those mechanically produced by the pulsatile tumour, and (*b*) those indicative of a diathesis or general internal agency, and these latter were rarely otherwise than syphilitic. The main object, however, of the paper being not so much to detail the disease as to inquire into its surroundings and causation, the statistics of its dispersion throughout the service are first given to show that the disease is not peculiar to climate, station, or occupation, nor connected with age or any condition of system brought about by length of service, and upon this negative basis is superadded the positive basis furnished by the morbid anatomy and life history of the cases comprised in this paper, the deductions arrived at being placed in the form of two propositions, the first of which refers to the condition of the vessel, and is as follows:—"That the aneurismal tumours are associated with and preceded by a diseased condition of the contiguous layers of the internal and middle coats of the vessel—a tissue growth terminating in degenerations which, by impairing the elasticity and contractility of the walls, allows of their expansion and dilatation under the tension of normal arterial blood pressure, or this abnormally increased by any cause." The term "atheroma" is regarded as an extremely unsatisfactory designation of the disease, inasmuch as it expresses one possible phase only of it, that of degeneration, and allows of the accumulation under the same nomenclature of structural changes divergent in origin and progress. Two forms of vessel deterioration are embraced by it—the one a distinct tissue-growth, an end-arteritis—an active lesion, having as one of its sequelæ the aneurismal sac; the other, a mere opacity, or occasional fatty degeneration of the inner surface of the vessel—a passive phase, followed apparently by no deleterious results between eighteen and forty years of age, the period of the soldier's service. The pathological chain of continuity between the aortic disease characterised by a tissue-growth and the aneurismal sac is complete and unbroken, and hence the important problem in etiology is to elucidate the exciting agencies in the development of the end-arteritis of the internal and middle coat, and these are given in the second proposition of the paper, which stands as follows:—"That these two forms of textural derangement of the aorta [the two spoken of as included under 'atheroma'] are dissimilar in origin and causation; that the limited passive opacity is connected with long-standing diseases of various kinds inducing a diminished vitality of the system at large; that the structural growth is, in the major number of instances, associated with syphilis, and, in a minor degree, with rheumatism and alcoholism as causations; hence it follows that as the latter phase is the commencement of that pathological sequence of events under one aspect terminating as aneurism, the means for the prevention of the aneurismal tumour must be essentially directed towards the elimination of these special exciting agencies." The 34 cases of aneurism analysed stand as under: 50 per cent. in subjects saturated with the syphilitic virus, and with no other diseased conditions to detract from this deduction; 14 per cent. where syphilis was probably present, but not beyond doubt; 5·8 per cent. in acute rheumatic diathesis; 5·8 per cent. with excessive intemperance; 2·9 per cent. with syphilis, rheumatism, and alcoholism combined; 17·64 per cent. with no known conditions, from absence of information; and 2·9 per cent. where no associated condition could be elucidated. But, as the aneurism is one sequel only of the aortic disease, a table is given to show the associated systemic conditions of the aortic lesion as exemplified in 117 cases as follows:—46·1 per cent. in undoubtedly syphilitic subjects; 6·8 per cent. probably syphilitic, but not beyond doubt; 21·3 per cent. in phthisical subjects; 14·2 per cent. with no records for determination; 5·9 per cent. with heart disease; 5·7 per cent. with various other diseases individually small. This table includes both forms of the aortic disease, the active growth as well as the passive degeneration, but shows a great preponderance with syphilis; the subjoined facts, however, separate the lesions, and place each on its proper basis. In 56 cases of syphilis terminating fatally through special lesions, 60·7 per cent. illustrated aortic nodulation, the major part of a severe type, and in about one-third of these (i.e., 18 out of 56) the vessel disease had led on to dilatation more or less pronounced—that is to say, were in the infantile stage of aneurism, and required only further development to bring them under this classification. Adding these infantile aneurisms, and including one infantile aneurism subsequently mentioned as due to the acute rheumatic diathesis, to the 34 of this paper, we have a sum total of 53, and of these 66 per cent. occurred in subjects infected with syphilis, but with no other diseased conditions to neutralise the deductions arrived at as the point of causation. Again, 106 post-mortems were taken, in which the non-existence of syphilis, both from the life history and after-death data, was fairly deducible, in order to view the subject from an opposite direction, and the following results came out with reference to aneurism and the aortic disease:—Five cases of aneurism were present, and these are included in the aneurismal table of this paper under acute rheumatism, intemperance, and no known cause. Of the aortic disease we get,—in 1 instance it was severe, and had led on to dilatation, in an acute rheumatic diathesis with great intemperance; in 5, or 4·7 per cent., the inner wall of the vessel was corrugated but not dilated; 3 phthisical; 1 alcoholism; 1 aortic valve disease; in 29, or 27·3 per cent., the lesion was to be included under the passive phase of atheroma, mere opacity, and of these 15 were associated with phthisis, and the remainder with renal affections, dysentery, diabetes, scrofula, lupus, cancer, in nearly equal proportions. Hence, then, from whatever light we regard the disease, the same feature becomes apparent, and as these aortic aneurisms are associated with syphilis to the extent at least of 66 per cent., and as nodular disease of the aorta is not often exemplified otherwise than with it, it becomes an incontrovertible deduction that the syphilitic virus must be regarded as a very potent cause in the development of the arterial lesion and its sequel, aneurism; but not the only one, for, as minor agencies, we must include the acute rheumatic poison and alcohol. It is considered that the chest constrictions to which the soldier is liable from the accoutrements, pack, &c., act as fostering influences to the diseased conditions engendered by syphilis, rheumatism, and alcoholism, these probably inducing dilatation in the deteriorated vessel when no such result might ensue under ordinary circumstances and under such amounts of physical exertion as pertain to the civil portion of the community. The summary of the paper is as under. (1) That in the army we have a lesion of the aortic walls characterised by the presence of a fibroid growth mainly in the internal coat, which, as a rule, ultimately disintegrates, and that this growth is connected with syphilis in a major degree, and rheumatism and alcoholism in minor degrees as exciting agencies. (2) That this disease of the aortic coats may retrogress without producing any marked ulterior results upon the system at large, but if extensive or severe, as a rule it is followed by one of three fatal phases—formation of aneurisms, implication of aortic valve, or hypertrophy with or without dilatation of one or more of the heart's cavities. (3) In the army there is also a lesion of the aortic walls characterised by limited opacity or fatty change of the normal textures of the internal coat. This is common to all diseases associated with prolonged general deterioration, and especially lung destruction, but it does not appear *per se* to lead to ulterior results. (4) That the chest constrictions and temporary forced exertions to which the soldier is liable, act as adjuvants to the aortic disease in the production of aneurism, as fostering influences to the germ laid by syphilis, rheumatism, and alcoholism. (5) That in the adoption of preventive measures against aneurism the attention must be primarily directed against the causes of the aortic disease, notably the suppression of syphilis, and secondarily against the conditions of dress &c. which assist in its development.

A vote of thanks having been accorded to the author of the paper, the PRESIDENT pointed out that it raised the whole question of syphilis in relation to aneurisms (other than aortic) in young subjects. The syphilitic origin of aneurism had frequently been mooted, and the opportunity was now afforded for the expression of opinion upon the subject.—Dr. DOUGLAS POWELL, after alluding to the value of the accurate and minute pathological details contained in Mr. Welch's paper, said that the question really was—is the arterial lesion he describes one special to syphilis, or is it similar to, or identical with, that found in non-syphilitic subjects? On this point there was great discrepancy between the cases of aneurism occurring in civil and those in military life. He confessed that he had only met with one case in which it could be said with certainty at the post-mortem examination that the lesion in the aorta was syphilitic. There was here the same nodulation and depressions of the inner coat as described by Mr. Welch—not, however, limited to the aorta, but affecting also the pulmonary artery. It was, indeed, the occurrence of this lesion in these two sites that rendered the view as to their syphilitic origin a feasible one. He did not believe that the lesions described in the aorta alone could be held to be distinctive of syphilis, and he could not help thinking that army surgeons had been led to exaggerate the relationship existing between syphilis and disease of the great vessels. Disease of the heart is much more common in military life than in the civil community, and yet syphilitic disease of the heart is notoriously rare. It did not appear that any of the author's cases of men "saturated with syphilis" had shown syphilitic affection of the heart, and he thought this should be taken into consideration before referring the lesions in the aorta to that disease. In round numbers, out of 500 soldiers discharged from the service or dying daily, 450 had heart disease, and the remaining 50 syphilis. Then had not the author been a little biased by the life history of his cases? The number of cases returned as syphilis in the Army Returns was very great, and it was a question whether in many cases the slightest venereal excoriation had not led to the case being recorded as one of syphilis. It was impossible that any case of venereal disease should escape being recorded since the men were periodically examined; and he (Dr. Powell) believed that many men had syphilis written against them who were not syphilitic, whereas many who (medically speaking) were intemperate had not been returned as such. In the Indian Army Reports the number of cases returned under the head of "constitutional syphilis" exceeded the total number returned under the head of local disease of the generative and urinary organs; and it was significant that of these cases of "syphilis" only about one in three exhibited secondary symptoms. He thought, then, the value of the evidence deduced by the author from the life history of his cases to be much weakened, owing to the inaccuracy of the record.—Mr. Brudenell Carter was desirous of a more precise definition of the word "syphilis," as employed by the author of the paper. Was the patient to be regarded as syphilitic in whom in previous years there had been slight syphilitic manifestations which had never further developed? He had lately seen a patient who died from aneurism, who in 1859 had exhibited a slight syphilitic rash, but who had been free from any manifestation of the disease from that date to the time of his death. What was the definition of syphilis in the public service? Out of 1000 volunteers for the Arctic expedition, only 9 were accepted, all the remainder being rejected as being the subjects of syphilis! If the same criteria existed in the other branch of the medical service as in the navy, not much value could be placed upon the statement that the patient had had syphilis.—Mr. Myers said that he had arrived at totally opposite conclusions to the author of the paper. In the first place, the statistics of Mr. Welch were quite different from those of Professor Maclean, whose report showed that syphilis could *not* be regarded as a cause of aneurism, for in that report, out of 51 cases, only 6 were due to syphilis. Surely if there were a specific lesion of the aorta it would have been recognised before now. Syphilis is admitted to be a cause of degeneration of all parts of the body, and the more it affects the constitution the deeper are the tissues attacked by it. How is it that the aorta, on Mr. Welch's showing, is alone affected of all the deeper tissues? Mr. Myers further pointed out that at Netley men were received chiefly from foreign parts, who were the subjects frequently of a complication of diseases, of which syphilis might be one; but how could it be said in such cases to be the origin of arterial lesions? He believed rather that aortic aneurism was due to the strain put upon the vessel chiefly by constriction from the outside. The parts at which aneurism occurs are parts which are most subjected to the blood-pressure when the circulation is impeded. He admitted the existence of syphilitic degeneration of the arteries as distinct from atheromatous degeneration, but thought it did not bear any specific characters.—Dr. Drysdale would have liked further details on the cases alleged to be syphilitic. In reply to Mr. Carter's query, he would say that it was not of the least importance whether the subject of an aneurism had suffered from a slight or an aggravated attack of syphilis. He had seen cases of aneurism undoubtedly attributable to syphilis. Syphilis, with slight external manifestations, was no less dangerous than when the disease was more manifest.—Sir William Gull said that he must take great exception to the use of the word "node" as applied to the arterial degeneration referred to, for he doubted much if there was any pathological distinction between this form of arteritis and other forms. Indeed, the author of the paper admitted that the same nodular condition of the aortic lining membrane occurred under other states. Then a syphilitic lesion is something very characteristic—e. g., a syphilitic rash has certain characters stamped on it, by which it is at once recognised as specific. Therefore if these same arterial inflammatory changes can be attributed to rheumatism and to alcoholism, then it would limit the part played by syphilis to a predisposing cause. He was surprised to hear Dr. Drysdale say that he had seen cases of aneurism due to syphilis.—Dr. Drysdale: "I meant cases of aneurism in syphilitic subjects."—Sir Wm. Gull: "There have been many cases of aneurism then due to syphilis." Mr. Welch seemed to regard aneurism of the aorta as a sort of syphilitic tumour. He (Sir William) believed that those cases of reputed aneurism which were said to be cured by iodide of potassium were really not aneurism at all. They were examples of mistaken diagnosis. He had seen one case in which an abdominal aneurism was said to have been so cured. But of what value are such statements unless confirmed by post-mortem observation? Before then admitting the therapeutical efficacy of iodide of potassium in such cases, the diagnosis of aneurism must be undisputed, and that it can only be by subsequent dissection. He believed that syphilis was a cause of aneurism, but probably only indirectly so. What proof had Mr. Welch, besides the disease in the aorta, that his subjects were syphilitic? Were there undoubted syphilitic lesions in the other viscera? The weakened and degenerated state of the heart in aneurism was doubtless due to the kind of life such patients were obliged to lead.—Mr. Welch, in reply, said that he was not surprised at the doubts that had been expressed, for before he took up the subject he himself would have been surprised at the results he obtained. His cases were based upon the life history, taken from registration reports, in which each time the man is ill that fact is recorded, as well as the kind and degree of syphilitic infection, if any; and also upon the post-mortem data, drawn up by men who were not acquainted with the previous history of the case. In nearly all his cases there had been primary syphilis, followed by eruption on the skin, glandular affection, and periosteal nodes. The lesions in other parts found after death embraced indurated glands, nodes on the cranium, and often cirrhosis or gummata in the testicle. The absence of other lesions he had explained in his paper by the fact of the aortic disease leading to early death. Nor were any of these men the subjects of other disease, as Mr. Myers had suggested, nor had they been so in their life history. The fact of the arterial changes being syphilitic was not altered whether the changes were called "nodes" or not; nor was that fact set aside because a small proportion of cases could be referred to other influences, not syphilitic. A periosteal node was not solely produced by syphilis.

The Society then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

At the meeting on November 3rd, 1875, William Overend Priestley, M.D., F.R.C.P., President, in the chair, the following gentlemen were elected Fellows of the Society:—John Ford Anderson, M.D., R. S. Fancourt Barnes, M.B., John Branson, L.S.A. (Rotherham), and William Stewart, L.R.C.P. Ed. (Barnsley). The President announced that Dr. Farre had accepted the Honorary Presidency of the Society.

Dr. Edis exhibited an Infant with Hydrocephalic Head, which impeded delivery. It presented by the breech. Traction upon the trunk failing to accomplish delivery of the head, Dr. Edis was sent for. Examination of the abdomen showed that no second child was present, so that the question of twins with locked heads was negatived. The patient was a pluripara, and vaginal examination failed to detect any deformity of the pelvis. The child being dead, and the head evidently much enlarged, perforation behind the right ear was effected, a gush of clear fluid confirming the supposition that had been made that the case was one of hydrocephalus. Delivery was then readily accomplished. The head, when distended with fluid, measured seventeen inches in circumference. The patient convalesced normally. The placenta had been examined microscopically by Dr. Coupland, who failed to detect any change in its structure throwing light upon the case.

Dr. Protheroe Smith exhibited a Fœtus of six months and a half, the subject of General Dropsy. The mother, aged thirty-five, had previously had three living children born, three miscarriages, and three premature labours at the twenty-sixth week following each other, the last of which was now shown. In the last two pregnancies she had suffered from albuminuria and liver derangement. Before the eighth labour the patient was kept lying up and well fed; before the last she got about and was thin. On both occasions there was incompressibility of the pulse and flushing of the face, and the labour was attended by considerable hæmorrhage both before and after. The body of the fœtus was anasarcous, there was a large quantity of clear brownish-yellow fluid in the peritoneal cavity, and also some fluid in the pericardium and pleural sacs; the kidneys were healthy; the placenta was large, and consisted of only the fœtal portion.—The President inquired whether there was any trace of syphilis in the mother, and whether the œdema existed during the life of the fœtus, or was only a post-mortem appearance, the result of decomposition.—Dr. Smith replied that the fœtal heart had been heard the day before birth.—Dr. Braxton Hicks inquired whether there was any symptom of obstruction to the funis, to which Dr. Smith replied in the negative.—Dr. Snow Beck stated that the fœtus when born was in such a fresh condition as to preclude all idea of decomposition.

Mr. Lawson Tait related the particulars of a case of General Dropsy in a Fœtus, where the skin was so tense that it was not possible to bend the limbs without risk of bursting the skin. The scalp was so distended that the bones could nowhere be felt, and, in fact, the head had been mistaken for the breech during labour. The abdomen was enormously distended by highly albuminous fluid, as also the pleuræ and pericardium. The placenta was large and very œdematous. The cause of the general dropsy seemed to be the premature closure of the channel between the auricles, there being no direct opening between the auricles through the foramen ovale.—Dr. Protheroe Smith considered this to be evidently a disease primarily and altogether of the ovum, whereas in his own case the disease had originated from the disordered health of the mother. He would like to know whether any of the fellows had met with similar instances—hyperæmia with liver derangement. There was in his own case great peculiarity of the pulse, which was extremely incompressible. The mother's lips were of a crimson tint, and she had had several abortions. One patient, who had aborted seven times, he had bled once, and she went to full time. In his case he had tried abundance of fruit and wine in one pregnancy, and exactly the reverse in the other, the result being the same in both. He had witnessed in a few cases frequent consecutive abortions, at about the fifth and sixth month, arrested by venesection, and followed in succeeding pregnancies by living children.—Dr. Madge said he could hardly accept Dr. Smith's explanation as to the cause of the death of the fœtus. He had given considerable attention to the subject, but he had never understood that a common disease or derangement of the liver in the mother could affect the child in utero in a somewhat similar way. It was well known that the mother may be morbidly affected in many ways, even with albuminuria resulting in convulsions, and still give birth to a perfectly healthy child. A syphilitic history, if such existed, might afford an explanation. The fœtal liver, receiving the tainted blood direct from the mother, became affected with syphilitic inflammation, and deposits leading to obstruction of the portal system and ascites.—Dr. Routh inquired if there had been any specific examination of the foramen ovale of the first child.—Dr. Heywood Smith replied that the heart, on examination, was found to be perfectly normal. The last three times pregnancy had ceased at the twenty-sixth week, showing that there was some disease of the ovum. The liver was also disordered in former confinements. He would be glad if any Fellow of the Society could throw any light upon the intermittence of the albuminuria during pregnancy.—Dr. Snow Beck remarked that he had the opportunity of examining both Dr. Smith's cases, and had also seen two other very similar specimens. The clinical histories had been very much alike: healthy living children at first, then premature expulsion of dead fœtuses about the sixth month, presenting evident signs of previous and serious disease. Effusion of fluid into the peritoneal cavity existed in all, far too large in quantity to be the result of post-mortem change. The organs, excepting the liver, were healthy; this was paler than normal, soft, readily torn with the finger; the liver-cells being much broken down. The parents were singularly free from even the suspicion of a syphilitic taint. The effused fluid was too large and too generally diffused to be caused by any mechanical disturbance of the circulation. The only probable explanation of this condition of the fœtus appeared to be from some deficient or altered state of the nutrition, whether fœtal or maternal it appeared impossible to determine from the facts at present known.—The President said that in considering the pathology of these cases it was well to bear in mind that the subcutaneous cellular tissue in children after birth was prone to become œdematous from the infiltration of serum in certain depressed conditions of health. It was no uncommon occurrence in hospitals to find children, who had been ill-fed and exposed to adverse influences, the subjects of a general œdema, which might proceed to an extreme degree, without such malformation or disease as to account for it. The villi of the placenta in Dr. P. Smith's case had the appearance of being atrophied, and he might suggest that possibly the œdema in the child was due to its imperfect nutrition in utero, and to the passive congestion this induced.

Dr. J. G. Swayne, of Bristol, brought forward a communication "On a New Form of Blunt Hook and Sling, for assisting Delivery in Cases of Breech Presentation." The instrument consisted of an ordinary blunt hook, with the end curved back upon itself, so that a loop could be hitched upon it. When the hook was withdrawn after being passed over the groin, the sling, consisting of a piece of strong silk cord, with a loop at each end, was left *in situ*. Traction was then made in the usual way, and as the sling was padded there was less risk of injuring the soft parts of the child than when the ordinary blunt hook was employed.—Dr. J. Braxton Hicks thought that in the use of the blunt hook sufficient attention had not been given to the assistance afforded by external pressure, applied to the fundus uteri, in breech cases, and the delivery of the aftercoming head through the brim. He thought half the strain was taken off the thigh, and that without undue crushing of the uterine wall, by the hand pressure. Text-books generally omitted to notice the great help given, and although he had no doubt some practitioners employed extreme pressure, yet very frequently it was never thought of, but all the force was put upon the hook.—Dr. Madge had had reason to be dissatisfied with the blunt hook. He was afraid that in any case when much force was required some injury must be inflicted, whatever the plan adopted. He had suggested covering the hook with india-rubber, compressed sponge, or wash-leather. If this could be properly carried out it would probably be a safer instrument than Dr. Swayne's, and could be much more quickly and easily applied.—Dr. Aveling remarked that the life of india-rubber was only about three years; it then became brittle, and if put aside would be found useless. He feared therefore that the suggestion, though ingenious, was not very practical.—Dr. C. Godson agreed that whenever a foot could be brought down, in impacted breech, it was the best plan to adopt; but where this was impossible the hook must be employed. He had recently tried that known as Lazarewitch's, but found that the bulb at the extremity of the hook was the point which received the force applied, and pressed severely upon the tissues. He regarded it as a dangerous instrument. In one instance the skin had been cut through, and much bruising of the surrounding soft tissues produced by its employment.—Dr. Lawrence had seen a case where the saphena vein had evidently been lacerated from the use of a blunt hook. The sling was far less likely to cause injury.

Dr. George Roper read a paper "On Prolapse of the Funis during Labour," tending to show that this accident was rarely primary, but mostly the result of some other abnormality. After alluding to the various conditions predisposing to this complication of labour, and mentioning the different methods of accomplishing reposition, he stated that the real difficulty consisted in keeping the cord within the uterus after it had been returned. The best means of doing this seemed to be in securing the firm adaptation of the presenting part to the os uteri. The question of turning in place of forceps was then considered, the author preferring the latter method, considering that there was less shock to the mother. Reports of six cases were given, the author concluding by stating that prolapse of the cord is for the most part associated with some other complications of labour, and that it behoved us to make observations as to what that complication might be, as the management of the cord would in a great measure depend upon the nature of the complication; in some cases the funis could be saved from pressure, in others not.—Dr. Braxton Hicks had employed cephalic version in transverse presentations with prolapse of the cord, using one hand externally to press down the presenting part into the os uteri, the funis being pushed up simultaneously by the internal hand.—The President inquired if Dr. Hicks combined the postural method with reposition of the cord.—Dr. Hicks replied that he had not found it necessary. He had experienced no difficulty in pressing up the head and carrying the cord up by the same hand as quickly as possible, and then the outside hand pressed the head into the os. In prolapse with head presentation, pressing the breech to the fundus is not needed as in transverse presentations. —Dr. BRUNTON thought Dr. Roper had not given sufficient prominence to the postural method. He (Dr. Brunton) had found it the most satisfactory of all methods of treatment of prolapse of the cord, and considered it applicable in all cases. He questioned whether Dr. Hicks would be able with his middle finger to reduce a long loop of cord protruding from the vagina; by the postural method this could be done.—Dr. EDIS called attention to the correct postural position being the genu-pectoral or knee-shoulder, not knee-elbow position, as had been spoken of by many.—The PRESIDENT referred to a paper read by Dr. Thomas, of New York, some eighteen years ago.—Dr. ROPER asked what was the *rationale* of the postural position; gravitation would not account for it.

Mr. LAWSON TAIT read a note on a "Diseased Placenta." The author narrated briefly the outlines of a case. The patient, aged twenty-nine, miscarried three months after marriage. She next bore a child at full term, which died of convulsions three days after. She next miscarried between the sixth and seventh month, and again between the seventh and eighth month, the child being alive. When one month advanced with the next, Mr. Tait put her upon chlorate of potass and perchloride of mercury, and she went her full time and was delivered of a healthy living child. The chief point of interest was in the appearance of the placenta. It was disproportionately small to the size of the child, and fully two-thirds of its surface had undergone a peculiar change. This the author had examined most minutely, and described most thoroughly, the communication being one of much scientific interest.

Reviews and Notices of Books.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome XX.: LACRYMALE GLANDE—LUXATION. Paris: Baillière and Son. London: Tindall and Cox.

THIS volume contains, amongst others, the following important articles:—"Langue," by MM. Demarquay and Rigal; "Lait," by M. Straus; "Larynx," by Bœckel; "Lépre" and "Lichen," by M. Hardy; "Leucocythæmie," by MM. Jaccoud and Labadie-Lagrave; "Leucorrhœa," by M. Stoltz; "Lèvres," by M. Laugier; "Lit," by M. Poncet; "Lithotritie," by M. Demarquay; "Luxations," by M. Valette; "Ligatures," by M. Sarazin.

The volume opens with an exceedingly good article by M. Od. Lannelongue on the Anatomy, Physiology, and Surgery of the Lachrymal Gland and Apparatus. The difficult point of the cause of the entrance and descent of the tears through the small canaliculi is, according to the author, satisfactorily explained on the theory of Ross, which is that the orbicularis in closing the eye contracts from without inwards, and thus drives the tears into the lachrymal sac. The symptoms of true fistula lachrymalis are given, and the several methods of treating it, including that of von Graefe, which consisted in removing the lachrymal gland (rather a heroic measure for so small a disease) are described. The author, however, has not noticed the very ingenious method suggested by Mr. Hulke some years ago in a case that came under his care, in which he re-established the normal opening, whilst he closed the cutaneous one. The subject of inflammation of the lachrymal sac is described in accordance with Mackenzie's division, and the author very honestly confesses that neither internal nor topical applications are of much service when the inflammation has fairly set in. In performing the little operation of slitting up the canaliculus, M. Lannelongue recommends that the *upper* duct should be divided. Speaking of the origin of obstructions leading to abscess, accompanied by disease of the bone, M. Lannelongue is in accordance with Wecker and with our own experience, that the disease of the bone in many instances is not the result of the violence of the inflammation, but that the bone or periosteum is the part primarily affected either from scrofula or syphilis. He approves strongly of the injection of medicated fluids through the canaliculi in the early stages of the affection, practised with a view of modifying the mucous membrane. We fancy it is but rarely practised in this country. He recommends strongly Stilling's proceeding for obstruction in the lachrymal sac, which consists in slitting up the canaliculus, and pushing down the duct a knife with a peculiarly-formed narrow triangular blade, turning the instrument once or twice, so as to divide new portions. It is founded on the supposed presence of muscular fibres in the walls of the canal, the incisions allowing them to retract. The success is stated to have been very great in the hands of more than one distinguished operator.

The articles "Langue" and "Larynx" exemplify well the progress that has been made during the last thirty or forty years in special departments of surgery. On referring to "Cooper's Dictionary of Surgery," published in 1838, we find only four pages devoted to the consideration of the affections of the tongue, whilst in regard to the diseases of the larynx the only reference made to them is included in the article on "Laryngotomy." In the volume before us these two subjects occupy just one hundred pages each, and contain a large amount of information in regard to the varieties, causes, symptoms, and treatment of numerous affections that, if not always capable of being successfully dealt with, are now diagnosed without difficulty.

The article on the "Tongue," by MM. Demarquay and Rigal, commences as usual with an anatomical description, which is sufficiently accurate, though some objection might be raised on embryological grounds to the propriety of calling the hyoid bone the skeleton of the tongue. An interesting section is devoted to the function of the organ and of the nerves supplying it. M. Demarquay states that he has been able to trace the chorda tympani beyond the submaxillary ganglion, beneath the mucous membrane of the dorsal surface. There seems to be reason for believing that it is distributed to the vessels with branches of the sympathetic, and this may account for some of the peculiarities in the sense of taste observed in cases of paralysis of the seventh. The pathology of the tongue is considered under the following heads:—(1) Vices of conformation, (2) inflammation, (3) abscess, (4) gangrene, (5) wounds, (6) burns, (7) the pustule maligne, (8) ulcers, (9) foreign bodies, (10) tumours, (11) constitutional affections; and several of these are subdivided.

Under the head of "Larynx," an account of the anatomy and physiology of this organ is given by Eugene and Jules Bœckel, with a woodcut showing the appearances presented by a vertical transverse section of the vocal cords. The varieties of the laryngoscope are fully detailed, with the difficulties that attend its use and the mode of overcoming them, which are illustrated with appropriate diagrams. The writers enter into the consideration of inflammations of the larynx. They describe the symptoms and pathology of laryngitis, but, curiously enough, dismiss the subject of its treatment half contemptuously with the observation that it is "*connu de tout le monde.*" This omission is, however, supplied in the remarks that are subsequently made in regard to œdematous laryngitis, &c. We do not find the value of emetics dwelt upon, though an emetic and a full dose of quinine will sometimes cure a severe case of laryngitis. The bibliography of this article is extremely well given.

The article on Leucocythæmia is very instructive. The term, as the authors, MM. Jaccoud and Labadie-Lagrave, remark, invented by Bennett, really indicates only a symptom of a much larger and wider disease, and, by directing attention to the symptom and not to the primary dyscrasia which produces it, long retarded the advance of knowledge. They prefer the terms "generalised hypertrophy of the lymphatic ganglia," suggested by Cossy, and "lymph adenoma," proposed by Wunderlich. The proportion of 1 white to 335 red corpuscles, which is regarded as the norm by Moleschott, has been in exceptional instances raised to 1:2, and in one case to 1:1 (Isambert). In one extraordinary case Welcker estimated that there were only 2,000,000 red corpuscles in the whole body. It would appear that the microscopic examination of the blood will alone suffice to diagnose paludal cachexia from that of lymphogenic origin. In the former the blood almost invariably contains black pigment, but additional signs may be found in the absence of enlargement of the glands, and in the history of exposure to marsh miasm. The peculiar characters of the urine are dwelt upon, especially the deficiency of urea and the excess of uric acid, and M. Jaccoud asks whether this is not referable to the oxidation of the hypoxanthine which the blood of leucæmic patients almost invariably contains.

Fifty pages and a dozen woodcuts are devoted to the subject of "Ligatures," which are considered first generally, and then specifically by M. Sarazin. The difficulties experienced in tying a wounded artery when the tissues, in consequence of being swollen and infiltrated with blood, are almost unrecognisable, are forcibly depicted, and he gives an instance where he tied the subclavian for a wound of the axillary artery, and, after a few days, the bleeding recurring, he was obliged, under much more unfavourable circumstances, to cut down and tie the artery above and below the seat of injury. No allusion is made to Lister's carbolic acid atmosphere, which is so important an adjunct in dealing with such cases as these.

The important article "Lithotritie" is the joint production of Demarquay and Cousin. Like all the other longer essays in this work, it is preceded by a short historical *résumé* in which the salient points are given. The first notice of lithotrity seems to go back to the beginning of the ninth century, when a monk, being tormented with a renal and vesical disease, introduced instruments *per vias naturales* into the bladder, and, having broken down the stones he found there, extracted the fragments. It was not, however, till 1823 that lithotrity became a practicable operation, owing to the ingenuity and perseverance of Leroy d'Etiolles and, after him, of Civiale and Heurteloup. Illustrations are given of the various forms through which the instrument has passed, from the days of its infancy to the present time, both in France and England.

A Guide to the Microscopical Examination of Drinking Water. By J. D. Macdonald, M.D., R.N., F.R.S., Deputy Inspector-General of Hospitals and Fleets; Assistant-Professor of Naval Hygiene, Army Medical School. With 24 Lithographic Plates. London: J. and A. Churchill.

Dr. Macdonald has given us a work which will prove of great use to medical officers of health. He has drawn with pen and ink on lithographic paper, and has then transferred to stone, the chief objects seen in the sediments of drinking water. By adopting this plan of drawing he has been able to give no less than twenty-four plates at a very small cost. He has first drawn the mineral substances, then the dead vegetable or animal structures which commonly pass into water, and then the living plants and animals which are more or less found in all waters. His object is, he tells us, to enable these various bodies to be easily identified by the observer. He has not attempted to decide whether any of them are hurtful or otherwise; he considers this to be a point for future inquiry, and at present he has merely attempted to give medical officers of health a means of making out the nature of what they see on microscopic examination of sediments in water. With the exception of the plate of Bacteria (Plate 6), which is copied from Cohn, and a few others where specimens could not be procured, all the drawings are original, and from waters examined by the author. Considering especially how they have been drawn, they are marvels of artistic skill, and some of the plates are quite beautiful. They are not, of course, coloured, as this would have made a costly instead of a cheap book, and the object has been to provide a work which all can purchase. The letterpress is placed at the end, and is so arranged as to render the identification of the objects easy even to those who are not familiar with the microscopic world in water. For example, in Plate 15 (not Plate 14, as stated by a press error at page 42), the monads are drawn; at page 42 will be found the means of identification, given in a tabular form, and so arranged as to present no difficulty even to a beginner, as the numbers in the tabular statement are identical with those on the plate. Henceforward no medical officer of health need close a report on water by observing that it contains "floating organisms"; he may, if he pleases, identify almost every form, except possibly the immature or transitional states.

It is clear that this identification is a necessary preliminary to the inquiry as to whether particular classes of plants or animals in water indicate particular impurities, or whether they are connected with special diseases. These are inquiries of singular importance, and have all to be still worked out. By this publication Dr. Macdonald has greatly advanced our means of attacking these difficult problems, and we do not doubt that medical officers of health will feel grateful to him for his timely and useful little work. We hope, indeed, that this book may lead young microscopists generally to study the world of waters; they will find it a very good introduction to this part of zoology.

Chemistry: General, Medical, and Pharmaceutical; including the Chemistry of the British Pharmacopœia. By John Attfield, Ph.D., F.C.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain. Sixth Edition. London: Van Voorst.

Professor Attfield's manual is so well known and so universally admired and used that it is hardly necessary to do more than notice the appearance of another edition, carefully revised and illustrated, for the first time, by woodcuts. The book is a storehouse of well-arranged and accurately-stated facts. The methods are judiciously chosen and clearly described, and altogether students of pharmacy and of materia medica may well be congratulated on having for their guidance so excellent a text-book.

MORTUARIES IN THE METROPOLIS.

To the Editor of The Lancet.

Sir,—As I am desirous of making out a complete case for legislative action on the question of the establishment of mortuaries in the metropolis at the forthcoming deputation of the Strand Board of Works to the President of the Local Government Board, will you permit me to request the medical officers of health, Poor-law medical officers, and others, to forward me any information they possess as to the evils that arise from the want of such accommodation.

I am, Sir, your obedient servant,
33, Dean-street, Soho, Nov. 22nd, 1875. Joseph Rogers.

We are asked to state that the Provisional Committee of the British Medical Defence Association invite the attendance of medical practitioners at a meeting to be held at the Medical Society's rooms, Chandos-street, Cavendish-square, on Tuesday afternoon next.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 27, 1875.

DURING the past few years a custom has grown up at some of our leading Medical Societies which, if it were only carried out on certain definite and fixed principles, might aid greatly in the advancement of knowledge on many vexed questions in Medicine. We allude to the institution of discussions on subjects of stirring interest, where much difference of opinion prevails. Such debates have an intrinsic value in themselves, as they give opportunities for the expression of their views by individual workers on the subject; and it might have been thought that the result would have been something tangible and satisfactory. But it is much to be questioned whether they have hitherto really produced so much benefit or added to our resources in the treatment of disease as much as they might reasonably have been expected to do. In reviewing the subjects that have been so treated we find, in the first place, that we have learnt many different views on the subject of tubercle in its anatomical relations to phthisis—views expounded by men who had devoted much time and study to the question, and whose opinions on such a subject carried much weight with them. We have had an equally luminous exposition of the views held upon the kindred subject of cancer in a debate which only served to show how wide was the gulf between those who adopt the theory of its local origin and those who deem it to be the expression of a constitutional disease. We have had similar divergence of opinion on the subjects of pyæmia and puerperal fever in debates the result of which was, we venture to state, no more satisfactory than in those which preceded them. Then we have had the germ theory of disease discussed in a manner which left the one side victorious, less, perhaps, by reason of the preponderance of facts than because the opposite views were so little and so feebly advanced; and, finally, within the last few weeks we have witnessed an attempt—abortive it is true, and stifled in the birth—to elicit the opinions of metropolitan surgeons as to the value of the plan of treatment known as antiseptic. We have had all these subjects fully expounded in a series of speeches, many delivered after careful preparation, and some even clothed in an eloquence which it would have been thought could scarcely have been made to cover the bare details of science. We may well ask ourselves, now that we are on the eve of another debate dealing with a most important subject,—How much have we gained by them? Is the subject of puerperal fever, for example, settled now once and for all?—and are all men of one mind as to the nature and origin of that disease since the long debate at the Obstetrical Society last summer? Is there but one opinion now prevailing as to the origin of cancer?—or, at least, have we gained a clearer insight into the nature of this disorder? Surely not; for, even putting out of question the one-sided character of some of these debates, the result has been in most cases to leave individual opinion much in the same position as before they were started. How many, for example, did Mr. DE MORGAN convince by his logical and closely-reasoned argument in favour of the local origin of cancer?—for on this question opinion was so equally divided that anyone who had before framed his views on the subject can have seen no reason to change them. Thus unsatisfactory as the issue has been in the past, bewildering as has been the conflict of opinion to him who has sought for light where he has had most reason to expect to find it, we must confess to view with some misgiving the prospect of another debate on a subject which it is notorious is one on which much diversity of opinion exists. We can safely predict that, if the forthcoming debate on syphilis be pursued on the same principles as those discussions we have already experienced, the profession will have gained but little from its having taken place.

It is certainly, then, time to see if there cannot be devised some means by which such debates might be rendered more profitable. We have before now indicated some of the paths which it is desirable that these discussions should take, so that on their termination we may be left with some fixed opinions, some definite and precise conclusions.

In the first place, it is incumbent upon the Society in which the debate takes place that the subject matter of the debate should be strictly confined to the objects for which the Society was founded. If it be desirable to treat the subject from a clinical point of view, the facts adduced should be strictly the result of bedside observation. If the pathology of the subject discussed be in question, to the consideration of its pathology, and of that alone, should the debate be limited. Hence the obvious necessity of fixing clearly beforehand the limits of the debate and the branches of the subject to be discussed. Without some such guidance, the speakers will, like ARTHUR's knights, pursue "wandering fires" and lose themselves in the quagmires of vague hypothesis.

In the next place, the debate should be wound up by an authoritative statement, embracing the views of the various speakers, and enabling the hearer to judge of their relative value and importance. At present, a host of heterogeneous opinions, emanating from men whose opinions are indeed of great individual weight, are flung down before the profession *en masse*, and perhaps even the very authority they bear renders the task of elucidating the truth of greater difficulty. We by no means advocate such a conclusion as might be obtained by a division being taken at the close of a debate; for, even if such a solution to the difficulty were desirable, it would often be impossible, so varied and numerous are the "amendments" that crop up one after another on the propositions laid down by the opener of the discussion. But a definite conclusion might fairly be arrived at, if it be made incumbent on the president to close the discussion by gathering up the chain of evidence and laying before the Society the points of agreement and difference in such a manner as would enable the profession to arrive at a reasonable and just verdict, and to feel satisfied that their conclusions were right. One manifest objection to such a course might be found in the disinclination of the president to adopt it. He may feel, and rightly too, that he was himself more or less of a partisan, and would thus be unable to present the facts in as impartial a manner as if he were on the judicial bench; and it would perhaps be too much to expect this of him. But, failing this, we do not see why, in questions of such great import as those that have already been discussed and as that which is shortly to be reviewed, a committee of the Society should not be appointed to report on the whole debate, and draw certain broad and specific conclusions from the facts adduced on all sides. It is premature yet to point out the example of the Medical and Chirurgical Society in this respect, although we have no doubt the Council will accept the recommendation of Dr. WEST to refer the subject of Croup and Diphtheria to a committee. It can only be in this or some other similar manner that we can hope to arrive at unanimity, or rather stability, of opinion, sufficient to guide the feet of those who now lose themselves in the maze of individual views.

That some such scheme is desirable there can be little doubt; and that it is practicable there is ample evidence in the proceedings of other scientific bodies both in this country and abroad. Certainly of the value of these debates there can be or ought to be no two opinions. The time has arrived when from the stores of accumulated material we may fairly hope to gain some important general facts and principles to guide our daily practice. But if such debates are to have any real and permanent value—if they are to mark an epoch in the history of medicine, and are not doomed to be recorded as a congeries of individual views tending no whither,—then some such reform in the conduct of them should be at once initiated. In one Society, at least, the debate has become an annual institution; and here, if anywhere, it is desirable that its results should be settled and enduring (so far as the shifting basis of the science will allow). If, on the other hand, this annual debate be conducted in the future as it has been in the past, it will not ensure the objects for which it was started, and will leave but little lasting impression on, and produce but little advantage to, the profession at large.

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THE intention and ingenuousness of Mr. MARSHALL'S proposal to institute a compulsory examination in Anatomy at the Royal College of Surgeons of England at the end of the first winter session, are so laudable that it is a duty far from pleasant to be compelled to say anything unfavourable of the scheme. But in the interests of medical education we feel bound to point out the fallacy of its guiding principle. In estimating the merits of the project we must, however, be careful not to mistake the will for the deed. Mr. MARSHALL'S prime object is to make sure that the knowledge, and especially the knowledge of anatomy, acquired by candidates for the diploma of the College of Surgeons shall be not only more extensive, but sounder than it has hitherto been. This desire is in itself highly commendable, but not original or peculiar, and is probably participated in by every member of the profession. It is as to the mode in which it is proposed to secure these objects that any serious difference of opinion exists.

Many of the evils to which Mr. MARSHALL has drawn attention in his memorandum are, alas! too rife. Everyone engaged in the tutorial departments of the medical schools knows well that much valuable time is wasted by many first-year's students; and that the knowledge acquired by the candidates for the College examinations is not only deficient, but unsound and evanescent. The question is whether matters would be improved by compelling students to prepare for an elementary examination at the end of the first session in one and only one of the subjects in the prescribed course of study for that term. Experience says no! The experience of most competent authorities in educational affairs, and the experience of the College of Surgeons itself, have shown that such a course would be the surest means of defeating the real objects of education. It is no exaggeration to state that the certificate and examinational systems of the College have done more to damage the cause of medical education in this country than anything else. Professional grinding and its attendant evils have been the direct outgrowths of the hampering regulations that have been imposed upon students by the Council of the College, and of the unsound method of testing the students' knowledge. While the Council has always vainly flattered itself that if its curriculum has been carried out the efficient training of the student has been secured, the cause of true education has suffered. Not only have regulations in many instances been systematically evaded by teachers and pupils, but, even where they have been complied with, evil rather than good has resulted. Students have worked for examinations, and the knowledge thus acquired has been unsound and of little permanent value. A certain number of facts have been "crammed" within a limited space of time; but there has been no mental assimilation, no organic registration of ideas,—and what had been learnt has been speedily forgotten. The College examinations have proved quite worthless as tests of the candidate's reason and judgment, and even of his training, and serve only as exercises of memory and of coolness and self-possession. It is as Dr. WHEWELL has affirmed: that when the student works for examinations only, "he does not wish to understand, but to appear to understand"; and any teacher of anatomy can testify that those who can put on the best appearance at the College are the most likely to succeed. When we consider the nature of the examinations and the constitution of the Board of Examiners at the College of Surgeons, it is not difficult to account for these things. Not only is the time allotted to each candidate quite inadequate, but the tests themselves are wanting in uniformity and appropriateness. A spirit of indifference and recklessness has been engendered in students; and professional grinding, which has made now its way in its most objectionable forms into the medical schools, has been encouraged. The quality of the instruction has also, with a few honourable exceptions, gradually deteriorated and sunk to the level of the knowledge of the examiners, most of whom have taken no part in the practical teaching of anatomy or physiology for many years, if at all, and retain only the crude notions of their early years, uninformed, or, what is worse, misinformed concerning later acquisitions and recent advancements. The examinations at the College of Surgeons are acknowledged on all hands to be, as far as the educational purposes and tests of knowledge are concerned, monstrous failures, if not actual impositions. We could at the present moment state at least a dozen instances in which within the last two years students thoroughly trained and well educated, of high culture, and great distinction as prizemen and honoursmen at the various schools and colleges in the United Kingdom, have been rejected at the College of Surgeons, while the veriest pretenders have passed creditably. Yet it is this system, from which such results may arise, that Mr. Marshall would use for the improvement of medical education. It is greatly to be regretted that a teacher and examiner of Mr. Marshall's position and influence should not have attempted some radical reform, instead of endeavouring to patch up a system that is old and rotten, and must sooner or later inevitably succumb to the force of enlightenment and progress. Mr. Marshall proposes to remedy the evils that have been produced as a direct result of the pernicious regulations of the College and of the faulty system of examinations by extending the operation of the morbific influences. He would hold what he terms short elementary examinations in anatomy, the examination consisting of two parts, a written and a *vivâ voce*. In the written examination two hours or less would be allotted to the answering of four questions, while the *vivâ voce* would not extend at most over more than fifteen minutes, and it might be considerably less. This would surely be playing at examination. No good could possibly come of such an imperfect test, even if it were not destructive of all previous study. If an elementary examination were instituted, its standard could not be made higher than that attainable by dull students, for, if it were, it would be unjust, and if it were not, it would only thwart the efforts of the quicker and more intelligent students. The evils of the levelling-down system would therefore be greatly multiplied. But there is another fallacy by which Mr. Marshall's scheme is marred. It assumes that the knowledge of the first-year's students is complete. The fact is that the first year's instruction at the best schools is preliminary to that of the second year, and the knowledge of the student is, as it were, embryonal, and should be regarded as merely an early developmental stage of a subsequent complete knowledge. But even if the knowledge be complete as far as it goes, it is, in the vast majority of cases, confined to so small an area that it would be impossible for the student to present himself even at an elementary examination on the anatomy of more than a very small portion of the human body. If the average student were to present himself for such an examination as Mr. Marshall suggests, it is certain that he must have hurried over his work in a manner altogether inconsistent with any accurate and sound knowledge. For the first two months of his career the student flounders in the elements of the subjects of study, and has to acquire a vocabulary of technical and scientific terms. At least one clear month must be given to the study of osteology and histology, without a knowledge of which no progress can be made in either anatomy or physiology. But even when these difficulties are overcome, others present themselves. The supply of bodies is so scanty and irregular that in large schools two or three months elapse before each student can be supplied with even one part for dissection. Let us take an example by no means unique. To a large anatomical class numbering nearly two hundred students, twelve bodies have been supplied by the Inspector of Anatomy since the commencement of October. Now, as twelve bodies will furnish parts to only about one hundred men, it follows that long before the second hundred can be supplied with parts, the first hundred have finished their work, and are compelled to remain idle, as far as dissection is concerned. It is, therefore, impossible for the majority of first-year's students to get through the dissection of the limbs before the termination of the first winter session, unless means are adopted for securing a large and regular supply of subjects to the large schools. Where there are about one hundred new students, twenty-five bodies will be required to commence with—that is, four students to each body; and as each student will be required to dissect an upper and a lower limb, it follows that in the course of the winter session at least fifty subjects will be required for the first-year's students alone, over and above the bodies required for the purposes of instruction and demonstration and for the second and third year's students preparing for the first professional examinations at the College of Surgeons and elsewhere. Unless the Inspector of Anatomy can undertake to supply at least five or six hundred subjects to the medical schools in one session, it is manifest that Mr. Marshall's proposal is quite impracticable, and if insisted on will lead to a cramming of anatomy from books instead of patient working at dissection.

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A few weeks only have elapsed since we called attention to some very interesting and important researches by Dr. Klein on the Lymphatics of the Lungs having a direct bearing on the process of acute miliary tuberculosis; and we have now to place before our readers the results of an equally elaborate investigation by the same indefatigable observer on the Small-pox of Sheep, a disease that very closely resembles variola in man, and a knowledge of which will undoubtedly materially elucidate our conceptions of the exanthemata generally, showing, as these observations appear to do, that variola, at least, is due to the development of a special form of fungus. The lymph was obtained from Professor Chauveau, and inoculation was practised in the skin of the groin on the 8th of December, 1873. On the 13th most of the punctures were surrounded by a raised red areola; these gradually increased in size till the 15th, when they became depressed and pale in the centre. The temperature of the animals rose at first slowly, then rapidly, but fell when the pocks ceased to increase in size. The pocks were excised at various stages, and immersed for a few days in very weak ($\frac{1}{5}$ per cent.) solution of chromic acid.

Careful examination of the lymph showed the presence of — 1. Minute highly refractive spheres, isolated, or in couples, or in small groups; they correspond to the micrococci of Cohn, and exhibit Brownian movements. 2. Decolourised blood-corpuscles. 3. A few rod-like bacteria, of the types termed by Cohn "termo" and "subtilis." 4. Lumps of a pale transparent substance, with irregularly distributed larger and smaller granules. 5. Several forms of spheres, some larger than the decolourised blood-corpuscles, some smaller. If the lymph be placed in an incubator for twenty-four hours, the pale transparent masses above alluded to become more or less distinctly fibrillar, and appear to consist of a feltwork of very delicate branched filaments, in or on which the highly refractive granules are found, and these in the course of another twenty-four hours become enlarged into the spheres of various size. It is worthy of notice that the few rod-like bacteria disappeared completely after the preparation had been kept in the incubator for twenty-four hours or more. The refractive granules, when small, are of a slightly greenish colour, and proliferate with extraordinary rapidity by transverse fission, forming necklaces, of which the micrococci constitute the beads and a transparent connecting substance the thread. When these necklaces become closely packed, they constitute a *colony* or *zooglœa* of COHN.

On making sections of primary pocks which had only appeared for from six to twelve hours, the characteristic points observed were that the epidermis had undergone considerable increase in thickness, owing chiefly to the swelling of the cells of the rete mucosum. The papillæ of the corium had also become broader and longer. The blood-vessels were distended, the endothelial cells being swollen, distinctly granular, and containing enlarged nuclei. The tissue of the corium, in general, was slightly œdematous, and the lymph-canalicular system larger and more clearly visible; colourless blood-corpuscles had made their way out of the vessels. The general appearances were therefore those of slight inflammation.

Pocks that had existed for twenty-four hours presented all these characters in a more marked condition. The cells of the rete Malpighii had undergone division, and the infiltration of the corium with lymph-corpuscles had greatly increased. In addition, the interfascicular or lymph-canalicular spaces contained a firmly granular material, in which were embedded peculiar ovoid or spherical sharply-outlined structures, containing in a clear substance one large, or two, three, or four small highly refractive bodies. Dr. KLEIN proceeds to contrast these with connective-tissue corpuscles and their nuclei, with pus- and lymph-cells; and shows that by the difference of their microscopical characters and reactions they must be regarded as bodies foreign to the structure of the skin, and, in fact, that they may be regarded as a *fungus*. Many of the lymphatics contained a material composed of a transparent matrix, in which were embedded highly refractive granules; and a few hours later the granules were seen to be arranged in shorter or longer, branched or unbranched filaments. When forty-eight hours had elapsed the granules were found not only to have arranged themselves into filaments, but the filaments had more or less lost their granular aspect, and had become smooth, longer, more branched, highly refractive, and slightly greenish. The mycelium thus formed then fructifies, forming conidia, like an *oidium*. In the earlier stages of the disease it is most abundant in the deeper stratum of the corium; but subsequently it appears in the superficial stratum and in the superficial stratum of the subcutaneous tissue, from which it may be traced for long distances through the lymphatics.

Further observations showed how it comes to pass that the central part of the pock is depressed and pale as regards the peripheral portion. It becomes depressed because a great number of layers of the original rete Malpighii undergo conversion into layers of horny scales, while the deep stratum of the rete grows very actively into the corium; and it becomes pale because the central portion is covered with a thick, horny, dry membrane, formed by the condensed layers of the rete.

Lastly, Dr. KLEIN gives the results of his examination of the pustular stage of the development of the primary pustules; and states that pustulation commences by the formation of isolated vesicles in the rete Malpighii, which, as they gradually increase in number and size, become eventually fused together to form larger cavities and canals. The formation of the vesicular cavities invariably depends on the transformation of individual epithelium cells of the middle layer of the rete Malpighii into spherical or elliptical vesicular structures, possessing a thick membrane and clear contents. As they increase in size the contents come to consist partly of lymph-corpuscles, but principally of mycelium, which may or may not be in fructification. Many of the lymph-corpuscles themselves contain a number of spherical bodies of greenish colour, which appear to be spores.

It would seem from all this that we are now in possession of substantial evidence that variola, if not caused, is at least accompanied, in the sheep, by the growth and development of a peculiar fungus which makes its appearance in the tissue of the corium and its lymphatics, and is gradually carried or penetrates into the vesicles formed in the rete Malpighii. This fungus, Dr. KLEIN proposes, since he has been unable to identify it with any described species, to call the "oidium variolæ"; and adds that it is a very important question, and one deserving alike the attention of physicians and anatomists, whether any form of vegetation corresponding to it is to be met with in the cow-pox or in human small-pox.

Dr. KLEIN'S researches appear in the just issued part of the Philosophical Transactions, and have been communicated by Mr. SIMON, at whose instigation they were made. They are illustrated by most beautifully executed plates.

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A VERY proper attempt has been made to pass a Medical Bill through the Parliament of New South Wales. The Bill was a very reasonable one, erring, if anything—especially in the amendments agreed to by its able promoter, Sir ALFRED STEPHEN,—in too liberal concessions made to those weaker brethren, always forthcoming in legislative assemblies, who think it their duty, in the interest of truth and liberty and other exalted principles, to legislate with a special favour to every conceivable crotchet and quack in medicine. Sir ALFRED'S Bill was conceived in the spirit of a professional man and based on the English Medical Bill. That is to say, it forbad the false use of titles, and gave power of recovering in Courts only to such persons as held diplomas or degrees approved by a Medical Council which it provided. It enacted also that no one should be disqualified or refused qualification merely on the ground of peculiarity of medical opinion or theory, so long as his knowledge of medical facts and the sciences fundamental to medicine was ascertained to be satisfactory. Unlicensed practitioners were by one of the amendments specifically exempted from punishment, provided that they put "unlicensed" at the end of any title they used—not definitely forbidden—to indicate that they professed to cure disease.

Such was the moderate Bill by which enlightened men in New South Wales, in the interest of the public, tried to encourage medical education, and give a certain legal recognition to those who had given evidence of possessing it. We are sorry to say that the promoters of the Bill have been defeated, and still more sorry to add that their principal opponent was Dr. SMITH, the Dean of the Medical Faculty of the University of Sydney. It is no part of our wish to intensify the acrimony which Dr. SMITH's conduct in this matter has occasioned. We readily give him credit for not intending to speak disparagingly of the profession or of medical education. Much that he said about the existence of incompetent medical men who had gone through a curriculum and passed the examining boards was of course true. Everybody admits it. But for him to extract an argument out of such a fact against a Medical Bill favouring medical education, and examinations to test it, was an inconsistency which we deeply lament. There are plenty of ignorant people to point out the imperfections of our system of medical education, and to misconstrue the lessons of it, without a Dean of the Medical Faculty coming to help them. Dr. SMITH must know that the only remedy to be relied on for incompetence in the profession is a better education of medical men and a more stringent examination. And these ends can only be secured by some such Bill as that of which he has been the main and too successful opponent. At the time such a Bill as that in question was being discussed he that was not for it heartily was practically against the whole cause of medical science and education.

We can only hope that ere long Sir ALFRED STEPHEN will reintroduce his Bill, and will have Dr. SMITH among his supporters. It is appalling to think what may be the consequences in a colony like New South Wales of leaving everybody that likes to call himself doctor, surgeon, physician, or any other title by which simple people can be misled. If the ignorance of men who have gone through some sort of a medical education is so mischievous, how much more injurious must be the ignorance of those who have had no such chance of being informed. It is really the public that will suffer. Educated medical men may well feel chagrined when a civilised community, led by a Dean of the Medical Faculty, refuses them any special advantage or recognition. But they can provide for themselves. It is the public that will pay the penalty.

MAJOR BOLTON, water examiner, reports that in many of the complaints received by the Local Government Board as to the quality of the water delivered by the metropolitan water companies for domestic purposes, examination has revealed the cause of the alleged contamination to be a dirty state of the cisterns on the premises of the complainants. Major Bolton urges the importance of the frequent and thorough cleansing of all cisterns, and he again points out the danger of gases flowing back into the cisterns, and becoming absorbed by the water, unless the overflow-pipe is brought outside the house, and the end left exposed to the air. We trust that householders generally will practise the excellent instructions given them by the water examiner.

Annotations.

"Ne quid nimis."

THE MEDICAL OFFICERS OF HEALTH OF COMBINED SANITARY DISTRICTS.

THE medical officers of health of combined sanitary districts are beginning to understand more clearly the very anomalous position in which they have been placed by the Local Government Board's administration of the Sanitary Acts upon Poor-law traditions and principles. They find themselves suspended, like a Mahomet's coffin, between a presumed central departmental heaven and an assumed local authority hades, repelled by both alike. It must be confessed that they, in their blind advocacy of the earlier administrative measures of the Local Government Board, and their voluntary and willing acceptance of a position wanting in professional respect, whether as related to the central or to the local authority, have contributed much to the present state of things. But it is astonishing how imperfectly they even now apprehend their true position. They are indignant at having been told in effect by the Local Government Board, in their recent interview with the President, that "as they had made their bed so they must lie upon it," such answer only being possible so long as the present administrative policy of the Board is pursued. They have been made the "cat's-paw" of the Board in its policy of aggrandising the power of its Poor-law elements of administration, and have been thrust to the wall precisely as the Board's own Medical Department has been. Indeed, they have been astutely used in helping to bring about the depreciation of medicine at head-quarters, not seeing that the attitude of the Board in this respect must govern its attitude in a like respect with local authorities. They have been encouraged not to content themselves with administering existing law to the best of their power, but freely to criticise this irrespective of their immature experience, thus exposing themselves alike to discredit from the central and local authorities, and justifying in a fashion most detrimental to themselves the cry against being doctor-ridden. Until medical officers of health take a professional as well as an individual view of their position, they must remain, as they are now, isolated and helpless each in his own district. When they have come to understand that there is a professional as well as an individual aspect of the question, they may carry the whole profession and the public with them, and it will go hard if the present derogatory position which they hold, both with reference to the Local Government Board and the local authorities, is not amended.

METROPOLITAN WEEKLY RETURNS OF MORTALITY.

IT is now rather more than twelve months since the Registrar-General ceased to furnish gratuitous weekly returns of mortality to the metropolitan officers of health after repeated futile efforts to obtain from the sanitary authorities some remuneration for the registrars for copying these returns. This step was the result of representations from the London registrars, that by allowing a gratuitous secondary use to be made of returns furnished for official purposes, they were deprived of fees, for making such returns, enjoyed by registrars in all other parts of England and Wales, and which had been sanctioned by Act of Parliament. Attention has recently been again drawn to this subject by Dr. Gibbon, the medical officer of health for Holborn, in some remarks at the opening of his report upon the sanitary condition of Holborn for the year ending Lady-day, 1875. These remarks appear to us, at the present time, most ill-judged, both because, the matter being now settled, no good can result from further attempts to make justice to the registrars appear, like a grievance to sanitary authorities, and because the least said about the fact that the Holborn sanitary authority, by refusing to pay the paltry sum of less than £15 per annum to three registrars, has deprived their medical officer of health of the use of these weekly returns, the better for the credit of the Holborn District Board. Holborn enjoys the unenviable notoriety of furnishing the largest contingent of fever cases to the Metropolitan Asylums Board fever hospitals, and can therefore ill afford to neglect any of those precautions which are deemed essential by other sanitary authorities and other medical officers of health. There appeared to us no necessity for medical officers of health to take part in the dispute between the Registrar-General and the sanitary authorities of the metropolis, but it might fairly have been expected that their interest would have been used in favour of the new system of returns, which renders them available for use on each Monday morning, instead of the old system under which they did not come to hand until Thursday morning. We are informed that some at least of the Holborn registrars have regularly furnished Dr. Gibbon with *gratuitous* information of cases of infectious diseases, but this is not acknowledged in his report.

We may take this opportunity of stating that Holborn is not the only metropolitan sanitary authority which still refuses to pay for these weekly mortality returns, and thus places their medical officers of health at a disadvantage in fighting zymotic disease, more especially during the present epidemic of scarlet fever. No weekly returns are yet furnished in St. George's (Hanover-square), Clerkenwell, Bethnal-green, Whitechapel, or Mile-end Old Town; we are, moreover, informed that in Shoreditch the vestry now demurs to pay for returns which the local registrars have been furnishing for more than six months under promise of payment. The other thirty-two of the thirty-nine vestries or district boards, constituting the metropolitan sanitary authorities, have long since made more or less satisfactory arrangements for the furnishing of these returns to their medical officers of health. We trust that the medical officers of health of the above-mentioned seven defaulting authorities will lose no opportunity to urge the inconvenience and danger to the public health arising from the neglect of this well-defined responsibility.

THE PRIVATE DISPENSARY SYSTEM.

This system was the subject of a very full and critical discussion at the meeting of the Islington Medical Society on Tuesday, held at the residence of N. H. Clifton, Esq., who presided. The interest in the question seemed the greater inasmuch as the system has had a considerable development in Islington. The universal feeling was that to pretend to doctor people for one shilling a week was to degrade the profession and to mislead, if not to defraud, the public. Some striking instances were given of the neglect of and imperfect examination of patients under such a system, such as a case of large pulmonary cavities and a case of urgent empyema, in which the chest had never been examined. Such cases seem to show, what one might *a priori* conclude, that private dispensaries are capital places for not having your diseases detected. Striking illustrations were also adduced showing the improper way in which the system was applied to those who can pay ordinary charges. One case was mentioned that used to receive treatment for a shilling a week, and afterwards came under the care of a regular practitioner, who was paid £15 for three months' attendance. It is only fair to add that the members generally expressed much interest in the difficult question of attending the poor medically and not charitably. Mr. Brown, of the Islington Provident Dispensary, expressed natural disappointment at the limited acceptance which such institutions had met with at the hands of the working classes. After ten years' existence, two medical men, who devoted three or four hours a day to the work, divided only about £100 a year between them in this institution. The discussion was adjourned to next meeting.

DR. WEBSTER.

A few weeks ago we announced that arrangements were being made by the inhabitants of Dulwich to erect a memorial to Dr. George Webster, who for the long period of sixty years resided amongst them, and we at the time gave expression to a hope that his honoured life might be yet spared to accomplish fresh deeds of usefulness and charity. It is with feelings of profound pain and regret that we now learn of his sudden death—struck down while apparently in the enjoyment of a vigorous old age, although it had already exceeded the period allotted by the Psalmist. On Saturday evening, the 12th inst., Dr. Webster entertained a few friends at his house, no one appearing in better health and spirits than the worthy host himself. On the following morning his servant found him lying senseless in his room with an apoplectic seizure. All that medical science, aided by assiduous love and care, could suggest proved unavailing. He never recovered consciousness, but passed away, bequeathing in his death a bright example and an unsullied name.

Dr. Webster was a Scotchman by birth, and came of a very ancient family in Forfarshire. At fifteen years of age he entered the University of Edinburgh as a medical student, and only three years later obtained the diploma of L.R.C.S. Young Webster immediately secured an appointment as army surgeon, and narrowly escaped being present with our troops at Waterloo. Peace stopped his career in this direction, and at the close of that memorable year (1815) he made his way to the village of Dulwich, and became a partner of Mr. Hall, the resident practitioner. Dulwich he never quitted. He found time amidst the cares of a large general practice to contribute several sound practical papers to the literature of medicine. Many of his professional brethren will remember him as the promoter of the British Medical Association, of which he was the first president.

He always displayed a keen interest in public affairs, and, in addition to being a prominent guardian and vestryman, was intimately associated with various institutions for the education and general amelioration of the youthful poor; notably he was well known as Chairman of the South Metropolitan Schools. In 1829 he obtained the M.D. Aberdeen. He was also F.R.G.S., and J.P. for the county of Surrey. The loss of Dr. Webster will be felt far and wide in the south of London, but by none more than by the poor.

ENTERIC FEVER AT CROYDON.

Eight deaths from enteric fever occurred at Croydon during the week ending Saturday, November 20th. These, with the deaths previously registered, make a total of eighty since the commencement of the epidemic. Last Friday a deputation of residents of Croydon, introduced by Mr. Grantham, M.P., waited on Mr. Sclater-Booth at Gwydyr House to ask for the appointment of an inspector to inquire into the causes that led to the outbreak. Dr. Chambers especially insisted on the necessity of at once ascertaining the causes of the present epidemic, so that an effective remedy might be applied without loss of time. No serious steps, he said, had been taken by the Local Board of Health to make the necessary investigations, and their measures had been confined as yet to frequent flushings and disinfecting of the sewers, in issuing instructions for domestic use, and commencing a house-to-house visitation. Mr. Sclater-Booth regretted he could not give a definite reply to their request. He had that morning received an elaborate report from the Local Board of Health at Croydon in answer to the official and authoritative inquiries made by his office. The report in question contained a document expressing, on the part of a number of gentlemen residing in the neighbourhood, perfect confidence in their medical officer, Dr. Philpot. In our article last week we bore testimony to that gentleman's valuable report, and fully endorsed the opinions expressed by him in it. We also urged the local authority to adopt without delay the chief recommendation it contained—to institute at once a searching inquiry into the immediate cause of the outbreak. This was the point urged by Dr. Chambers and the other members of the deputation upon Mr. Sclater-Booth, and we are anxious to learn what steps the local authority have taken to carry out the recommendation of their medical officer. Whatever may be the cause, it certainly is not due to any casual contamination of the water, but to some deeper and more extended sanitary defect. Last week we conjectured that this defect would most probably be found to lie in the faulty condition of the mains and sewers, and nothing has as yet transpired to make us alter the opinion we then expressed. Certainly the condition of the mains and sewers ought to be one of the first points to be inquired into.

BUYING AND SELLING PRACTICES.

There is nothing with which doctors are more frequently twitted than their differences, though it is doubtful whether they differ more than other men who have to deal with difficult questions. There is one thing, however, about which any two doctors are almost sure to differ. The thing we refer to is the value of a practice that has been sold; the two doctors are respectively the buyer and the seller of the practice transferred. As a rule they have the most diverse views on the question. The difference is likely to be still greater in the event of the seller removing to but a short distance from the place he is leaving. The particulars of a case in illustration are before us. They were elicited in the course of an action in equity in the County Court at Stone before the judge, W. Spooner, Esq. The plaintiff was Mr. Theodore Edgar Dickson Byrne, surgeon, of Newcastle-under-Lyne, and the defendant Mr. Daniel George Astley, surgeon, Beech Cliff, Trentham. Not unnaturally, the report of the trial is headed "Extraordinary Disagreement between Medical Men." We need not go into the details, as the case finally terminated in an amicable arrangement between the parties to the following effect:—"The agreement to be annulled. The defendant to return £100 in discharge of all claims and costs. Each party to be unlimited as to area of practice. All imputations to be withdrawn." We share with the judge satisfaction at the "happy conciliation attained." At the same time the case seems to point two morals: one, to purchasers, not to be too careless in investigating for themselves the real facts of a practice—in legal language, *caveat emptor;* the other to sellers, not to colour too highly the representations of the value of the practice to be sold. It is, to say the least, an undignified thing to have one's own witness in such a case admit that the average value of midwifery cases was overstated, and to have, as a result of the conciliatory arrangement, to return part of the payment. It is reasonable that men who have created practices should sell them when they see fit to do so; but the terms and the representations should be so conspicuously just as to make a complaint in the law courts hopeless.

WARMED RAILWAY CARRIAGES.

Among the diseases easily preventable by better social contrivances must certainly be reckoned a large number of those which result from the external application of cold. How many lives might be saved every winter had we better organised arrangements for the protection of invalids from cold during travelling! The discomfort of railway journeys at this time of the year is not only annoying, but to many the exposure is a source of positive harm. Hot-water tins are the only means of maintaining the temperature, and they can act only on a small part of the body, and scarcely at all on the air respired. On many lines of railway, even, as appeared from a letter to a contemporary, on some main lines which derive so large an income from the conveyance of invalids as the South Western, hot-water tins are not always to be obtained even at a terminus. On some parts of the Continent the arrangements for warming the carriages are much more efficient. The composition of the train, consisting of saloon carriages connected with one another, renders it possible to heat them properly and pleasantly with warm air, and thus a journey in mid-winter is robbed of half its discomfort and danger. Such a system would probably not be practicable with our present small compartments. It would be impossible to regulate the temperature and fresh air in an efficient manner, and an alternation of baking heat and freezing draught would be the only result. But the need for warmed carriages is very great, and should constitute another motive for the supply of better constructed railway carriages in which such safe and effective warmth might be possible.

THE HEALTH OF ETON.

The answer the Rev. Charles Wooley Dod was able to give in *The Times* last Monday to the letter of "A Father" on the health of Eton, which appeared the preceding Saturday, must be considered eminently satisfactory; and there can be no doubt that the uneasy feeling excited by the ill-advised communication in question has been allayed by Mr. Dod's straightforward statement. Our Sanitary Commission have had occasion to visit Eton twice within the last eighteen months; on the first to report on the new system of sewerage and drainage which had recently been completed, and on the second to collect materials for our Reports on the Sanitary Condition of our Public Schools. On both occasions the drainage question was a subject of particular inquiry, and we are pleased to be able to state that the system adopted is working well, and that there is no possibility of the sewage being choked back by the floods or otherwise. Eton, from its low-lying situation, has always been subject to floods. In 1852, as we are informed by Mr. Dod, the water rose eight feet six inches above the ordinary summer level—the highest flood recorded for forty years; since that time recent arterial works on the Thames have reduced the flood level nearly two feet, a most important fact with reference to the drainage of towns in or near the Thames valley. In this year of extraordinary floods, the highest level reached has been seven feet nine inches, or seven inches below the highest flood level recorded for forty years. If typhoid fever should be introduced into Eton, the possibility of its spreading would not be through the medium of the sewers, but by the water-supply. The chance of the water-supply becoming contaminated, however, has been reduced to a minimum since the old cesspools have been done away. There are many points of detail no doubt connected with the sanitary arrangements of the school that call for improvement, as is the case in nearly every school we have yet visited, but the authorities must be acquitted of the charge of neglect and indifference to sanitary matters; the fact that an extensive drainage scheme on the separate system has been satisfactorily carried out is a proof to the contrary. To place Eton in the same category as Uppingham shows the profoundest ignorance of the first principles of sanitary science.

IMMUNITY FROM SMALL-POX IN LONDON.

In his last Weekly Return the Registrar-General calls attention to the recent remarkable immunity from fatal cases of small-pox which has been enjoyed by the 3,445,160 persons now estimated to be residing within registration London. It appears that since the week ending July 17th last, more than four months, no death in London has been referred to small-pox, whereas the corrected average number in the corresponding period of eighteen weeks in the ten years 1865–74 was no less than 337. This period, however, includes the remarkable epidemic of 1871-2. Since the beginning of the year 47 deaths from small-pox have been registered in London, of which 31 occurred in the first and 15 in the second quarters of the year, and the last case, as before mentioned, during the week ending July 17th. Since this date the 16 deaths which have been attributed to small-pox in London in the Registrar-General's Weekly Return have all been fatal cases of varicella or chicken-pox. The last Quarterly Return of the Registrar-General showed that the fatality of small-pox was unprecedentedly low throughout England and Wales during the three months ending September, and the remarkable freedom from a fatal case in London during more than four months is certainly without precedent since civil registration was established in 1837. It will be somewhat interesting to observe how these facts will be twisted by the ingenuity of the anti-vaccination leaders to support their case against compulsory vaccination.

THE KEIGHLEY GUARDIANS AND THE MANDAMUS.

The guardians of the Keighley Union are making a very sorry and ridiculous exhibition of themselves before the country. They have prepared and forwarded the following return to the writ of *mandamus* issued against them by the Court of Queen's Bench:—

> "We, the guardians of the Keighley Union, to whom this writ is directed, do most humbly certify and return to our Sovereign Lady the Queen—1st. That the said writ cannot be obeyed without serious damage to the health of the inhabitants of the Keighley vaccination district of the Keighley Union, and without increasing mortality among young children; it being the fact that, notwithstanding the adoption of all modern sanitary improvements, infant death has been increased by enforcing the Vaccination Act in large towns. 2nd. That the Local Government Board have power to direct the vaccination officers to prosecute persons omitting to obey the Vaccination Acts; consequently, it is not necessary to require the guardians to do so. Under the circumstances herein appearing, they humbly submit that they ought not to be compelled to do so."

We will leave the Court of Queen's Bench to say what is the force of this answer regarded from a legal point of view. As we have already said, the interest of the case between the guardians and the Court largely supersedes the interest of the abstract question of the wisdom or otherwise of compulsory vaccination. We will only say that, from a medical point of view, the main part of the answer is as erroneous as it can be. If a reasonable time be taken into account, it will appear that the application of the compulsory Vaccination Acts has immensely reduced the mortality of young children. Small-pox occurring in unvaccinated children kills 40 or 50 per cent. of them; whereas few practitioners could be found who have seen such a thing as a child's death from vaccination, either direct or remotely.

It is only proper to say that the above answer to the *mandamus* was the work of only six guardians, four others present opposing it. Amongst the dissentients, Mr. Redman deserves praise for the words of sense which he spoke. He very forcibly referred to the snubbing which the Keighley guardians have received from other boards. Not content with not obeying the law themselves, they have tried to incite other boards to disobedience; and they seem signally to have failed. At the end of the same meeting at which the return to the *mandamus* was settled, answers to the overtures of the Keighley guardians from three boards were read, which may be taken as specimens of others. The Hexham Union stated that they could not concur with the Keighley guardians in presenting a petition for the abolition of vaccination. Romley Marsh Union declined to interfere. The Leicester guardians had resolved, "That this board, having no sympathy with the views expressed in the memorial of the Keighley guardians, declines to take any part in supporting them in their resistance of the law."

It is to be hoped that the Keighley guardians will begin to see that they are not taken for great lights by other boards, and the sooner they exchange the work of teaching for that of learning the better it will be for their reputation.

CHLORAL.

The uncertainty of the action of chloral, however rare, is an undoubted fact which lessens very much the safety of the drug. Some time ago we expressed the opinion that unexplained death after chloral was more common than after any other of the narcotics in common use. Two cases reported in the daily papers since our last issue afford fresh support to this belief. In one case a medical assistant, on whom an inquest was held at University College Hospital, was in the habit of taking hydrate of chloral to induce sleep. He was found in the street dying, as if from the influence of some narcotic poison, and when brought to the hospital was actually dead. In the other case a lady, said to have been subject to epileptic fits, had a small dose of chloral (ten grains) administered to her, and was found the next morning lying on her face, and dead. Death after an epileptic fit from accidental suffocation is not uncommon, and it is very possible that it was in this way that it happened. But if a fit occurred during the night it does not appear to have been sufficient to rouse the husband of the lady who was sleeping by her. The habitual dose of chloral cannot be acquitted (in the absence of any direct evidence of a fit) of having contributed to the fatal result. Each case points the lesson very strongly that the nocturnal use of chloral is not without its dangers, and should, as much as possible, be discouraged.

DR. WARD.

We regret to have to announce the decease of Dr. S. M. Ward, of Chobham, which took place on the 16th instant. He was the youngest son of the Rev. Canon Ward, formerly Rector of Meesden, Hertfordshire; was educated at Tunbridge School, whence he proceeded to Caius College, Cambridge, in 1854, having obtained a Tancred Studentship in Medicine. He graduated as B.A. in 1858, and afterwards as M.B., having previously been elected a Scholar of his College. He completed his medical education at St. Bartholomew's Hospital, and succeeded to the practice of the late John Langdon, Esq. Dr. Ward was an accomplished physician, and successfully worked a very large practice, which embraced nearly all grades of society, from the highest to the lowest. The Poor-law appointment which he held brought him in daily contact with the poorer population of his district, with whom he had endeared himself by his kindly and generous qualities. These must feel his loss acutely. Dr. Ward leaves a widow and eight children.

REPRESENTATION UNDER THE ARTISANS' DWELLINGS ACT IN BRISTOL.

Last week we urged that the recent excessive fatality of scarlet fever in certain of the crowded portions of the city of Bristol, in which high death-rates generally prevail, could not safely be disregarded as evidence that the city contains "unhealthy areas" which should be dealt with under the Artisans' Dwellings Act. On the same day that we went to press a meeting of the Sanitary Committee of the Bristol Town Council was held, to receive an important representation from Mr. David Davies, their medical officer of health, describing "all the area subject to inundations of the river Froom, lying within the city of Bristol, as an unhealthy area, and all the houses within such area as permanently unfit for human habitation until such means have been adopted as to preclude any inundation of such area by the waters of the river Froom." This is undoubtedly a bold and novel application of the powers conferred upon medical officers of health and local sanitary authorities by the Artisans' Dwellings Act, but if the facts asserted by Mr. David Davies in his report are substantiated by further investigation, we cannot see what is to prevent the provisions of the Act from being put in force to redress a great evil. Hitherto it has only been sought to apply the Act to clear away, by means of an improvement scheme, the crowded and squalid courts and alleys of our large towns. This considerable area in Bristol, though covered with new houses, is not only continually subject to floods, but the houses and drains are constructed of bricks that can be crumbled between the fingers. Some of the houses are, moreover, so unsound that the walls are only kept from falling by iron straps. This revelation is a singular commentary upon the nature of the local bye-laws relating to building in Bristol, or upon the way in which they are carried out. It was decided that a special meeting of the committee, to consider the representation of their medical officer, should be held as soon as sufficient information had been obtained to enable them to arrive at a decision. A strong *prima facie* case has in the meantime been established that the houses on this area are "unfit for habitation" within the meaning of the Artisans' Dwellings Act.

A RECENT INQUEST.

Our attention has been directed to the report of an inquest held at Lowestoft by the deputy coroner of the district, which affords a very good proof, if any were wanting, that none but properly qualified (in the broadest sense) medical men should hold the office of coroner. The facts are briefly as follows. A fine healthy infant of fifty-two days old gets eight drops of "Godfrey's cordial," is soon after suckled by its mother, and shortly after this vomits and dies in about four hours. The eight drops of the cordial were administered to the infant at 11 P.M. The child slept in the same bed as the parents; the mother took the child into bed with her, and all soon fell asleep. About 10 minutes to 3 A.M. the father was awakened by his wife, and discovered the infant dead by its mother's side. The child had always slept on the mother's arm, but on the night in question her arm was above it. The bottle containing the remainder of the drops was produced at the inquest. The chemist who both made and supplied the "cordial," and was responsible for the doses named on the label of the bottle, gave evidence as to the ingredients of which it was composed, and swore that it contained exactly one minim of tincture of opium in thirty-two minims of the "cordial." The evidence, as we have said, gives eight drops as the dose taken. This will equal one-fourth of a drop of laudanum, or about one fifty-sixth of a grain of opium. The druggist declared in his evidence that he sold one hundred pennyworths of the cordial in a week, and that he had never known a fatal case to arise from using it. Dr. Ringland, who had been called in to see the infant, attributed its death, without the slightest doubt, to an overdose of opium; and, in reply to a question from a juror as to how this opinion could be reconciled with the fact that the druggist had for years sold upwards of one hundred pennyworths of the cordial without the occurrence of a fatal case, stated that the very healthiness of the child in question would make the administration of opium to it the more dangerous. The jury returned a verdict in accordance with the coroner's charge—viz., that the child died from an overdose of opium ignorantly administered, and the coroner, after expressing his concurrence with that verdict and passing an encomium on Dr. Ringland for his excellent evidence, declared that if a death should result from such causes in future, he should be under the painful necessity of directing the jury to return a verdict of manslaughter.

It is almost a platitude to say that the administration of opium to infants of tender age requires extreme care, and should certainly only be done under the advice of some medical man after having seen the case. The use of opiates for infants under the name of Godfrey's Cordial, or in any other form, is unquestionably a very reprehensible practice, and we are utterly opposed to chemists and druggists taking upon themselves the very grave responsibility of prescribing such things on the application of parents for something to quiet a child. But what we have now to consider is the evidence and the verdict in this particular case. It seems to us far more probable that the death of the infant was caused by asphyxia from an overdose of the parents than from an overdose of opium. The infant was most probably suffocated by what is commonly termed being overlaid. While fully recognising the susceptibility of infants to the action of opium, yet the dose in this instance, according to the sworn testimony of the witnesses, was so minute—one-fourth of a drop of tincture of opium—that we cannot help thinking a coroner, if himself acquainted with the purely medical aspect of the question, would, at any rate, have striven to exclude all other causes of death before attributing it to the one in question.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

As mild cases of typhoid fever still continue to appear among the boys on this ship, and several relapses, a large steamboat was procured, and all the healthy boys were transferred to her on Saturday last. This vessel was sent down the river, and is now moored below Gravesend, near the hospital-ship *Rhin*. All the sick and convalescents are on board the latter vessel, and since this complete removal no cases have occurred. A thorough examination of the ship has been made, and it is probable that she will undergo a further inspection in dry dock. The question of moving the ship to another position in the Thames is still undecided.

SANITARY NOTES.

The solicitor of the Board of Trade conducted a prosecution on the 17th instant against the master of the ship *Sarah Smeed*, the charges being that no lime-juice was given out during the entire voyage to and from Lagos, and that no entry of illness of any of the crew was made in the official log. Several of the crew were seriously ill with West Coast fever, and one had also marked symptoms of scurvy, which appears to have exaggerated the ill effects of a wound of the leg, for which he is still under treatment at the Seamen's Hospital. Both offences were proved, and the legal penalties inflicted by the presiding magistrate. This is the second prosecution conducted by the Board of Trade during the past month on account of scurvy and neglect of those clauses of the Merchant Shipping Act that relate to health of crews.

Mr. Ebenezer Davies, medical officer of health for the Port of Swansea, gives some interesting particulars as to work done during the past year, and records a glaring instance showing the necessity for port sanitary surveillance in view of preventing the spread of epidemic diseases. But the observations made as to cholera are altogether beside the question, as indicating a return to the old and useless restrictions of quarantine. If Mr. Davies will read carefully the order in Council of July 17th, 1873, with reference to cholera, he will find that, if properly administered, it affords a very sufficient provision against the importation of the disease.

THE HEALTH OF THE WAR MINISTER.

There is nothing like improving the occasion; and one of our provincial contemporaries, seeing, we presume, that Mr. Gathorne Hardy's name had been conspicuous for its absence from some cabinet meetings, and learning that the right honourable gentleman was ill, was neither at a loss for a name for the disease nor for the cause to which it might be attributed. Mr. Hardy was suffering from "War Office fever," and added another name to the list of officials who had been "knocked over" and obliged to absent themselves from that unhealthy building. The atmosphere of the War Office, by all accounts, is not that of a summer garden; but as Mr. Gathorne Hardy's late indisposition was ascribed to that common complaint a "cold in the head," we may acquit the War Office this time, and lay the charge to the weather. Any War Office fever from which Mr. Hardy may have been suffering was probably of another kind altogether, arising from the intricate and tangled mass of work before him. This was, no doubt, well calculated to induce lowness of spirits in the most Mark Tapley type of character. However, it will be gratifying to an army all anxious to see "what he will do with it" to be assured that the War Minister is very nearly "himself again," and will, we hope, shortly take his accustomed part at Cabinet Councils.

A SLIGHT DIFFERENCE.

Touching some recent statistics of our contemporary, the *World*, as to the risks encountered by Europeans in India of contracting and perishing from cholera, it will be remembered that it was computed that there was one death out of thirty-seven Europeans attacked with that disease. Those acquainted with the terrible nature of the disease naturally raised the "eyebrows of astonishment" when they found it had been robbed of nearly all its terrors, and was, after all, a very mild kind of disease. Dr. Bryden's tables unfortunately tell a very different story, however. From these we learn that among European and native troops occupying the same stations during the invading epidemics of late years, the mortality of those treated for cholera has averaged 60·19 per cent. for the European and 43·02 per cent. for the native troops.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

On the 20th inst. an election took place for a Vice-President of this College in the room of the late Mr. Hamilton, when Dr. George H. Kidd was appointed without opposition. A vacancy having occurred in the Council, three candidates competed—viz., John Cronyn, Thomas Darby, and Robert Persse White. The first two gentlemen each polled forty-two votes, the casting vote being given by the president in favour of Mr. Cronyn, who was thereby elected.

THE PUBLIC HEALTH OF ST. PETERSBURG.

A Russian sanitary periodical, aptly and briefly entitled *Health*, publishes some statistics which conclusively demonstrate the unwholesome condition of St. Petersburg. Cholera, it is true, has not made its appearance this year, but a typhoid epidemic has continued its ravages notwithstanding the magnificent summer recently enjoyed on the banks of the Neva. With the advent of winter, the number of deaths has risen to nearly double the average chronicled during the summer months. This fatal increase is, however, the ordinary consequence of the rigorous climate, and will not be reduced again till the end of April, but the rate of mortality is higher than it should be all the year round, and this may be attributed to inadequate sanitary precautions, though the fact is not generally realised. The number of inhabitants has multiplied so rapidly that at first sight many persons might believe the increase of population to be a result simply of natural causes. M. Yélatchitch, secretary of the St. Petersburg Statistical Committee, has, however, issued a publication which clearly proves that this augmentation in the number of citizens is due to immigration, and not to the excess of births over deaths. When St. Petersburg was founded there were about 25,000 inhabitants gathered within its walls during the first few years of its existence. Subsequently, in 1750, the number rose to about 80,000. The first census was taken in 1764, and it estimates the population at 192,000. This number increased to 220,000 in 1800, 308,000 in 1812, 470,000 in 1840, and 522,000 in 1863. On the other hand, we find that the average annual number of births from 1764 to 1770 was 5122, while the deaths during the same period amounted to 4677; but from 1808 to 1813 we note a great change, for there were nearly 6000 more deaths than births during that period. Again, in 1848 no less than 31,707 deaths were registered, to correspond with 14,529 births. Altogether, and taking the whole century, there have been 1,095,451 deaths, and only 962,689 births, in St. Petersburg.

DECLINE OF THE SCARLET FEVER EPIDEMIC.

True to the experience of previous epidemics, the fatal cases of scarlet fever showed a marked decline on the first appearance of winter temperature. In the eighteen large English towns furnishing weekly returns, and having an estimated population of nearly six millions and three-quarters, the deaths referred to scarlet fever in the third week of this month fell to 185, from 231 and 260 in the two preceding weeks. In London, the numbers in the three weeks ending the 20th inst. were successively 129, 116, and 96; and, excepting an increase in Nottingham and Salford, the fatality of the disease showed last week a general decline in all the large towns. The annual death-rate from the disease in the week ending 20th inst. was, however, equal to 1·5 per 1000 in London, 2·8 in Bradford, 3·5 in Salford, 4·3 in Bristol, and 4·5 in Nottingham.

SIR TREVOR LAWRENCE.

We are glad to be able to announce the unopposed return of Sir J. J. Trevor Lawrence as the parliamentary representative of Mid-Surrey. As we have before stated, the new senator is a member of the medical profession, and formerly served his country in the medical department of the Indian Army. He was born in 1831, and in 1867 succeeded to the title, by the death of his father, Sir William Lawrence, F.R.S., Serjeant-Surgeon to the Queen. The small band of doctors in the House of Commons have received a welcome accession to their number. There are great questions now coming on before Parliament which cannot be properly discussed without the aid of medical men and sanitarians.

A HEALTHY YEAR IN INDIA.

Dr. J. M. Cuningham, the Sanitary Commissioner with the Government of India, reports that the sanitary history of 1873 presented a very marked contrast to that of 1872. In some parts of India small-pox was epidemic, and had caused much mortality among the people during several months; generally there was a remarkable absence of cholera, and a considerable diminution of other diseases compared with other years; cholera can only be said to have been epidemic over a small area, while its dormancy over certain large tracts of country and its almost complete absence from others had been very striking features. These remarks are borne out by the statistics of the European troops, who appear to have suffered little from any serious epidemic, and the year, as a whole, was an unusually healthy one.

UPPINGHAM SCHOOL.

We are requested by Mr. Haviland, who is investigating the recent outbreak of enteric fever at the Uppingham School, to say that he will be much assisted in his inquiries if the medical attendants upon boys who have fallen ill shortly after leaving that school will kindly favour him with notes of the facts of illness and particularly of the date of the commencement of illness. Letters should be addressed to him at Northampton.

We gather from a report of the sanitary condition of York, recently issued by Mr. S. W. North, that the health of the city is by no means good. The death-rate during the last quarter has been unusually high, and there was a great deal of sickness from diseases of the zymotic class. Many cases of enteric fever were reported, and on investigation it was ascertained that the sewerage and drainage of the localities of the outbreaks were defective. New sewers are now in course of construction, and other improvements are being carried out, which cannot fail to have a beneficial influence on the health and comfort of the inhabitants.

A brief report of the health of Hastings during the last quarter has just been issued by Mr. C. Ashenden, medical officer of health. The death-rate during the period was 18 per 1000 annually, which is rather a higher figure than could be desired for a town with such great natural advantages. The borough was free from epidemics, although cases of zymotic disease were imported into the town. Mr. Ashenden thanks the urban sanitary authority for having provided a disinfecting apparatus and for sanctioning his appeal for a hospital for infectious diseases.

Last week Dr. Inglis, late of Worcester and now of Cheltenham, was presented by the inhabitants of the former city with a testimonial in the form of a silver salver and a vase containing one hundred guineas. The salver bore the following inscription:—"Presented to Dr. Inglis, with a purse of gold, on the occasion of his leaving Worcester, by his numerous friends, as a token of esteem, and in recognition of his valued services to the Infirmary and Dispensary: November, 1875." We heartily congratulate Dr. Inglis upon this expression of goodwill and of appreciation of his work in Worcester.

The supply of subjects to the schools this session is so much less than usual that complaints are almost universal among the teachers of anatomy. In many schools the number of bodies which have been received is only one-half of that which they had at a corresponding date last year, and we much fear that the influence of this diminished supply will be greatly felt at the January examinations.

Dr. Charles Warden has resigned the office of senior honorary surgeon to the Birmingham Lying-in-Charity, having been associated with it for nearly a quarter of a century in its present form, and as the Lying-in Hospital for Midwifery and the Treatment of Diseases of Women and Children. The General and Medical Committees passed resolutions highly complimentary to Dr. Warden as to his valuable services, and expressive of much regret at losing them.

A meeting of the Society of Medical Officers of Health was held on Saturday last, when an interesting paper on Sanitary Administration in India was read by Mr. W. R. Cornish, sanitary commissioner in Madras. The discussion was introduced by Dr. Druitt, who has recently returned from India, and some pertinent observations on the subject were made by the President and Dr. Letheby.

We understand from a Calcutta newspaper that, in compliance with orders recently issued by the Government of India, the arrangements and equipments for the Prince of Wales's staff have been created into a special department, a portion of which will accompany His Royal Highness during his tour. The European and native apothecaries who attended on the Duke of Edinburgh during his visit to India have been appointed to the new medical establishment.

A case which illustrates the need that exists for the obtainment of a higher class of attendants on the sick in some of our public charities came before the Salford Borough Police-court a few days ago. Two nurses employed in the small-pox and fever wards of the Salford Workhouse were sentenced to twenty-one days' imprisonment for drunkenness, and it was stated that during their debauch they left thirteen or fourteen patients entrusted to them quite unattended.

We are glad to be enabled to announce that Sir John Glover is progressing favourably towards recovery under the professional treatment of Mr. R. G. Butcher, of Dublin.

Mr. William Colles, Regius Professor of Surgery in the University of Dublin, has been appointed Surgeon in Ordinary to Her Majesty in the room of the late Mr. Hamilton.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

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ROYAL MEDICAL COLLEGE, EPSOM.

We have so frequently advocated the claims of the Royal Medical College that we feel no special introduction is needed on this occasion to explain the aims and objects of the institution. The College is situated on the north-west slope of the Epsom Downs, about one mile from and eighty feet above the town of Epsom. The buildings consist of a main block, which contains the dining hall, the dormitories, and the school and class rooms; attached to this block is the "Albert Memorial Wing," set aside for the residence of the pensioners. At the southern extremity of the main building is a residence for the head master, with accommodation for forty boarders; this house was presented to the College by the munificence of Mr. Erasmus Wilson. The out-buildings in the back playground consist of a gymnasium, two swimming-baths, a lavatory, and a range of closets and urinals; all these are closely connected with the main building. In the large front playground is a fives-court and the chapel. All the principal buildings are of red brick, faced with freestone, and are well and substantially constructed; they rest directly on the chalk. The aspects are north-west and south-east, the latter being sheltered by the down that rises behind the College. At the present time there are residing at the College 50 foundation scholars, who receive their education free; 165 resident pupils, paying, if the sons of medical men, from £48 to £51 a year, or, if not the sons of medical men, £70; and 24 pensioners, each of whom has a set of chambers allotted, and receives, besides, certain other privileges. In addition to these must be reckoned the tutorial staff, the servants connected with the institution, and the servants and relatives living with the pensioners,—making in all a population of about 300.

Drainage and water-supply.—Formerly the drainage of the College was received into large cesspools, situated at the north-west extremity of the College grounds. This arrangement was found to be so extremely unsatisfactory that it was determined to make a junction with the town system of sewage. This has been effected at a cost to the College of £400. The College drainage now consists of two sewers; the principal one on the high level, which is connected with the main block, and passes behind the buildings to the end of the Albert wing, and then, turning downwards, makes a junction with the smaller sewer, which comes from the master's house, about fifteen yards from the lodge gates, where the town system may be said to commence. The ventilation of the College drains is effected by three untrapped water-pipes, which are placed at points of the buildings where there can be no possibility of sewer gas escaping from them into the building; in addition, at the back of the school, at the commencement of the high-level drain, is a man-hole with an open grating. We do not think the ventilation provided sufficient, considering the College stands eighty feet above the level of the town, and the pressure consequently in the upper part of the sewers must be very great. We should therefore recommend that increased ventilation be effected at the junction of the College and town drains, so that all possibility of the town gases making their way to the building may be prevented. The substitution of an open grating for the present closed cover of the man-hole, in this situation, would doubtless be sufficient; but a ventilating shaft would be more effectual, and perhaps safer. The water supplied to the College is furnished by the Epsom Town Waterworks. The supply is supposed to be constant; but, owing to the scarcity of water, the mains are often empty for some hours, and an insufficient quantity furnished to the school. In order to keep an adequate supply on the premises, a large open tank has been built on the top of the central tower, in which a considerable quantity of water is stored. For some time past complaints have been made that the water when drawn (generally the water first taken in the morning) has been thick and turbid, yielding a rusty deposit. This condition of water has been noticed only in the supply of the main building; and the Albert wing that furnishes the master's house, though taken from the same point in the town mains, has hitherto been free from deposit. This points to some local defect in the service of the main buildings, certainly not to any general contamination of the water-supply itself. Mr. Elkington, the architect of the College, has offered, we think, a very reasonable explanation of the cause of the deposit, and, though it is difficult to speak positively till the necessary examination be made, we venture to predict it will be found correct. It appears the main, on entering the building, gives off two lateral branches for the wings; these ascend slightly before their ultimate distribution. Mr. Elkington thinks that these have become corroded, and that the rust from these is sucked up during the periods of intermittency into the pipes connected with the whole service. The fact that the water is foulest in the morning gives additional support to this view, since the intermission, when it occurs, is usually during the night time. In all other respects we were satisfied with the purity and quality of the water supplied, and we were glad to see that the additional precaution had been taken of having Lipscombe filters attached to all taps and cisterns from which water for drinking purposes could be obtained. We think, however, the Council ought to insist on the town water-supply being made constant without delay, for till that is done there is danger at any moment of typhoid being introduced into the school from the town; the experience of Over Darwen, Lewes, and Croydon ought not to be disregarded. If the Council fail in obtaining a constant service, they should, we think, endeavour to obtain a water-supply of their own. They have on their premises a well, sunk in the chalk, about 130 feet deep, yielding an abundant supply, and if this on analysis prove as good as it is abundant we think that, under any circumstances, they would be wise to employ it. The cistern at the top of the tower ought also to be covered in; at present it is exposed to large quantities of smoke and soot from the chimneys close to it.

General sanitary details. — The halls, school and class rooms, dining-hall, and dormitories are all lofty and well-lighted, but we cannot say well ventilated. Certainly plenty of fresh air enters the buildings, but, to judge by the draughts, it passes in with too great velocity and is irregularly distributed. We can fully understand the complaints that have been made with respect to the cold and draughty corridors, and we hope the Council will do something to remedy this evil before next term begins. The introduction of two or three Galton stoves in each corridor would materially warm the air of the building and improve the ventilation by equalising the currents of air. The school and class rooms are excellent, and, for the accommodation afforded, may compare with any school in the kingdom. In the large school-room and in several of the classrooms, a rearrangement, however, of the seats would be advisable, so that the shadow of the boy may fall to the right or left of him, and not on his book or copy. The school is provided with two excellent swimming baths, one hot, the other cold, and also a gymnasium; indeed, we cannot speak too highly of the liberality of the Council in providing for the general comfort and convenience of the boys. In the back playground, near the school-rooms, is a range of privies and urinals; the former have an arrangement for flushing, which is done once a day at least, and is very effective. The urinals are of slate, with an iron-pipe arrangement for flushing. As usual, when the water was turned on we found that, instead of a good strong stream, only ineffectual little dribblets trickled down the slabs. The only efficient method we have seen for keeping urinals clean is a simple but extremely powerful tap facing towards the urinal: this should be turned on twice a day. In the back playground is a tap to which the boys have access, all the water supplied having passed through a Lipscombe's filter. All waste and overflow pipes are disconnected from the sewers, and are discharged over well-trapped gratings. Where possible, the rain-water pipes have been disconnected; we should like to see this plan adopted with all, and the rain-pipes at present used for ventilating the drains changed for proper ventilating shafts. We were pleased to see that some attempt had been made to utilise the rain-water by collecting it in cisterns in different parts of the buildings; if our suggestion of cutting off the remaining connected rain-pipes be carried out, the soft-water supply of the College would, if stored, be greatly increased. The closets in the College are fitted with separate cisterns; none that we saw had screw taps, and the architect distinctly assured us that no such taps were used in the building.

The precautions employed to prevent the introduction and spread of infectious disease.—On returning to school, each pupil is expected to bring with him a certificate that he is in good health, and has not been exposed within one month to any disease of an infectious character. In the head master's house a general statement is required in addition, on entrance, with respect to the general state of health and the infectious diseases he has had. The medical officers of the school (Dr. Jones and Dr. Barnes) this term, on their own responsibility, examined every boy on his return to school, and in future a record of the boy's height, weight, physical development, and illnesses is to be kept, the examination to be made every half-year on the boy's return from home. We think the Council ought officially to acknowledge the additional and valuable labour thus voluntarily undertaken by their medical staff, and that the "Health Register" should become a recognised feature in the management of our "Medical College." It is a rule for all boys that fall out of school to be seen by the medical man at his next visit; we would suggest, as an extra precaution, that the patient should be isolated in a sick room, however trivial the complaint, till the visit had been made. The great want at Epsom hitherto has been a sanatorium for the isolation of infectious cases. A building for this purpose is now to be erected, affording accommodation for twenty-four patients, and the site selected, though somewhat near the Albert wing, is as far as possible from the school itself. At the end of the last term, and the beginning of this, scarlet fever made its appearance in the school; the first outbreak was limited to seven cases, the last to five. We are fully satisfied with the arrangements made by the medical officers of the school for the accommodation and isolation of the cases at present under treatment; the fact that the epidemic has not spread shows how effective those measures have been.

General remarks on the school hours, work, meals, &c.—School commences at 7 o'clock in the morning; at 8 the boys go to breakfast; at 9 to chapel; at 9 30 the boys go to work again till 12.30; at 12.45 the first dinner to half the school, and at 1.45 the second dinner for the remaining half is served. School reassembles at 3.30, and continues till 5.30; then chapel at 6, and tea at 6.30. School again at 7, lasting till 10, with a quarter of an hour allowed for supper. These hours give a daily total for work of eight hours and three-quarters on whole school days, and six hours and three-quarters on the two half-holidays. We consider these hours to be in excess of what they should be. The time of work at our great public schools generally averages but seven hours on whole school days; whilst on half-holidays, which at many schools are every other day, the work is from four to five hours. We are aware that at Epsom few of the boys are intended for a university career, and that they are chiefly trained with a view of becoming candidates in the competitive Civil Service Examinations, or for the severe Matriculation Examination at the University of London—examinations which require a considerable range of subjects to be taken in hand. Still, eight hours and three-quarters' work is a very severe strain on boys of twelve or fourteen, and should only be imposed on the older boys, and those who are preparing for an immediate examination. We would venture to suggest that afternoon school should not commence till 4.30 and continue till 6, and no work should be done by boys under fourteen after 8 30. This would reduce the number of working hours for juniors to seven a day, and for seniors to eight; moreover, this arrangement would give the boys an extra hour for afternoon play. The meals are four in number: breakfast at 8, of bread-and-butter; a substantial meat meal at the midday dinner; tea at 6.30, of bread-and-butter; supper at 9, with bread and cheese. We think these meals are sufficient, and we do not consider an extra meat meal necessary. Complaints have reached us that sufficient time is not allowed the boys at dinner, especially at the second meal. This, we fancy, must be their own fault, in their desire to get to the playground. If such is the case it could be easily remedied by insisting on the boys remaining in hall at least half an hour, and allowing none to leave till that time has expired.

In conclusion, we must bear testimony to the excellence of the domestic arrangements and the care and nicety with which the food is prepared. No one can visit the Royal Medical College without feeling impressed with the great and noble work that is being carried on, and how unwearied must have been the efforts of all connected with the establishment to bring it to its present perfection. Apart from the merely charitable aspect of the institution, it is a fact of no mean significance that nearly two hundred boys are receiving an education almost equal in some, and vastly superior in other, respects to that given by our large and expensive public schools, at a cost to the parents of barely £50 a boy. The Council, in building the new sanatorium, will be put to considerable expense. We hope the members of the profession and the public will continue to give them liberal support, for without that it is impossible for any of the suggested improvements to be carried out.

ANSTIE MEMORIAL FUND.

A MEETING of the General Committee of the Anstie Memorial Fund will be held on Tuesday, the 30th of November, at the House of Dr. George Johnson, 11, Savile-row, at 8.30 P.M. precisely. The following report of the Executive Committee will be presented, and resolutions embodying its recommendations will be proposed for adoption:—

The Executive Committee of the Anstie Memorial Fund beg leave to report to the General Committee that the accounts of the Fund were closed on the last day of February, although a few contributions have since been received. The total amount collected was £2548 8*s.*, and the total expenses of the collection were £153 8*s.* 4*d.* Of this amount the sum of £50 was defrayed by a single donation given for this especial purpose, so that only £103 8*s.* 4*d.* will rank against the fund, leaving a balance of £2444 19*s.* 8*d.* available for the purposes for which it was collected. On this balance dividends to the amount of £60 19*s.* 10*d.* have been received, making a total sum of £2505 19*s.* 6*d.*

The purposes of the fund, as defined by the original circular issued by the Executive Committee, were to set up a memorial tablet in some proper situation, and to devote the remainder to the education or advancement in life of Dr. Anstie's children.

The Chapel of King's College naturally suggested itself as the best place for the proposed tablet; and Sir Gilbert Scott kindly undertook to furnish a design in harmony with the decorations of the interior. A considerable time elapsed before this design was prepared, and then an inscription which was approved by the Executive Committee was found not to be acceptable to the Council of King's College. Further delay and much correspondence were thus occasioned; but ultimately the following inscription, which was written by Mr. John Simon, F.R.S., removed all difficulties:—

In Memory of
FRANCIS EDMUND ANSTIE,
M.D. LOND., F.R.C.P.,
PHYSICIAN TO THE WESTMINSTER HOSPITAL,
HONORARY FELLOW OF THIS COLLEGE.
LABORIOUS IN STUDY, ACCOMPLISHED IN PRACTICE,
ARDENT IN LOVE OF TRUTH AND JUSTICE,
STRENUOUS IN EFFORTS FOR THE POOR AND FRIENDLESS,
HE WAS STEADFAST, GENTLE, AND AFFECTIONATE
IN ALL PERSONAL RELATIONS,
AND DEAREST TO THOSE WHO KNEW HIM BEST.
HIS DEATH, WHICH TOOK PLACE ON SEPTEMBER
THE 12TH, 1874, IN HIS 41ST YEAR, WAS CAUSED
BY BLOOD POISONING INCURRED IN THE DISCHARGE
OF HIS DUTY.

Correspondence.

"Audi alteram partem."

ARMY SANITARY COMMISSION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of last week there are some severe reflections on the Army Sanitary Commission, the cause of which appears to have been that the Commission had failed to discover in certain cholera reports submitted to them from India support for one of the many theories of cholera propagation—viz., the cholera water-theory; and the somewhat extensive deduction is drawn from this default that there is nobody on the Commission competent to deal with questions of this class.

I am not aware what steps the Commission may take in this matter, and, as Dr. Fayrer, the sanitary adviser and representative of the India Office on the Commission, is with H.R.H. the Prince of Wales in India, I have in my private capacity thought it advisable to ask your indulgence to enable me to state simply the facts of the case, many of which appear not to be known.

First, then, as regards the deduction drawn from the premises. When the Commission was first formed the late Sir Ranald Martin was placed on it as sanitary adviser to the India Office, in which capacity he served till his death. He was succeeded by Dr. Fayrer, and I am quite sure that the simple mention of these two names will carry conviction to the minds of the medical profession that, whatever *laches* the Commission may have been guilty of in the matter of cholera theory, the interests of public health in India, so far as regards an intimate acquaintance with every point of importance in the most recent advances of pathology and etiology of Indian diseases, are as well, and have been as well, represented within the Commission as without it.

Second.—The Commission is composed of representatives from the War Office, India Office, Royal Engineers, Army Medical Department, and Local Government Act Office, and it took its present form in consequence of a recommendation of the Royal Commission on the Sanitary State of the Indian Army. It acts under instructions from the Secretary of State for War, and the Secretary of State for India; its functions are of a practical sanitary kind, and, as regards India, are directed to the improvement of barracks, hospitals, married quarters, the drainage, conservancy and water-supply of military stations, improvements in bazaars, native towns, and among the civil population generally. Many years ago suggestions on all these matters of principle were sent to India, and the Commission has ever since been in communication with the authorities on them. But although the Commission has no power to undertake pathological or etiological investigations, there is nothing in this department which escapes its notice, or the notice of the Sanitary Department in India. There is, indeed, no publication in which any new matter on these subjects is set forth in England, Germany, or France, which is not transmitted as soon as possible to India, and the Indian Government makes a money grant annually for this purpose. There is besides a scientific staff in India engaged on these very investigations. The duty of the Army Sanitary Commission is to use all information of this sort as a basis from which to deduce principles of practical utility, and even this cholera water-theory has been taken into account for a number of years past. The literature of water analysis in India, undertaken at the instance of the Commission, has no equal in Europe. The results of it led to the recommendation by the Commission of certain principles for the protection of water-sources at Indian stations, which, when fully carried out, will render the pollution of drinking-water by cholera material, or indeed by any other impurity, physically impossible. I could give other similar illustrations, but this, as connected with the present subject, will be sufficient to show the use to which etiological doctrines have been and will continue to be put. Of course there are other and most important applications of these doctrines which do not come within the functions of the Commission. These belong to the Army Medical Department under its own chiefs. It is not necessary that any pressure should be adopted in this direction, neither would it be submitted to. There is only one way in which persons holding such doctrines strongly can get them adopted by the Army Medical Service, and that is to support them by facts and reason.

Third.—The executive work of sanitary improvement is all done in India by Government; by its public works department, sanitary and vaccination services, commissioners, municipalities, local magistrates, and even by native village officials; and, as regards regiments and stations, by the great Indian Army Medical Service and Cantonment Committees. In the whole history of human progress there is nothing more remarkable than the advance of sanitary improvement in India during the last ten or twelve years. There is nothing in the West that can be compared with it. The work is very far from being done, but very much has been already accomplished.

Fourth.—With regard to criticisms which have been made on the form and contents of the Commission's "Remarks," it seems necessary to state that these are determined by the nature of the documents submitted to the Commission from every part of India, and by the terms of the reference. The Commission has considered it to be advisable to give a terse account of the principal parts of the documents (a recent one contained 500 printed folio pages), as well as to call attention to the main practical points, which are all considered with reference to the principles of sanitary improvement long since adopted in India. It need scarcely be said that the remarks embody the views of the sanitary and engineering advisers of the India Office serving on the Commission. No practical difficulties have arisen from the form of the "remarks," and they have aided in the advance of sanitary improvement.

But, after all, the main question is, What has been the practical result of all this work, even admitting that it is small in amount when compared with the vastness of the field? The reply is, that wherever sanitary work has been done, in cities, municipal towns, villages, and public institutions, there has been improvement in the public health, of which striking examples are afforded by improved gaols, many of which may now be used as illustrations of what may be done for the native population. But the British Army, from its complete system of statistics, affords the most striking illustration of the effect of these improvements. At the time when the Royal Commission on the Sanitary State of the Indian Army began its inquiry in 1859–60, the average death-rate among British troops in India was 69 per 1000 per annum. Last year (1874) it was a shade above 13½ per 1000 (13·58). This, however, is a fact, not an average, because there was little cholera about (only 11 deaths in the whole army). In old times the sick in hospital averaged about 10 per cent. The proportion is now less than half this amount, the difference representing the number of men in the ranks who formerly would have been in hospital. Perhaps no better justification of the present method of carrying out Indian sanitary work could be adduced. As already stated, this communication is simply intended to state facts, and not to discuss controverted questions.

I am, Sir, yours, &c.,

London, Nov. 24th, 1875. JOHN SUTHERLAND, M.D.

THE CASE OF SUPPOSED BLOOD-POISONING.

To the Editor of THE LANCET.

SIR,—With reference to the interesting case of supposed "blood-poisoning," the particulars of which are given by Dr. Dyce Duckworth in the last number of THE LANCET, will you permit me to suggest, with every respect for his opinion, that the evidence against the symptoms being due to malignant disease in the thorax is scarcely conclusive.

I understand from the report that Dr. Duckworth looks upon the enlargement of the thyroid body present in that case as part of a general infection of the lymphatic system; but in a case of primary cancer, occupying the mediastinum and root of the right lung, which I met with not long ago, and reported in a contemporary of April the 25th, 1874, enlargement of the thyroid gland was one of the earliest and most marked symptoms. It was uniform, firm, and smooth, and I regarded it merely as an evidence of obstructed circulation through the superior vena cava.

Primary intra-thoracic cancer, moreover, evinces a decided preference for the right lung, and it is remarkable that this was the side on which the respiratory changes described by Dr. Duckworth were heard. In my case there was the same paroxysmal pain and the same absence of pyrexia.

Dr. Duckworth states that at a time when the thyroid body was manifestly enlarged the patient "did not feel unwell." I think this was scarcely likely to be the case if septicæmia was the cause of the enlargement. In septicæmia also was pyrexia likely to be continually absent? As there was no evidence of leukæmia I cannot help thinking that the symptoms may have been due to malignant disease mplicating the bronchial glands and root of the right lung.

I have only ventured to make these comments as I have seen enlargement of the thyroid body in the case to which I refer, and also because it is evident that primary intra-thoracic cancer may go on, almost to the very close of the patient's life, without producing any symptoms save those which are due to obstructed circulation and respiration, and to the effects of nerve-pressure; emaciation, cachectic appearance, pyrexia, and night-sweats being possibly altogether absent.

I am, Sir, yours truly,
GEO. F. ELLIOTT, M.D.,
Nov. 22nd, 1875. Physician to the Hull Infirmary.

Medical News.

Royal College of Surgeons of England. — The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 18th inst. :—

Blakiston, Arthur A., L.S.A., Wallington, Surrey.
Carcenac, Edward, Mauritius.
Carey, Adrian, Guernsey.
Cooper, Henry D., LS.A., Bengal.
Darker, Frederick W., Peckham.
Dobbie, Robert J. A., L.S.A., Budleigh Salterton.
Don, Arthur C., Hammersmith.
Gairdner, John, Maidenhead.
Godfrey, Benjamin G., Clapham, Surrey.
Harmer, James R., L.S.A., Birmingham.
Hopgood, Wm. C., L.R.C.P. Ed.. Chipping Norton.
Jackson, Philip J., L.S.A., Merton, Surrey.
Knight, John T., L.S.A., Sandiacre, Derby.
Lewis, Joseph J., Milborne Port, Somerset.
Lloyd, James H., Milner-street, Chelsea.
Mathias, James, L.S.A., Cardigan.
Price, Henry E., Stamford-hill.
Shann, Frederick, Brompton.
Sherrin, Francis M., Camden-road.
Smith, Stephen M., Surbiton, Surrey.
Steddall, Thomas W., Pontypridd, South Wales.
Tredinnick, Ernest, Camborne, Dorset.
Twining, Frank T., M.B., Southport, Lancashire.
Ward, Charles, Greenstreet, Kent.

Of the 78 candidates examined during last week, 46 were approved and obtained their diplomas; 14 passed the examination in Surgery, and when qualified in Medicine will be admitted Members; and 18 failed to satisfy the Court of Examiners, and were referred to their professional studies for six months. There were also 18 candidates admitted members who had passed in Surgery at previous meetings of the Court, and who had subsequently obtained medical qualifications recognised by the College.

The following gentlemen passed the first part of the Professional Examination for the Fellowship of the College on Tuesday and Wednesday last :—

E. B. Gardner, St. Thomas's Hospital; W. L. Barker, St. George's Hospital; J. W. Smith, Guy's Hospital; G. Jackson, University College; F. Buller, Toronto and St. Thomas's Hospital; A. W. Pritchard, Bristol; F. F. Chavasse, Edinburgh and Birmingham; J. L. Jaquet, Westminster Hospital; W. R. Harrhy and A. S. Underwood, King's College; P. H. E. Freund, St. Thomas's Hospital; W. J. Roeckel and C. W. M. Moullin, St. Bartholomew's Hospital; A. H. Young, Edinburgh; E. W. Cottle, St. George's Hospital; A. Hensman, University College.

For the Final Examination for the Fellowship, which commenced on the 25th inst., there were 13 candidates.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 18th :—

Blakiston, Arthur Alexander, Wallington, Surrey.
Harmar, Jas. Raffles, Newhall-street, Birmingham.
Gathergood, B. W., Terrington St. John's, King's Lynn.
Maples, Reginald, Spalding, Lincolnshire.
Pilkington, Henry, Liverpool.
Williamson, Geo. Edward, North Shields.

The following gentlemen passed the Primary Professional Examination on the same day :—

John Chadwick, Manchester Infirmary; J. Henry Lee Macintire, Middlesex Hospital; Gordon Money Roberts, Guy's Hospital; George William Sidebotham, Manchester Hospital.

The "Scotsman" states that Professor Huxley, having received the necessary sanction of the Lord President of the Privy Council and of the Royal Society, has accepted the invitation of the Senatus of the University of Edinburgh to take charge again of the Natural History Department during next summer session, Professor Wyville Thomson's term of absence having been prolonged in order to enable him to complete the work he is charged with in the *Challenger* Surveying Expedition.

Bequests, &c., to Medical Charities. — The Annual Report of the Taunton and Somerset Hospital acknowledges legacies of £1000 under the will of Major-General Waddington, £500 under that of Mrs. Lark, and £100 under that of the Rev. C. J. Allan, and an investment of £1000 New Three per Cent. Annuities by Lady Anna Gore Langton. Mr. Abraham Mitchell has given £1000 between the three medical charities at Bradford, Yorkshire —viz., the Infirmary, the Eye and Ear Hospital, and the Fever Hospital. Mr. Wm. Robinson Johnson, of the Cliff, Wybunbury, Cheshire, bequeathed £500 to the Manchester Infirmary, £100 to the Chorlton-in-Medlock Dispensary, and £100 to the Ardwick and Ancoats Dispensary. Mr. Wood, of Longthwaite, bequeathed £250 each to the Cumberland and Westmoreland Convalescent Institution at Silloth, the Cumberland Infirmary at Carlisle, and the West Cumberland Infirmary at Whitehaven. Lord Berwick has given £100 towards the building fund of the Eye, Ear, and Throat Hospital, Shrewsbury. Miss Calvert Jones, of Bath, has given £100 to the Swansea Hospital. The Dental Hospital of London has received £100 under the will of Mrs. Carmichael. £100 has been sent anonymously towards the proposed Cottage Infirmary at Andover. The City Orthopædic Hospital, Hatton-garden, has received £100 under the will of Mr. George Bond, and a third donation of £21 from the Fishmongers' Company.

Proposed United System of Drainage. — The Improvement Commissioners for the district of Surbiton having applied to the Local Government Board to direct an inquiry with a view of forming the urban sanitary districts of Acton, Chiswick, Croydon, Ealing, East Moulsey, Epsom, Eton, Ham Common, Hampton Wick, Kingston-on-Thames, Richmond, Staines, Surbiton, Teddington, Twickenham, Wimbledon, and Windsor, together with all or some of the rural sanitary districts of Brentford, Chertsey, Croydon, Epsom, Eton, Kingston, Richmond, Staines, Uxbridge, and Windsor, into a united district for the purpose of carrying into effect a system of sewerage, the board have directed Lieutenant-Colonel Ponsonby Cox, Royal Engineers, to hold a preliminary inquiry at the Commissioners' Office, Surbiton, on the 3rd prox.

Dr. William Sedgwick Saunders has been placed on the Commission of Lieutenancy for the City of London.

Medical Appointments.

Austin, Dr. J. A., has been appointed, provisionally, Medical Officer and Public Vaccinator for the Parishes of Tongue and Farr, Sutherlandshire, vice M'Calman, resigned.

Beatty, J., F.R.C.S.I., has been appointed Surgeon to the Rathdown Hospital and Dispensary, Monkstown, Co. Dublin, vice Wm. Plant, M.D., J.P., deceased.

Boodle, R. M., M.R.C.S.E., has been appointed House-Surgeon to the Rochdale Infirmary, vice Burke, resigned.

Briggs, Mr. W. P., has been appointed Demonstrator of Anatomy in Anderson's University, Glasgow.

Buchanan, W., M.R.C.S.E., has been appointed Surgeon to the Chatham Division of the Kent County Constabulary.

Bullmore, W. K., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Falmouth Borough Urban Sanitary District.

Cole, R. M., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Gloucester Union Workhouse, vice Cookson, resigned.

Davies, Mr. D., has been appointed Medical Officer and Public Vaccinator for the No. 4, or Leigh District of the Martley Union, Worcestershire, vice Moore, who was appointed but declined, having been appointed about the same time to the No. 1 District of the Ongar Union.

Devany, P. C., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Sligo, and Strand Hill; and Medical Officer of Health for the Sligo Urban Sanitary District, vice Tucker, deceased.

Diamond, Dr. J., has been appointed Medical Officer and Public Vaccinator for the Parish of Muthill, Perthshire, vice Core, resigned.

Donovan, Dr. J. I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballincollig Dispensary District of the Cork Union, vice Rountree, deceased.

Ellis, H. D., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the Bournemouth District.

Govett, P. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 5 District of the Plympton St. Mary Union, and Medical Officer of Health for the No. 5 Sub-district of the Plympton St. Mary Rural Sanitary District, vice Adkins, resigned.

Helsdon, C. V., M.R.C.S.E., has been appointed Medical Officer for No. 4 District of the Andover Union, vice Pike, resigned.

Hill, P. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Crickhowell District of the Crickhowell Union, Brecknockshire, vice Parry, resigned.

Horsfall, J. S., L.R.C.P., M.R.C.S.E., has been appointed Public Vaccinator for the Sowerby-bridge District of the Halifax Union, vice Wm. Elliott, M.D., resigned.

Jagielski, A. V., M.D., M.R.C.P.L., has been appointed a Physician in Ordinary to the Margaret-street Infirmary for Consumption and Diseases of the Chest, vice Smith, resigned.

Laird, J., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Rosses Point, vice Tucker, deceased.

Mackintosh, A., M.D., L.F.P. & S. Glas., L.M., has been appointed Medical Officer of Health for the Clay-lane Urban Sanitary District.

Packer, W. H., L.S.A.L., has been appointed Junior Assistant Medical Officer to the Gloucestershire Lunatic Asylum, near Gloucester, vice Cassan, appointed House-Surgeon to the Royal South Hants Infirmary, Southampton.

Saer, D. P., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Pembroke Urban, and Milford Port, Sanitary Districts.

Sarjant, J., M.D., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Hailsham Union, Sussex.

Seagrave, C., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Clonmany Dispensary District of the Inishowen Union, Co. Donegal, vice Coyne, resigned.

Shewen, A., M.D., has been appointed Assistant-Physician to the Metropolitan Free Hospital.

Stokes, Mr. W., Professor of Surgery, Royal College of Surgeons, Ireland, has been appointed a Governor of the House of Industry Hospitals, Dublin, vice Hamilton, deceased.

Terry, W. F., M.R.C.S.E., has been reappointed Medical Officer of Health for the Tiverton Urban Sanitary District: £50 per annum.

Thomas, L., L.R.C.P.Ed., L.F.P. & S. Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the Amlwch District of the Anglesey Union, vice Hughes, resigned.

Webb, Mr. V. G., has been appointed Demonstrator of Anatomy in Anderson's University, Glasgow.

Wilson, J., M.D., C.M., M.R.C.S.E., has been appointed a Physician to the Worcester General Infirmary, vice Inglis, resigned.

Wood, W. E. R., L.R.C.S.Ed., has been appointed a Resident Physician's Assistant at the Middlesex Hospital, vice Davis, whose appointment has expired.

Births, Marriages, and Deaths.

BIRTHS.

Baker.—On the 21st inst., at Walter House, New Romney, Folkestone, the wife of Charles Eaton Baker, M.R.C.S.E., of a daughter.

Boggs.—On the 21st inst., at Paris, the wife of Alex. Boggs, M.D., late of H.M.'s Indian Army, of a son.

Hemsted.—On the 17th inst., at Wellingborough, the wife of Edwin Hemsted, M.D., of a daughter.

Liddard.—On the 16th inst., at Ladbroke-grove-road, the wife of Thomas Liddard, L.R.C.P.L., of a son.

Pottinger.—On the 23rd inst., at Melville Hospital, Chatham, the wife of Robert Pottinger, Deputy Inspector-General of Hospitals and Fleets, of a daughter.

Smith.—On the 15th inst., at Worthing, the wife of Cleveland Smith, M.R.C.S.E., of a son.

MARRIAGES.

Gunn—Gunn.—On the 17th inst., at Edinburgh, John Jamieson Gunn, M.B., to Isabella, daughter of the late Robert Gunn, Esq.

Russell—Brewer.—On the 17th inst., at St. Luke's, Westbourne-park, George Ireland Russell, M.R.C.S.E., to Emma, widow of the late John Brewer, Esq.

DEATHS.

Brown.—On the 27th ult., on board the Steam-ship "Sumatra," on the voyage from Aden to Bombay, James Brown, M.B., C.M., Surgeon in the P. & O. S.N.Co.'s Service.

Brown.—On the 14th ult., at Fraserburg, Cape of Good Hope, John Henry, infant son of John Brown, M.D., L.R.C.S.Ed., aged 7 months.

Chapman.—On the 19th inst., at Leckhampton, Henry Thos. Chapman, F.R.C.S.E., aged 69.

Eaton.—On the 15th inst., at Hamilton House, Moffat, James Eaton, M.D., formerly of the Hon. E.I.Co.'s Service, aged 69.

Greenup.—On the 23rd inst., at Farnworth, near Warrington, Henry Greenup, M.D., aged 65.

Henderson.—On the 16th inst., at Scorton, Yorkshire, J. F. Henderson, M.D., aged 32.

Jones.—On the 17th inst., at Weston-super-Mare, E. S. Jones, L.R.C.P.Ed., aged 31.

Roberts.—On the 17th inst., at Holyhead, John Roberts, L.R.C.P.Ed.

Ward.—On the 16th inst., at Northbourne, Chobham, Samuel M. Ward, M.B., aged 40.

Webster.—On the 19th inst., at Dulwich, Geo. Webster, M.D., aged 78.

Wilson.—On the 15th inst., at Whitby, John Wilson, M.D., aged 82.

Woods.—On the 19th inst., at Rathfriland, Co. Down, William Woods, L.R.C.S.Ed., aged 64.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

Vivisection.

Dr. Arthur Gamgee, of Owens College, in a lecture at the Manchester Athenæum a few days ago, justified the restricted employment of experiments on living animals on the ground of the important discoveries which by its means had been made for the benefit of humanity, and the possibility of such experiments being performed with the infliction of but little real suffering on the subjects of them. The lecturer pointed out, however, that many interesting experiments are made on the living tissues of animals that had just died, which experiments, though properly included in the term "vivisection," involve no suffering at all. After deprecating the indiscriminating outcry which had been raised against physiological experimentation, Dr. Gamgee expressed his belief that the forthcoming report of the Vivisection Commission would be of a nature to set aside the fears and apprehensions which had arisen in the public mind, and that the Commissioners would show that the horrifying statements which had been made could not be borne out by facts.

Aristotle's Notion of Right-Handedness.

Mr. Pearson, of Emmanuel College, lately read a paper before the Cambridge Philosophical Society on "Aristotle's Notion of Right-Handedness," and added some remarks on a theory of his own on the subject. After referring to the paper by Dr. Hollis on this subject, communicated last year (Nov. 30th, 1874: *Journal of Anatomy and Physiology*, vol. ix., p. 263), the speaker stated that he had been led by Aristotle's great reputation to inquire what his views on the subject might have been. Partly from a perusal of much that Aristotle has written on the subject, but mainly from the new Index by Prof. Bonitz, he gave a *résumé* of the passages bearing on the subject. These passages seemed to show that Aristotle considered (1) that the right hand or side was naturally the source or origin of motion, (2) that in nearly all living creatures capable of motion it is the better or stronger side, (3) but that while the heart is always the origin of vitality, it is in the human race only set towards the left side of the body; in all other living creatures it is in the centre of the body or trunk (ἐν μεσῷ κεῖται τοῦ ἀναγκαίου σώματος). And though it may be a fair question how far Aristotle was misled by the preferential use of the right hand by the human race to attribute an excellence in the right side to the animal world, there can be no mistake about the distinct language in which he does so. Some observations were added about the terms in which Mr. Lewes in his work on Aristotle (1864) criticises some errors into which that writer has fallen in his works on Natural History, while it was admitted that he is probably right in considering that there is no reference in Aristotle's writings to the anatomical examination of any but animal subjects; though the fact that Macrobius ascribes to Erasistratus and Herophilus, two celebrated physicians of the succeeding generations, the practice not only of dissection but of vivisection of human bodies, shows, if the story is true, that public opinion could not have been quite unprepared for it. Mr. Pearson also referred to a passage in the *Encyc. Britann.*, art. Comp. Anatomy (§§ 202—205), ed. 1810 (but not occurring in later editions), in which the preferential use of the right hand is discussed, and ascribed to a natural peculiarity in the form of the subclavian and carotid arteries on that side, and in which it is stated that a similar preference for the right side may be traced in some dogs, if not in horses. The speaker said, however, that he would not answer for the existence of such a preference himself in those animals, nor in the lion and camel, to which Aristotle (and Pliny after him) especially ascribe it. He concluded by exhibiting a lobster, of which the right claw is distinctly larger and stronger than the left, as is specially mentioned by Aristotle (οἱ καρκινοὶ…τὴν δεξίαν ἔχουσι χηλὴν μείζω καὶ ἰσχυροτέραν…).—Mr. Neville Goodman considered that the paper had only shown the superiority of the inductive to the speculative method of reasoning, although proving Aristotle's skill in adducing facts from the great repertory of nature in favour of his own view. He quite admitted that many facts indicate the right side as having a preferential motor function. In addition to the examples given, the whole order of Gasteropods were mentioned as having their chief organs on the same side, while the ordinary snail exhibits an excessive development in the same direction. To this rule, however, there are many exceptions. Again, the flat-fish (Pleurovectidæ), though quite asymmetrical in their form, have not by any means always their motor function to the right; the sole being generally developed to the right, the turbot to the left. He doubted the preferential use of the right side in animals; and though in ancient art the left leg is advanced, the position he thought purely conventional.

Mr. S. C. Ashley.—We regret we cannot comply with our correspondent's request.

Typhoid and Distemper.

To the Editor of The Lancet.

Sir,—The communications published in your journal from "H. H." and Mr. Smithard, relative to the supposed connexion between distemper in the dog and typhoid in man, open up a question of especial interest to us veterinary surgeons.

Whilst fully admitting the possibility of such a mode of origin of enteric as that suggested by "H. H.," my experience of distemper in the dog is that no fever of any kind has ever seemed to be communicated to any of the attendants on many cases, nor after post-mortems thereof. A family employing a coachman, and calling in a veterinary surgeon to attend upon a Newfoundland dog, would presumably occupy a *large* house. The family being from home, the coachman *slept* therein; the watercloset and cistern arrangements having been at comparative rest some time, if as imperfect as they are in many large houses, might have allowed an emission of sewer gases, or contaminated the water-supply, of which probably the coachman and his guest partook in some form or other; the coachman, imbibing (and perhaps inhaling) larger or repeated quantities of the water or gas, or both, succumbed. If the house was subjected to the precautions which the occurrence of a case of typhoid would render imperative before reoccupation, the non-appearance of further cases therein would not exclude my hypothesis that the enteric of the coachman and groom might be due to causes referable to the house.

As the subject is one of undoubted importance, it would be satisfactory to be assured that the probable causes adverted to with respect to the domicile had been carefully eliminated.

I am, Sir, yours faithfully,
Thomas Paton,
Veterinary Surgeon, Army Service Corps.
Dublin, Nov. 17th, 1875.

Mr. Henry M. Fernie.—The qualifications are very good, but are not in accordance with the copy of the rule as sent to us in our correspondent's letter. The rule of the infirmary should be adapted to the existing state of law and opinion.

Manchester Royal Infirmary.

Dr. J. E. Morgan, Physician to the Manchester Royal Infirmary, has addressed a third letter to the *Manchester Guardian* in reference to the removal of the institution with which he is connected—a subject on which we have already commented. In this communication Dr. Morgan enters into a consideration of the part of Manchester most suitable for a new hospital, and points out the merits of the site selected by the Medical Committee for the building—namely, a plot of ground of twenty-one acres at Rusholme, on the southern side of the town. The claims of this site are made to rest on its possession of the four features which, according to Miss Nightingale, ought to characterise the position of a hospital: "First, and before all others, purity of the atmosphere; second, the possibility of conveying the sick and maimed to it; third, accessibility for medical officers and for the friends of the sick; fourth, convenient position for a medical school, if there be one." The number of beds occupied in the present infirmary averages 200, but the proposed hospital would accommodate 400 in-patients, and there would be ground and space sufficient to admit of the construction of new wards, when required, capable of holding 200 additional beds. The cost of the purchase of the land, the erection of the buildings, the furnishing the wards, &c., is estimated at £220,000.

Adelphos.—We are not able to give the required information.

Military Midwifery.

To the Editor of The Lancet.

Sir,—There is no class of women who are worse off for medical attendance during labour than soldiers' wives; for, above the rank of paupers, they cannot command medical attendance from the union; they are, for the most part, too poor to pay a qualified practitioner; and the regimental officer either finds himself unfit or unwilling to undertake the office of accoucheur. The result is that in garrison towns old "Sarey Gamp" still flourishes with all the disagreeable and dangerous sequelæ of crass ignorance, and the medical officer is frequently sent for to attend some of the most serious accidents of childbirth, resulting from the unskilfulness of such women, who, without the rudiments of the art they profess, are permitted to call themselves midwives and practise in barracks, but only too willing to saddle any responsibilities on the medical officer of the corps. If women and children belonging to a regiment are entitled to "medicine and attendance" according to regulations, surely the authorities ought to provide *qualified* midwives, or hold their own medical officers responsible for the duties; and to illustrate the necessity for such a proceeding I subjoin notes of four cases which occurred in my own practice within a few months.

Case 1.—A "midwife" called upon me, and asked for "some ointment for the piles" for one of her patients whom she had delivered two days previously, and on giving what passed for a fair description of external hæmorrhoids, she got some gall-and-opium ointment to apply. Two days afterwards she came to say that Mrs. —— was in great pain, and the "piles" were very large. On visiting the patient, I found her in extreme agony, with about eight inches of the rectum protruding, the gut deeply congested from strangulation, and, I need scarcely say, I found a very serious difficulty in returning it, and a tedious convalescence ensued.

Case 2 was attended by a medical practitioner, who lived three miles from the patient's house. He had spent the greater part of a night with her; the labour was tedious, but without complication, and he left her apparently in the most favourable circumstances. At 8 a.m. I was suddenly called to see her, and on entering the room a few minutes afterwards I found her lying on her back, totally insensible, her arms thrown up over her head, and with one gasp she expired before I was ten seconds at her bedside. I do not know the cause of death, and, strange as it may seem, *no one ever asked me!*

Case 3.—At the request of a "midwife" I was sent for to see a woman who had been delivered of a child ten hours previously, and on my arrival I was informed that the head of a second child was "in the birth." On examination I found the placenta lying in the vagina, and it was removed without the slightest difficulty. This the midwife had mistaken for a second child's head, and so entailed upon me a three-mile walk on a cold and dirty night.

Case 4.—Also attended by a pseudo-midwife. When called I found the placenta had been retained for *fourteen hours* without any effort having been made to remove it. There was hour-glass contraction of the uterus, and it was only by the greatest perseverance and care that it could be extracted, much exhaustion and a long convalescence being the result.

There was also a fifth case, resulting in puerperal fever and death, in which I had reason to believe that retained placenta was the *origo mali.*

Yours faithfully,
November, 1875. Robert Nelson, Staff Surgeon, late R.M.A.

"Social Purity Alliance."

Mr. John Jackson, secretary of the above Society, sends us a disclaimer. The object of the Alliance is "to promote the practical recognition of the principle that the Law of Purity is of universal obligation on all men and all women alike, and thereby to counteract the causes of Prostitution." Mr. Jackson indignantly repudiates any connexion between Mr. Theodore Tilton of New York and the Alliance.

Alienist.—In the United States the certificate of one physician is held a sufficiently valid proof of the insanity of a person. The law requiring the certificates of two practitioners on oaeh was repealed in 1850—a retrograde step in the opinion of many. The form of certificate is as follows:—"I, A. B., physician, of the township of ——, in the county of ——, do certify that I have examined into, or am acquainted with, the state of health and mental condition of C. D., in the township of ——, in the county of ——, and that he is, in my opinion, insane, and a fit subject to be sent to the State Lunatic Asylum."

Epsom College.

We have received a letter from Mr. J. Taylor, F.R.C.S., enclosing one which he had received from Dr. Barnes at Epsom. We regret that any difference should have arisen between these gentlemen with regard to the treatment of Mr. Taylor's son. It appears that the boy was suffering from chicken-pox, and as Mr. Taylor felt anxious about him, he visited the College, and then considered that his son required medicines. Dr. Barnes resented this interference, and hence the correspondence in question. We agree with Dr. Barnes that the position of the medical officers would be intolerable if they are to be interfered with in their treatment of the cases committed to their care. At the same time the question is one requiring great delicacy and tact in dealing with. On the one hand, the medical officers should make every allowance for the natural anxieties of parents, while the latter should remember that the medical officers are appointed by the Council, who, being themselves members of the profession, are therefore excellent judges of the qualifications of the men whom they appoint to this office. We should say that, except in severe and urgent cases, the parents of the boys ought not to interfere.

Mr. Jas. W. Ayres (Greenwich) is thanked for his communication, but we think that our correspondent's suggestion would be considered an impracticable one.

Waterclosets in Churches.

To the Editor of The Lancet.

Sir,—I am on the Committee for rebuilding our parish church, and last year, when the conditions for the architects' competition were arranged, obtained the consent of the Committee that a watercloset in connexion with the church should be a *sine quâ non.*

We are now far advanced in the building, and in considering the locality best adapted for a safe to contain the documents and registries, came to the conclusion that the part set aside for the W.C. was peculiarly fitted for the safe, and it was agreed to appropriate it for this purpose. The architect pointed out how in a much more suitable spot a W.C. might be built. Great opposition has arisen to such an erection at all; the clergy oppose it, architects do not like it, and I may add that in the first instance a Church Building Society, from whom we sought a grant, actually almost refused it because there was a provision for a W.C.

I am told that scarcely any church has one, that it is unnecessary, open to all kinds of evils, and I am rather afraid that the idea will be shelved (though I do not intend to withdraw my proposition for one). I believe that it *was* always a necessary addition, and it *is* now much more so when churches are open all day, and some one must be on the spot many hours to take care of the contents of the edifice.

May I then ask, through you, from medical men in all parts whether it is a fact that in the churches near them, and especially in the modern ones, there are no W.C.s, and whether it is within their knowledge that evil has arisen from the absence of what I believe to be a necessary sanitary arrangement?

An early reply will much oblige, yours obediently,
William Tiffin Iliff, M.D.
Kennington-park-road, Nov. 23rd, 1875.

Relieving Officers and Medical Orders.

The absurdity of the system which gives power to the relieving officer to refuse relief ordered by the medical officer has received another illustration. A poor labourer suffering from starvation and slight pneumonia was ordered by the doctor, on Tuesday, 3 lb. of mutton. The relieving officer declined to give it, and told the poor man's wife that she should have come before the Board met. The next day the order for mutton was repeated, and the sagacious relieving officer refused again, but sent six loaves instead. Meantime the husband was craving for meat, and could not eat bread. His weekly wage prior to his illness was ten shillings. He had five children, three of whom were unable to work. It is therefore easily intelligible that his reserve of vital forcc was slight. He died on the Friday. The post-mortem revealed nothing but an empty stomach and slightly inflamed lung. The jury requested the coroner to administer a severe rebuke to the relieving officer. They would have done still better to have requested him to draw up a rebuke of a system which allows a relieving officer to withhold relief in such a case, though ordered by a medical officer.

A. B. C.—We believe, first-class fare each way, and one guinea per diem for each day actually and necessarily absent from home.

Dr. H. D'O. Foote.—Yes.

"Affairs in Glasgow."

Our Glasgow correspondent writes as follows —

Dr. Russell has corrected the statement I made to you, "that a somewhat personal and hasty correspondence took place between the superintendent of the infirmary and Dr. Russell." "The fact is," he continues, "I have never written a line to the 'daily papers' on the subject, or directly or indirectly taken any part in the controversy, excepting officially through the minutes of the Local Authority."

As this statement in the first place questions the accuracy of my report, and in the second may mislead anyone not familiar with the dispute, permit me to say that the minutes of the Local Authority are public property. They are duly and fully reported in the daily papers, with the discussions which afterwards ensue. Any remark in the minutes is simply a letter addressed to the editor of the paper, and through the paper to the public.

Dr. Russell has elected to misunderstand the term "correspondence" which I used, and I regret that he has done so. Technically he may be right; practically, I hold, and from the accompanying document and paper which I furnish you, you must observe, that his excuse is a mere play upon words, for the facts of the "somewhat personal and hasty correspondence" have become notoriously public property.

INDUSTRIAL INFANTICIDE.

ONE of those half-told stories—under the guise of medical evidence,—chiefly remarkable for the waste of valuable information, is reported from Wigan. It is stated that an "infant met its death from failure of the heart's action caused by intestinal irritation," consequent upon being suckled by a mother who had been away all day working in a factory. The hypothesis set up seems to have been that the milk had been rendered "sour" by retention for many hours. We offer no opinion as to the plausibility of this presumption. There is probably just enough ground in fact to support a theory of causation something like that propounded. But is the explanation offered the true one? It would be a grave inference, if proved, that mothers labouring should not nurse their offspring, or, nursing, should not be allowed to labour. This was the deduction drawn from the facts. We venture to think that, before any conclusion is arrived at, it would be well to ascertain the precise medical data upon which the judgment is to be based. Unfortunately the Coroner's Court is not available for scientific purposes, and *evidence* is not trustworthy testimony to medical facts, whatever may be its relation to legal truth.

Multum non Multa.—The work referred to is adequate for the purpose, and is recent.

Mr. D. M. Ross.—Supposing the facts to be simply as stated, we do not see how our correspondent could have done otherwise than he did.

T. H. J., (Shirehampton.)—The questions for past examinations have been published in the Army Medical Blue-books.

INCORRECT WRITING.

To the Editor of THE LANCET.

SIR,—On page 299 in "Dougall's Art of Shooting" is the following:—"The difficulty of trapping the hooded crow and of holding the raven when trapped have induced the use of that detestable strychnine, the mere effluvium of which in an apothecary's shop, when making a purchase for a nobleman, so sickened me as to give me a lively horror of it ever since. *Horresco referens.*" Mr. Dougall should be told that strychnine is colourless and *inodorous.* I am, Sir, yours truly,

November 22nd, 1875. T. F.

Z. X. Y.—Yes, the beneficial action of jaborandi on diabetes has been observed, amongst others by Dr. Laycock, who published a paper on the subject in our columns in August last.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Dr. Roper, London; Dr. Gwynne, Hampstead; Mr. Vance; Mr. Hudson, Chatham; Mr. McGough, Monaghan; Mr. Hagon, Worcester; Mr. Paton, Dublin; Mr. Jeaffreson, Newcastle; Mr. Barraclough, New Wandsworth; Dr. Cassells, Glasgow; Mr. Meadows, Hastings; Mr. Williams, Barrow-in-Furness; M. A. E. Baines, London; Dr. John Brunton, London; The Honourable Francis Scott; Mr. Fitzgerald, Melbourne; Dr. Boggs, Paris; Mr. Taylor, Wargrave; Mr. Hall, Blackheath; Mr. Jackson, London; Mr. German Reed, London; Mr. Wolff, London; Mr. Webb, Glasgow; Mr. Nankivell, Chatham; Mr. Bell, Uppingham; Dr. S. Ringer, London; Dr. Warden, Birmingham; Mr. Robinson, Denbigh; Dr. Taylor Johnstone; Dr. Thursfield, Bridgnorth; Mr. W. Buchanan, Chatham; Dr. Wardell, Tunbridge Wells; Mr. Ashley, London; Dr. Boyland, Baltimore; Mr. Nelson, Gosport; Dr. Barton Smith, London; Mr. Kite, Welwyn; Mr. Smith, Ware; Dr. Shewen, London; Dr. Elliott, Hull; Dr. Wiltshire, London; Dr. Hope, Chobham; Dr. Smith, Loftus-in-Cleveland; Messrs. Latimer, Plymouth; Dr. Hickland, Portsmouth; Dr. Iliffe, London; Mr. Mills, London; Messrs. Weldon & Co.; Dr. Tuckwell, Oxford; Mr. Harvey, Frome; Mr. Wyon, Bruton; Mr. Bridge, Axminster; Mr. Smith, Watford; Mr. Warton, Gravesend; Mr. Foote, Rotherham; Dr. Railton, Old Trafford; Dr. Beatty, Dublin; Mr. Baker, New Romney; Dr. Dickenson, Stalybridge; Dr. Gilland, Wallingford; Mr. Clever, Lozells; Mr. Brown, London; Mr. R. Bayly, Stourbridge; Dr. Ayres, Greenwich; Multum non multa; An Old Subscriber passing through Brussels; A Subscriber; T. H., Ireland; Edinburgh; A Nurse in Difficulties; Adelphos; The Editor, Co-operative Review; J. F.; A. B. C.; F. R. C. S., Sudbury; F. S. A.; Omega; J. B., &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Brown, Haddington; Mr. Brown, Brighton; Dr. Thompson, Hawes; Dr. Ross, Badcall; Mr. Kavanagh, Coventry; Mr. Morrell, Bradfield; Mr. Barrett, Wolverhampton; Mr. Stead, London; Dr. Stewart, Nottingham; Mr. Ashworth, Bourn; Mr. O'Brien, London; Mr. Holmes, London; Mr. Pettinger, Chatham; Dr. Greenup, Farnworth; Mr. Fox, London; Mr. James, Taibach; Mr. Hodges, London; Dr. Martin, Walkden; B. A., Leeds; Medicus, Glasgow; R. F. E., Rotherham; Medicus, Spennymoor; M.D., Twickenham; B. A., St. Ives; F.R.C.S.; Dessimus; Medicus, Halifax; H. M. J., Swansea; M. D., Brighton; W. O.; D. M.; E. A.; Medicus, Islington.

Surrey Advertiser, East London Observer, Birmingham Morning News, Cork Constitution, Liverpool Post, Lymington Chronicle, Huddersfield Chronicle, Metropolitan, Western Morning News, Manchester Guardian, Newcastle Chronicle, Tavistock Times, Surrey Advertiser, Cardigan Advertiser, Sheffield Telegraph, Worcestershire Chronicle, Leeds Mercury, and *Sheffield Independent* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, Nov. 25TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 19	29·69	W.	53	55	...	57	52	...	Hazy
" 20	30·03	N.W.	35	39	...	41	37	0·02	Cloudy
" 21	30·02	W.	37	40	...	45	35	...	Clear
" 22	30·17	N.E.	36	39	...	44	35	...	Overcast
" 23	30·20	N.E.	38	40	...	45	37	...	Overcast
" 24	30·22	N.E.	38	40	...	42	39	...	Cloudy
" 25	30·05	N.E.	34	37	...	...	36	...	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Dowse, "On External Mitral Stenosis, with Remarks."—Dr. Crisp, "On a late Epidemic of Scarlatina, Epidemic Sore-throat, and Erysipelas in the South-Western part of Chelsea."

Tuesday, Nov. 30.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Dec. 1.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Heywood Smith: "Notes of a Case of Ruptured Vagina during Labour, with Recovery."—Dr. Wiltshire: "Spontaneous Rupture of the Vagina; Recovery."—Dr. Routh, "On a Case of Extra-uterine Fibroid successfully treated by Gastrotomy." — Dr. John Williams, "On the Mechanical Action of Pessaries."—Dr. Oswald, "On Cæsarean Section."—And other communications.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Prof. Rupert Jones: "Remarks on the Foraminifera, with special reference to their Variability of Form, illustrated by the Cristellarians."

Thursday, Dec. 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HARVEIAN SOCIETY.—8 P.M. Harveian Lectures: Dr. Sibson, "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination."

Friday, Dec. 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 4.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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A Clinical Lecture

ON

DIAGNOSIS,

Delivered at University College Hospital on November 18th, 1875.

BY SIR HENRY THOMPSON,

SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE HOSPITAL.

(*Reported by* Mr. G. BUCKSTON BROWNE.)

GENTLEMEN,—You will recollect I announced at our last meeting that the subject for our inquiry to-day would be the Diagnosis of Diseases of the Urinary Organs. Now let me remind you at first starting that the diagnosis of disease is the one important thing that you come to the hospital to learn.

I know that the youth, when entering on his professional career, and also that heterogeneous body which is designated "the public," and to whom he at present belongs, regard, and quite naturally, the treatment of disease as the great subject which is to occupy all his time and powers. True it is his final object, but it is essential for him to know that the art of diagnosis is far more difficult and important to attain, that it demands labour, study, and experience, and that without it treatment is useless, or even worse, for it may be injurious. But let him be assured that if the diagnosis be intelligently made, then treatment is comparatively easy.

It must be admitted, however, that there is some difference between medicine and surgery in relation to this statement. The medical art may almost be said to culminate in diagnosis. I can remember the time when to distinguish between mitral disease and functional disturbance was more a matter of guess-work than of demonstration. At that period the early presence of phthisis was undistinguishable, and the arrival of its later stages a subject for widely differing opinions even among experienced men. These conditions verified, however, as is quite possible to the advanced among you, thanks to modern methods of physical examination, there can be small difficulty about the treatment, and little difference of opinion.

In surgery the diagnosis is no less important, but the treatment is less easy. The operative measures which often follow demand practical skill and certain other qualifications. Even here, however, diagnosis must take the first place, because operative treatment, being often of a very grave character, cannot be undertaken until after a correct and intelligent appreciation of the facts has been obtained.

What is diagnosis? It consists, first of all, in the acquisition of facts; and, secondly, in obtaining legitimate inferences from those facts.

Now the acquisition of facts is one of the most difficult things in the world. No two persons ever agree in their statements descriptive of an occurrence to which they both have been witnesses. If I bring a case of disease before you here, and ask ten of you to take as many histories of it, I will undertake to say that each one will materially differ, and that I shall get ten histories, varying from each other in some important particulars. Each will be approximately true; none will be absolutely correct. You must then diligently learn to observe, and to do so well requires special qualities and much practice. Is it not a very striking illustration of what I have said, that if two witnesses relate precisely similar stories of any given event, the suspicion of collusion is always instantly suggested, and is, indeed, very naturally aroused? It has often struck me that the qualities which men of our profession require, and which we should endeavour to cultivate, are precisely such as are necessary to those who are engaged in the exercise of the legal profession; and the men who are really successful in either profession have much in common in intellectual character and attainment. In our profession, equally with that of the law, careful examination of the statement, acute and subtle cross-examination of the witness, and a keen pursuit of the simple fact are essential; and, finally, a calm judicial habit of weighing the facts when obtained. And in both professions the issues raised are equally weighty, and demand in either case the highest qualifications in the individual.

But next, I have not only to call your attention to the necessity for making a careful and accurate diagnosis, it is equally important that you should learn to make a *rapid* one. For it must be admitted that our proceedings differ from those of the law in this respect; for while, as we have seen not so long ago, several months may be devoted to the critical investigation of a legal claim, and a considerable period of time must mostly be expended on the proof or disproof of any allegation, our decisions are required without delay. While the doctors are deliberating the patient is dying. Hence you see that the ability to arrive at a diagnosis rapidly often constitutes the essence of success. This art, also, it is my aim to teach you so far as I can.

To this end, and what I have to say applies to all departments of our art, I advise you always to pursue a uniform method. Order and uniformity are essential elements in directing the necessary investigation; and after much thought and experiment, for my own private guidance as well as for yours, I have adopted the following system. Relative to the class of diseases we are studying, there are three methods of obtaining the facts required:—Firstly, by questions of the patient; secondly, by physical examination of the body; thirdly, by examination, chemical and otherwise, of the secretions.

First, by questions. There are four chief questions which I always employ, and always in the same order. They ought, with the minor inquiries which branch out of them, to determine six out of seven cases which come to you. They relate to four signs and symptoms more or less met with in patients affected with complaint in any part of the urinary organs. Frequent micturition; painful micturition; deviation in the character of the urine itself from the healthy standard; the addition of blood to the urine.

The first question, then, which I invariably ask to any patient so affected is, "Have you any, and, if any, what frequency in passing water?" Then, as a branch of that question, springing out of it, I ask whether the frequency is more by day or by night, or influenced by movements, or by any particular circumstance? How the question applies I will tell you afterwards.

Then, secondly, I ask whether there is pain in passing urine, and whether before, during, or after micturition? Inquire also if pain is felt at other times, and if produced or aggravated by quick movements of the body. The locality of the pain is also to be precisely ascertained.

Then I ask, as a third question, "Is the character of the urine altered in appearance, or is there anything unusual in the stream itself? Is the urine turbid or clear?" Possibly the patient will tell you that it is turbid, but you find, on questioning further, that it was passed perfectly clear, and only became thick after cooling or standing. Also, as arising out of this, you may often ask, "Does it vary much in quantity?" noting of course the specific gravity. The healthy standard, both as regards quantity and density, however, must be allowed very extensible limits, and both, I need not tell you, are very important elements in regard of renal disease. Then, as regards the stream itself, it may be small, forked, or twisted, or it may stop suddenly when flowing.

The fourth and last question is, whether blood has been passed in any way with the urine; whether the mixture is florid or brown, light or dark; whether the blood and urine are intimately mixed, or whether the blood is chiefly passed at the end or at the beginning of making water; or, lastly, whether it issues independently of micturition altogether.

After dilating on these inquiries and showing the manner in which, by their aid, the differential diagnosis of various diseases could be easily established, Sir Henry Thompson proceeded to describe the methods and instruments necessary for prosecuting physical and other examinations of the patient and of his secretions.

ON A CASE OF

SIMULTANEOUS EMBOLISM OF CENTRAL RETINAL AND MIDDLE CEREBRAL ARTERIES.

By W. R. GOWERS, M.D.,
ASSISTANT-PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, AND TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

Several cases of retinal embolism have been recorded in which there also occurred at some other time embolism of a cerebral artery. In the following case the two accidents appear to have been simultaneous. This rare coincidence, and the circumstance that a post-mortem examination enabled the diagnosis to be verified, render the case one of considerable interest. The patient was in University College Hospital, under the care of Sir William Jenner, to whom I am indebted for permission to publish my notes of the ocular condition, and the account of the general symptoms and of the post-mortem appearances, which are taken from the hospital case-book. It will be convenient to describe, first, the case in its general aspect; and, afterwards, the ophthalmoscopic appearances, and the results of the microscopical examination of the eyeball.

C. H. H——, aged thirty, carpenter, a healthy-looking man, was admitted Jan. 29th, 1870. In early life he had an attack of "low fever," attended by pains in the joints, followed by chorea and by weakness in his right arm. A year later he had a similar, less severe, febrile attack. During the six months before his present illness he suffered from cough, shortness of breath, and occasional slight hæmoptysis.

Without premonitory symptoms, he suddenly, when out walking, lost consciousness, was picked up insensible, and brought to the hospital. Soon after his admission he had partly recovered consciousness. There was then complete paralysis of the right arm and leg, and slight paralysis of the face. At the heart there was a loud systolic apex-murmur, with accentuated pulmonary second sound, and evidence of dilatation of the left ventricle, the impulse extending outside the nipple line in the fifth interspace. The urine contained no albumen.

On the following day he had so far recovered consciousness as to be able to speak, but answered "Yes" to all questions, uttering no other word. He turned on his back when told, but opened his mouth when told to shut his eyes. His stools and urine were passed unconsciously.

Three days after his admission he still answered "yes" and "no" indiscriminately to all questions. The hemiplegia continued unchanged. A day later, when asked where he suffered pain, he answered "in the head," but when asked his name he answered only "yes, no."

In this state he continued for some weeks.

On Februrary 21st it was noted that there was slight improvement both in limbs and speech. When the assistant, Mr. Price, went up to his bedside he attempted to say something, but only got out "ning." On Mr. Price suggesting "good morning," he immediately repeated it. When trying to converse with other patients, one of them began to sing a song, and while singing the first verse H—— hummed it with him, and then took it up and sang the second verse by himself, articulating the words fairly well. Afterwards, however, he was able to speak no better than before.

In the beginning of March he became worse, began to vomit food and cough up blood. The heart's action became more feeble and irregular, so that the murmur could be heard only with a few beats of the heart. The legs became œdematous, that of the right being greatest, the right arm also. The urine contained blood. The paralysis of the face had increased a little, but he had become able to move the leg slightly as he lay in bed.

By the middle of March all the evidences of cardiac failure were more intense, and on the 20th he got some œdema of the left arm, with hæmorrhagic spots up to the bend of the elbow. Signs of effusion into the right pleura showed themselves. On the 25th the distension of the left arm became extreme, bullæ formed on the right foot, and hæmorrhage occurred from the nostril. He lingered until the 29th, when he died.

Post-mortem examination.—Brain: There was a little excess of fluid under the arachnoid, but no general flattening of convolutions. The ventricles contained no excess of fluid. The right hemisphere was healthy throughout. In the left hemisphere were two lesions. The smaller was an area of softening on the outer surface of the left hemisphere, at the posterior part of the parietal lobe; it measured one inch by three-quarters. The two corpora striata presented a marked difference. The left was less full than the right, especially behind; the lining membrane of the ventricle over it was opaque, and the vessels too numerous; and at its junction with the optic thalamus it was softened over an area three-quarters of an inch in diameter, and of a yellowish colour. On section the disease did not extend into the optic thalamus, but passed outwards to the fissure of Sylvius, the tint of the softened portion varying from creamy white to pale orange. Convolutions of the island of Reil destroyed; lowest frontal convolution a little damaged. The arteries at the base appeared healthy. The right middle cerebral contained fluid blood. In the left middle cerebral, within the Sylvian fissure, was a clot half an inch long, colourless, firm, easily detached near the orifice of the artery, but above adherent to the inner coats. On each side of the clot was a little fluid blood. Branches from this occluded artery passed directly into the diseased portion of the corpus striatum. The anterior cerebrals and anterior communicating arteries were empty. The heart was much diseased. The mitral orifice was thickened and roughened, and calcareous on its auricular surface. Old clots were contained in the auricular appendices and in the apex of the right ventricle. In the lungs were numerous angular patches of pulmonary apoplexy. Each kidney contained an infarct pyramidal in shape, the base on the surface. A similar infarct was contained in the spleen.

Condition of eye.—Four days after his admission into the hospital, and five days after the onset of the paralysis, an ophthalmoscopic examination was made for the first time. Only the indirect method of examination was employed. The fundus of the right eye was found to be normal. In the left eye the optic disc could not be distinguished, being veiled by a greyish-white cloud; its position could be noted by the convergence of the vessels. Another white cloudy opacity of considerable size existed in the retina near the yellow spot. Both these had soft edges, were moderately white, and the retinal vessels appeared partly concealed by them. The arteries were small, the veins large and distinct.

On the following day the appearances in the eye were nearly the same, the white opacity in the centre of the fundus being continuous with that near the optic disc. In front of the former a distended vessel crossed transversely just above the position of the yellow spot, and small twigs passing from this vessel at right angles on each side were abnormally conspicuous against the white background. On examination it was clear that he could not see with this eye.

During the next week these white patches gradually lessened, and the outline and surface of the disc became clear. As the vessels became more visible the diminished size of the arteries was distinct. By Feb. 18th the large white patch near the yellow spot had gone, leaving only a little irregular cloudy and granular whiteness. The optic disc was quite distinct in its inner portion, while the outer half was still somewhat hazy. A line of whitish opacity extended upwards and outwards towards the yellow spot, and, curving round and becoming fainter, blended with the traces of the mischief near the yellow spot. In the first part of its course it accompanied a vessel. Below the disc was another limited opacity bounded on each side by a vessel.

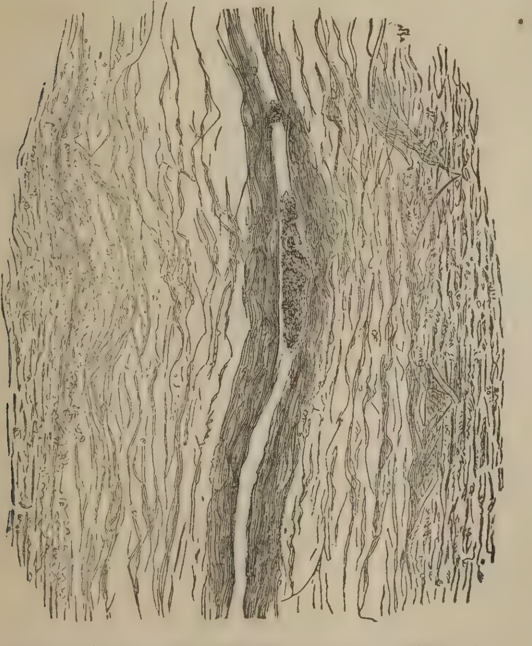
The veins were all perceptible and tolerably uniform. The arteries were much narrowed on the optic disc and for some distance around; they appeared mere threads. Not very far from the disc, at a distance variable in different vessels, but usually about twice the diameter of the disc, they again became conspicuous. There was a distinct darkish opacity of the retina all round the optic disc.

On March 1st the optic disc remained clear; the vessels, both arteries and veins, had diminished in size, the former, on the disc, being reduced to the merest threads. They were narrower at a distance from the disc than formerly. In one vein the column of blood was interrupted, for the vessel appeared as if empty for a little space.

On March 13th it was noted that the disc had become whiter, and its edges well-defined and clear, but a little uneven. The remains of opacity below and above the disc were still there, but less conspicuous. The veins were rather smaller than when last examined, and the diminution in size was chiefly noticeable near the disc, where they appeared considerably narrower than in the equatorial region. One small vein could not, with the indirect image, be seen close to the disc, but reappeared a short distance away. The arteries on the disc itself were just visible as lines, and some of them could not be distinguished against the choroid near the disc. All, however, became more perceptible at about two disc-breadths from its edge, and towards the equatorial region became much larger than near the disc, though smaller than when first observed. This condition continued until he died.

For microscopical examination, longitudinal sections of the optic nerve and disc were made, after hardening in weak chromic acid. The central artery in the optic nerve was dilated here and there, but for the most part so contracted that its calibre was reduced in places to a mere line. It was somewhat tortuous. The walls were thick, but only in proportion to the contraction of the artery. There was no plication of the inner layer. The dilated portions corresponded in some instances to the passage of a branch from the artery into the substance of the optic nerve. Just behind the division of the artery in the disc was a dilatation of some size. But in the disc itself, the main branches of the artery were reduced to very narrow dimensions, the cavity of one being only $\frac{1}{2000}$ in. in diameter, and that of another reduced to a mere line.

Here and there, chiefly in the substance of the nerve, but to a less extent also in the disc, minute granular masses could be seen in the vessels. The largest of these, represented in the woodcut, was situated in the main trunk in the substance of the optic nerve, about one-eighth of an inch behind the lamina cribrosa. It is an elongated plug, $\frac{1}{300}$ of an inch in length, and about $\frac{1}{800}$ of an inch in width, coarsely granular in appearance, containing many dark points. It apparently did not quite fill the vessel, having doubtless shrunk from the sides while the specimen was being hardened. A little distance in front of this was a small spherical mass. Further back the vessel was for some distance reduced to a very narrow size, hardly any cavity being visible; but here and there a little granular mass could be noticed within it. Further back it again widened out, and then narrowed. In one of the narrowed arteries on the disc a quantity of granular material could be perceived. The veins on the disc were reduced in bulk, but were much larger than the arteries. No capillaries in the disc or about the lamina cribrosa could be perceived. In the retina beyond the limits of the disc, however, about a disc's breadth from its edge, numerous dilated capillaries could be seen, running inwards through the nerve-fibre layer, some vertically, others at an inclination. They appeared as if passing from the choroid to the surface of the retina; but they could not be traced towards the choroid beyond the cellular layers of the retina.



Longitudinal section of central artery of retina, one-eighth of an inch behind the lamina cribrosa. On each side is loose cellular tissue, and beyond this the longitudinal nerve-fibres are indicated. Within the contracted vessel is an oval granular mass, and in front of this a smaller spherical body. Magnified 300 diameters.

The nuclei in the optic nerve were not more abundant than normal, but the nerve-fibres showed some commencing degeneration, a few globules of myelin being scattered among them. The disc was not swollen, its height above the level of the choroid being within the normal limits. The minute round nuclei which commonly lie among the nerve-fibres in the disc were increased in number, and in places were accumulated in oval heaps between the bundles of nerve-fibres. The layer of nerve-fibres passing on to the retina appeared a little swollen; but its thickness, a disc's breadth from the edge of the disc, was only $\frac{1}{300}$ of an inch, the fibres being here and there very slightly varicose, and lying less closely together than is usual. The cellular layers of the retina near the disc were in some parts normal, or nearly so, the ganglion cell-layer, the two nuclear and the internuclear layers being distinct, the former only in places a little thickened by the increase in the number of corpuscles composing them. (The layer of rods and cones was nowhere distinguishable as such, doubtless from the time which elapsed after death before the post-mortem examination was made.) On another side of the disc, however, probably where the opacity was noticed during life, the whole thickness of the retina was infiltrated with minute corpuscles resembling those of the nuclear layers. In these layers they were more closely aggregated, but they filled also the internuclear layer, and were scattered less closely through the molecular layer. The retinal layers were also a little sinuous. These changes were noted especially in the portion of the retina beneath the thickened nerve-fibre layer.

Near the macula lutea some irregularities in the surface of the retina could be noticed on looking at it with a simple lens. These depended partly on ramifying vessels and partly on the retina being raised in minute folds. The microscopical examination showed considerable though variable change. In some places all distinction of layers was lost; small round corpuscles resembling those of the nuclear layers, but staining less readily with logwood, infiltrated the whole thickness of the retina, the only other structure perceptible being the remains of the vertical fibres of the retina, themselves thickened, among which the nuclei lay. In other places the fibres of the internuclear layer (here, of course, always wide) were separated, spaces between them being left, and the nuclear layers being normal, as in simple œdema. In some places round corpuscles were scattered through this layer; in other parts the molecular layer was infiltrated with small round corpuscles lying amid a granular matrix. The external nuclear layer was also in places considerably thickened. Where the retina was raised in a fold, this layer on the concave side was sinuous, and between the contiguous folds the layer of rods and cones had disappeared, and the space was filled up by a considerable quantity of granular material, in which a few round corpuscles could be distinguished. The pigment epithelium was in this part in close contact with and adherent to the external nuclear layer.

Remarks.—There can be no question as to the nature of the case. The discovery of masses of granular material in the central artery and its branches, and the absence of any hæmorrhage around the vessel, the occurrence of undoubted embolism in the middle cerebral artery and in the kidneys and spleen, the correspondence of the retinal changes, vascular and parenchymal, to those observed in other instances of embolism, render the nature of the case unquestionable. The condition of the retina when first examined agrees closely with that observed in other cases a few days after the occurrence of embolism. Hence it is probable in the highest degree that the retinal and cerebral embolisms were simultaneous.

What was the position of the obstruction? I do not think that the plug figured can be regarded as that which effected the closure of the artery. Its size is not sufficient, and there is no narrowing of the vessel at the spot to account for the arrest of so minute a plug. The artery also was contracted behind it, and the contraction extended, with intervals of dilatation, as far back as the examination of the optic nerve extended, which was nearly, but not quite, as far as the entrance of the central artery into the substance of the nerve. The artery was traced, with the scalpel, from its origin from the ophthalmic as far as its entrance into the nerve, and no plug was seen, but a microscopical examination of the vessel was not made. The numerous fragments of fibrin to be seen in the vessels of the nerve and disc show how much material must have been discharged into the vessel at the time of the embolism. It is probable that the chief obstruction was situated where the artery enters the nerve.

A ready collateral circulation must have been established, for the arteries, as seen with the ophthalmoscope, maintained their thread-like dimensions only for a very short distance after leaving the disc, and then resumed a distinct though diminished contour. The blood reached them no doubt from the posterior ciliary arteries. It is often assumed that the vessels of the disc form an important part of the means of communication. The opinion rests on the statement of Leber that the disc is supplied by the posterior ciliaries. But surely the marked and increasing pallor of the disc in this and in almost all cases of embolism is in contradiction to the assumption. An exception was the case of Wecker's,* in which an obstruction of a branch of the artery was followed by increased vascularity of the corresponding portion of the disc. But the case stands alone. Pallor of the corresponding part of the disc is more common, as Mr. Nettleship has lately pointed out; and in a patient of Mr. Streatfeild's, whom I saw some time ago, in which there was obstruction (doubtless from embolism) of one branch, with corresponding segmentary loss of sight, there was not a trace of increased vascularity in the corresponding portion of the disc. The pallor of disc in these cases depends, as Gradenigo† has pointed out, on anæmia, rather than on tissue proliferation. No capillaries were visible, although carefully looked for, in the case I have just described; and neither the tissue-formation nor the degeneration of the nerve-fibres was sufficient to account for the pallor. But there was distinct distension of small vessels in the retina outside the limits of the disc, and it is, I think, clear that it was by the vessels near the papilla, and not by those in the disc, that the collateral circulation had been set up.

The retinal appearances, as seen with the ophthalmoscope, do not differ in any material point from those of most other cases recorded. It is, however, to be noted that when first examined, five days after the presumed onset, the opacity of the retina was as marked around the disc as around the macula lutea. Moreover, the red spot at the macula lutea, so often described, was absent.

This fact is of interest in connexion with the diagnosis of embolism within the artery from hæmorrhage around it. The absence of a red spot at the macula and the presence of early infiltration around the disc are given by Magnus as diagnostic indications of hæmorrhage around the nerve. In the case now described, unquestionably embolic, the spot at the macula was absent, and by the fifth day the infiltration around the papilla was very marked.

The anatomical changes in the retina corresponded to the opacity observed during life, and still present, although in less degree, at the time of death. They indicate more structural change than is, I think, commonly supposed to occur in these cases. The adhesion of the pigmentary epithelium to the outer nuclear layer may perhaps be taken as evidence that the destruction of the layer of rods and cones at this part was not a mere post-mortem change, but occurred during the active processes consequent on the arterial obstruction.

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* Atlas, p. 149, note.

† Gottardi, Giornale de Med. Mil., July 1875, p. 22.

ON A CASE IN WHICH IRRITABILITY OF THE FEMALE BLADDER OF FIFTEEN YEARS' STANDING WAS CURED BY DILATATION OF THE URETHRA AND NECK OF THE BLADDER.*

BY H. BENDELACK HEWETSON, M.R.C.S.

THE notes of the case I am about to relate are of extreme importance in connexion with an operation, still on its trial, introduced by Mr. Pridgin Teale, and but recently published,† which comprises dilatation of the urethra in the female for the relief of irritability of the bladder, and, as in this case, occasional retention of urine. The absolute success attendant upon its performance in some cases, and its partial, if not complete, failure in others, render it incumbent on us to keep strict records of the symptoms, general as well as local, which affect females the subjects of irritable bladder upon whom this operation is performed. The extent to which the dilatation of the urethra is carried should especially be noted, since the partial or complete failures may possibly be the result of too cautious stretching from fear of producing incontinence of urine. Moreover, the general symptoms must be taken into account, for it may be that it is upon them the surgeon is consulted, without the slightest reference being made (as this case will show) to the more delicate point of irritability of the bladder; when it is upon the latter trouble that the general malaise depends.

Following are the notes of the case:—

Miss M——, aged thirty-six, sent for me on the night of March 3rd, 1875. On arrival at her home, I found her to be suffering intensely from retention of urine. I relieved her (by the use of the catheter) of a large quantity of urine, such an amount as must have distended the bladder nearly if not quite up to the umbilicus. This point I did not test, being anxious to relieve her without delay from the worst agony of retention. The retention returned in a day or two, and I had again recourse to the use of the catheter.

Her previous history is as follows:—That she was a perfectly strong and robust woman, following the *arduous* duties of a "present day" schoolmistress until fifteen years ago, when she was seized with an inflammation of the bladder, for such it was termed by her medical attendant. This was followed by the formation of a small abscess in the region of the urethra, which discharged of itself. Since that time her health has been bad, preventing the continuance of her calling. She states that since her recovery from this attack, her nights have been wakeful and disturbed by being constantly "every half hour or hour" obliged to get up to pass small quantities of urine with great effort and some pain. She is low and depressed, with almost constant headache, loss of appetite, and continual bearing down, resulting in a total unfitness for prolonged exertion of any kind. She has lost flesh considerably, and has for several years been set down by her numerous friends and medical advisers, to whom she had made no reference to her urinary troubles, as a confirmed invalid. These symptoms were complicated a year ago by pain in passing the motions, which were infrequent and confined. She had not been seized by retention of urine previous to March last. In February last she was, with "questionable propriety," advised to come to Leeds to stay with some friends for the good of her health.

On examination I found the orifice of the urethra to be completely surrounded by warty growths of a considerable size, and on examining the rectum the introduction of the finger was impeded by a very tight sphincter ani. The rectum was baggy, and there was a small external pile. The uterus was in its natural position, and the catamenia were, and had always been, regular, and the urine was natural. Not being able to estimate to what extent the retention was due to the warty growths, and seeing she was suffering considerably from rectal difficulties, I deemed it advisable to negative the possibility of the retention being caused by the warty growths by removing them, and whilst the patient was under the influence of an anæsthetic stretching the sphincter ani with the forefingers introduced back to back sufficiently forcibly to paralyse it for a time and allow the sore produced by the snipping off of the pile to heal; in the same way as one would cure a fissure of the anus, by setting the spasm of the sphincter ani at rest, which, constantly contracting, might possibly be an element, through reflex action, in helping to keep up the vesical irritability.

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* Read before the Leeds and West Riding Medico-Chirurgical Society, Oct. 1st, 1875.

† Vide THE LANCET of Nov. 27th, 1875.

Accordingly, on March 5th, chloroform having been administered, I completely carried out the above suggestions. The result of this was, that during the next few weeks relief was given to the retention of urine and to the pain in passing the motions; but there was no relief at all from the vesical irritability. Her general condition, with these exceptions, continued as before, and there was a return of the retention of urine at the end of three weeks from the operation.

I had clearly told her a second operation would possibly be necessary should the first fail to give relief, and accordingly, on April 11th, I again placed her under the influence of chloroform, and introducing Weiss's female dilator into the urethra to the extent of about two inches, I then *slowly* separated the blades of the dilator, stretching the urethra so as to admit of the introduction of my forefingers within the bladder while the parts were on the stretch. On closing the blades and withdrawing the instrument, the urethra contracted upon my little finger, so as sensibly to grip it when introduced into the bladder, the coats of which were thickened. There was no foreign body or stone to be detected.

She was very much upset by the chloroform-sickness, which continued more or less all night; there was, however, *no more irritability of the bladder, no retention, no incontinence produced,* and, to use her own words, "I have not passed water so freely for years"; nor had she retained it so long without being disturbed, for the first time she made water was in the evening after the operation, and she was not disturbed during the whole night.

April 14th.—She slept the night through, and awoke with little or no headache, retaining and passing her water quite naturally with the exception of some soreness.

16th.—She complains of slight pain while passing water, but perfect facility.

19th.—She got up in the evening complaining of none of her former symptoms, having lost completely all trace of vesical irritability in eight days from the dilatation of the urethra.

Her progress now continued to be satisfactory and very rapid.

May 4th.—She reports her old symptoms to have all disappeared. She sleeps and eats well, and takes a fair amount of exercise.

At this stage I ordered her into the country, where she resides, and returning on May 31st, she reported herself as perfectly well, and has gained three stones in weight. On the day previously she had walked a distance of eight miles without feeling more than ordinary fatigue, and remarked that before the operation "she could hardly trail herself about."

Thus, then, were the miserable and intractable sufferings of years, shutting out this poor woman alike from society and employment, put an end to at once by an operation whose best recommendation is its simplicity and its success.

Leeds.

CASE OF HIGH TEMPERATURE IN RHEUMATIC FEVER TREATED WITH THE WET PACK.

By T. CARLETON RAILTON, M.B. LOND., F.R.C.S. ENG.

ELLEN G——, aged twenty, a housemaid, after having complained for two days of not feeling very well, and of pain in her right wrist, was sent to bed on June 25th, 1874, with all the symptoms of rheumatic fever. The pulse was 100, full and soft; both wrists were painful, and slightly swollen, and there was a copious perspiration, having the usual sour odour. The only treatment adopted at this stage was an opiate mixture to relieve the pain, together with the wrapping up of the affected joints in cotton wadding.

On June 26th the pain in the wrists had become more severe, and was accompanied by pain in one knee and in the back. The temperature taken at 10 A.M., in the axilla, was 102° F. Upon auscultating the chest, a mitral regurgitant murmur, soft in character, was perceived; this was treated by the application of one of Rigollot's mustard leaves over the cardiac region, followed by a constant succession of hot linseed-meal poultices.

June 28th.—The pain in the joints, although diminished in the wrists, had become intensified elsewhere, both knees and one ankle being somewhat swollen. Since the 26th the mustard leaves had been reapplied to the chest as frequently as the patient could bear them.

29th.—On being raised up in bed the patient fainted. The pulse still remained 100, but was very soft and compressible. A freshly prepared infusion of digitalis was ordered, together with certain fixed quantities of nourishment and stimulants at frequent intervals.

30th.—The faintness still continued; other symptoms remained the same.

July 1st.—The same symptoms. Temperature at 7 P.M. 103°. At night she began to ramble in her speech. Cold water cloths were kept constantly applied to her head.

2nd.—Rambling continued. Ice to the head.

3rd.—The rambling had turned to loud delirium, the carotids beating fiercely. The temperature at 4.30 P.M. being found to reach 105·7°, the wet pack was resorted to for the first time. A sheet was soaked in iced water and wrung out; the patient was then enveloped in it from head to foot for the space of half an hour, at the end of which period the thermometer showed an abatement of the temperature to 104°, and so far from appearing exhausted by the process the patient appeared considerably improved; the pulse, though still 100, being firmer, while the violent excitement had given way to a comparatively sound sleep. At 11 o'clock the same evening these good effects had passed off, but the temperature still continued at 104°. The wet pack was applied for the second time in the same way as before, with the result of a descent in temperature to 102° and a tolerably quiet night.

4th.—At 10 A.M. the temperature had again risen to 104·5°, and the patient still continued to ramble. After another half hour in the wet pack, the temperature went down to 101·8°; pulse 100; respiration 28. At 11 P.M. I was hastily sent for. The woman appeared to be sinking and almost unconscious; the pulse was very rapid and weak; the temperature was 104·2°. So great was the bodily prostration that I feared to have her lifted from the bed to the couch upon which the wet sheet had been spread, therefore, as an alternative plan, a large bath towel wrung out of iced water was tucked around her as far as possible without disturbing her. Stimulants and beef-tea were constantly administered. At the end of five minutes the towel was changed for a freshly-iced one, and in five minutes more a third was applied, the whole process thus occupying the space of a quarter of an hour, with the result of a descent in temperature to 103·4°, and a pulse much firmer and slower.

5th.—At 2 A.M. the bath towels were again applied as before to the front of the body, reducing the temperature to 102°. At 4 A.M. the process was repeated, but without observation as to the temperature. The patient was afterwards sponged over slowly with iced water from head to foot at intervals of an hour until 11 A.M., and by this means the temperature was maintained at 102°. The pulse (102) at this time was very much firmer, and the patient appeared calmer and more collected than she had been during the previous five days. The ice to the head was discontinued. The sponging was renewed for a quarter of an hour at 7 P.M., and also at 11.45 P.M., at which time the temperature was found to be 101·4°.

6th.—At 9 A.M. the patient, though still suffering considerable pain in some of her joints, was perfectly composed, and the marked depression from which she had previously suffered had passed off. Her pulse was 92; the temperature 100·4°.

Since the last date she gradually but slowly returned to comparative health, with but one slight relapse of the affection of the joints, unaccompanied by any great increase of temperature. The period of convalescence was naturally prolonged by the existence of the valvular disease of the heart, and by a very severe bedsore, but at the present time she is well enough to perform all the ordinary duties of her station.

In this brief record of (what was to me) a most interesting case, I have designedly omitted many details, as not bearing directly upon the object I have had in view in reporting it. It is evident that the application of cold to the body in cases where the temperature of the blood rises to a pitch at which it imperils the action of the heart (threatens its paralysis in fact), is as justifiable a course in rheumatic fever as in any other.

Old Trafford, Manchester.

TWO CASES OF THORACIC ANEURISM.

By FREDERICK ENSOR, M.R.C.S.,
SURGEON TO THE PROVINCIAL HOSPITAL, PORT ELIZABETH, SOUTH AFRICA.

To the physician who is alive to the insidious nature of thoracic aneurism, no cases cause more anxiety than those which exhibit symptoms of this grave organic lesion. I imagine in every hospital of seaport towns "cases" from the shipping are admitted which often puzzle the keenest and most painstaking observer. Men who are dissatisfied with their ship or captain, or who are attracted by diamond-fields or stories from gold-fields, will try every ruse to keep in hospital, but directly the vessel is out of sight their recovery is marvellously quick. When a man tells the usual tale of having pains here and there, and at the same time his pulse and temperature are fairly normal, or perhaps the former a little quickened by his "intent to deceive," and there be no marked symptoms of rheumatism, or expression of malaria or syphilis, you cannot but suspect him of malingering; and yet he may be the subject of grave internal mischief, causing immediate danger to life. I always like to give a man the benefit of the doubt, and watch and wait for a few days rather than act on a diagnosis which one may have cause to regret.

From manuscript notes of a clinical lecture on a case of aneurism of the aorta, by Dr. Todd, in 1855, I copy the following: "When patients above the age of thirty come to consult you about pains extending over the shoulders and chest, an aneurism should always be suspected." All King's men who had the good fortune to study disease at the bedside under that master in diagnosis, Dr. Todd, will coincide with me that it was a privilege and a treat to see him grapple with a difficult case of heart disease or aneurism: the repeated careful examination; the appreciation of, to us students, trifling symptoms; the patient watching of the man as he perhaps sat on his bedside; and the feeling that the *vim*, or vital force, or mind, as his disciple, Dr. Beale, would say, was stirring the depth and breadth of his "cerebral bioplasm," as it strove to solve the "enigma of life" in question, had a good effect on the class, and I dare say has made not a few strive to follow in the steps of so great a teacher.

The aid to diagnosis, which I quote from the clinical lecture, has been well illustrated in two cases which have come under my observation in this hospital; one occurred some two years ago, the other a few days since. As necessity of care in diagnosis is the only point I wish to lay stress on in these cases, I will not enter into much detail.

The first case was that of a sailor—I write from memory. He was a tall man, rather thin, aged about forty, and was admitted complaining of pain, not very severe, of a neuralgic character, in the spine and about the chest. The captain "thought he was scheming." He had been under medical treatment for same symptoms; no diagnosis had been distinctly given; he was suspected of trying to get rid of his ship.

I examined him several times and got at no positive symptoms to guide me, and yet there was something in his look which told of suffering, and made one feel that the man's pains were not imaginary. He had been in hospital about a week when I detected a prolonged sound, not amounting to a "bruit," at the back, between the shoulders. I gave a guarded diagnosis of aneurism of the thoracic aorta. A few days after, in the act of lighting his pipe, he fell dead at his bedside, and the post-mortem examination disclosed a circumscribed aneurism of the descending aorta, which, having eroded two or three of the vertebræ, had given way and filled the left pleura with blood. When men are admitted who, without a doubt, are "sea lawyers," I generally order a few doses of sulphate of magnesia, flavoured with tincture of assafœtida, and I find that they soon ask permission to leave the house. In the post-mortem room I felt glad I had not ordered the "stimulant mixture," as we term it, in the above case.

The second case, which occurred a few days ago, was the following:—A tall, thin, big-boned man, formerly a private in the German Legion, was admitted complaining of pain lancinating in the line of the intercostal nerves and lower part of the chest. No murmur at base or apex of the heart. Pulse even in both radials; no dulness over the middle of the sternum; no marked dyspnœa. The only thing I could detect was a limited dulness about the middle of the left lung, with rather harsh respiratory sounds; no cough or expectoration; pulse and temperature normal. The man was, nevertheless, conscious of something serious the matter with him; his eyes were particularly bright, the sclerotic pearly and clear.

At first I thought he was a dyspeptic "loafer" trying to remain in hospital. A thought of tubercle being laid down crossed my mind, but the pulse and temperature were against this idea. I remarked to the house-surgeon, "that it was not improbable we should find an aneurism in this case." After a careful examination, I could come to no conclusion, refused to commit myself to a diagnosis, and simply ordered him to remain in bed. No medicine was prescribed.

Two days after this, while engaged in an operation for crushed foot, the nurse entered the room, saying the German was "in a fit," as she called it. As soon as the operation was completed, on proceeding to the ward, I saw the poor fellow lying in bed, quite dead, with extreme pallor on his face. He had evidently died in a faint. The following day a post-mortem examination revealed an aneurism about the size of a turkey's egg in the descending aorta, which had eroded the seventh and eighth vertebræ, and had burst, filling the pleura with blood. The heart was small, and thin and pale in its muscular structure. The aortic valves were somewhat thickened, but not incomplete; the mitral valve was also thickened a little, but, I imagine, had been equal to its office, or we should have had more dyspnœa. Both lungs were hyperæmic, the left slightly consolidated at its contact with the aneurism.

These two cases illustrate well how cautious one should be in coming to a conclusion in a case. A harsh judgment, a wrong diagnosis followed by harmful treatment, would always be a matter of extreme regret to the physician, and, in some cases, might give rise to much social distress. Better that a scheming patient should impose on his doctor for a few days than that a poor fellow with thoracic aneurism should be hurried to his end by active treatment on a wrong diagnosis.

In Trousseau's "Clinical Medicine," vol. i., p. 597, is a case well illustrating the point I wish to impress in these few remarks.

CASE OF
DIABETES MELLITUS OR GLYCOHÆMIA.

By Surgeon JOHN C. LUCAS,
H.M. BOMBAY ARMY, IN MEDICAL CHARGE H.M. 18TH REGIMENT, N.I., CAMP DEESA.

Private Punchum Lalla, aged forty; service twenty years; married, but no family. The patient, a man of average height and fair intelligence, says that he enjoyed excellent health until about eighteen months ago, when, serving with the regiment at Rajcote, after repeated attacks of fever and ague, he observed that he began to pass large quantities of urine, and that the calls to micturition had been increasing in frequency, and also thirst had been in proportion excessive. His appetite has been gradually augmenting, and now he describes it to be ravenous. He has been rapidly losing flesh; from being a strong, muscular man, he is reduced almost to a skeleton. He complains of dimness of vision and near-sightedness, which he says have been steadily advancing. He admits having contracted a syphilitic sore on the genitals about sixteen years ago, and which was followed by laryngeal and cutaneous symptoms of constitutional syphilis. Habits temperate; does not remember any severe injury to the head. No information can be derived in regard to his hereditary history.

Present condition.—August 26th, 1875: Patient is greatly emaciated, with spare flabby muscles, height 5 ft. 5½ in.; weight, without clothing and on empty stomach, 84 lb. Aspect anæmic; expression of face anxious and careworn; appearance of the eyelids not unlike that of a myopic individual. Skin very dry, and feels like parchment, and indicating want of action of the sudoriparous, but not of the sebaceous follicles, as there is a shining or glistening aspect of the skin. Temperature at the axilla 96 8°. On the scrotum and penis there are cicatrices of syphilitic ulcers. There is some slight hyperæsthesia all over the body. Physical examination of the chest elicits nothing abnormal with regard to these, though the action of the heart is, of course, feeble; pulse in the sitting posture 74 per minute, small, and somewhat hard. Complains of some uneasiness (but not actual pain) in the lumbar region; quantity of urine passed in twenty-four hours 130 ounces, of faintly acid reaction, specific gravity 1040; the usual tests show abundance of sugar. Testes small and atrophied, and there is want of sexual desire. Mouth and fauces dry; tongue pale and furred; thirst intense; appetite large; bowels irregular; no pain or vomiting after food. Hepatic and splenic dulness normal. Memory to a certain extent failing; sleep disturbed by dreams; sometimes has shooting pains in different parts of the body. The ophthalmoscopic examination points to some atrophy of the left optic disc; direct illumination (without the object lens) proves the myopia.

The treatment ordered was dietetic. Mutton 2 lb, made into broth, flour bread 1 lb., milk one pint, brown sugar ½ lb., and four eggs. He was also to take two drachms of cod-liver oil and two grains of sulphate of iron twice a day; and advised to take drinks acidulated with dilute sulphuric acid and refrain from taking water as much as possible.

Progress of Case.

Date.		Amount of fluid taken in 24 hours.		Amount of urine passed in 24 hours.	Specific gravity.
Aug.	27th	80 oz.		130 oz.	1030
„	28th	80 „		120 „	1032
„	29th	80 „		130 „	1031
„	30th	70 „		120 „	1030
„	31st	70 „		140 „	1030
Sept.	1st	70 „		140 „	1030
„	2nd	70 „		130 „	1030
„	3rd	80 „		148 „	1025
„	4th	80 „		96 „	1038
„	5th	85 „		85 „	1040
„	6th	85 „		135 „	1030
„	7th	85 „		96 „	1041
„	8th	85 „		120 „	1020
„	9th	80 „		120 „	1020
„	10th	85 „		116 „	1030
„	11th	82 „		118 „	1027
„	12th	85 „		126 „	1030
„	13th	85 „		120 „	1028
„	14th	84 „		117 „	1032
„	15th	70 „		108 „	1020
„	16th	64 „	With 14 oz. of skim-milk.	130 „	1030
„	17th	64 „		120 „	1025
„	18th	60 „		113 „	1030
„	19th	64 „		130 „	1020
„	20th	60 „		120 „	1029
„	21st	60 „		120 „	1028
„	22nd	60 „		120 „	1029
„	23rd	60 „		120 „	1028
„	24th	60 „		120 „	1029
„	25th	60 „	*	130 „	1030
„	26th	60 „		130 „	1029
„	27th	60 „		126 „	1030
„	28th	60 „		120 „	1029
„	29th	60 „		120 „	1028
„	30th	60 „		120 „	1029

* In addition, diaphoretic treatment.

Remarks.—The treatment resorted to in this case has been considerably varied. Both sugar and starch were for a time allowed and withheld. The favourite remedies, opium and creasote, were in their turn tried, but had no decisive effect on the polyuria, as will be seen from the above columns. On Sept. 8th the saccharine and starchy constituents in the diet were altogether omitted, and, in addition to the cod-liver oil and iron, three minims of creasote, with a grain of opium, in pill, were ordered; then on the 16th these latter drugs were stopped, and the patient was allowed as much skim milk as he could take. Lastly, on the 24th I resolved to act upon the skin, and therefore the patient was ordered a warm bath daily, and half a grain of ipecacuanha, with a grain of opium, twice a day.

From this case it will be seen that the sugar in the diet did not produce any ill-consequences, and as far as this case is concerned the skim-milk plan of Dr. Donkin of Durham did not prove of much avail. During the above period the urine always continued saccharine, and the specific gravity fluctuated with the dilution—i.e., when the total quantity was less, the specific gravity rose in a corresponding ratio, and *vice versâ*. I believe the actual quantity of sugar excreted in a fixed number of hours remained much about the same.

The man continued losing weight (on an average from a pound and a half to two pounds weekly), but as yet there is no evidence of deposition of tubercle in the lungs, so that the patient will in all probability sink from asthenia rather than supervention of phthisis.

At the "invaliding," which is shortly to take place, the man will be recommended to take his discharge, and as he will leave the station for his native place, there will, unfortunately, be no opportunity afforded to learn the further progress of his case, or an autopsy in the event of a fatal issue.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

LARGE HYDATID TUMOUR OF LIVER AND RIGHT PLEURA; PUNCTURE, FOLLOWED BY COLLAPSE, PERITONITIS, AND SUPPURATION WITHIN THE MOTHER CYST; FREE OPENING, PERMITTING DISCHARGE OF NUMEROUS HYDATID CYSTS FROM TIME TO TIME; PLEURO-PNEUMONIA OF RIGHT SIDE; DEATH; AUTOPSY.

(Under the care of Dr. Andrew.)

For the following notes we are indebted to Vincent Harris, M.B. Lond., house-physician.

Ellen M——, aged thirty-nine years, an itinerant fruit-vendor, was admitted into Mary ward on Sept. 3rd, 1875. She stated that she had always been healthy and strong up to her last confinement five years ago, since which time occasional pains in the right side had somewhat troubled her, but she had been able to do her work fairly. About twelve months before admission she had noticed that there was a swelling rather high up on the right side of her abdomen, and that it had gradually increased. During the past four or five months the pains in the side had become more severe, sometimes enforcing entire cessation from work. Had never been jaundiced.

On admission, the patient was healthy-looking and fairly nourished; complexion sunburnt; conjunctivæ and skin not jaundiced; functions natural; pulse 80. No abnormal pulmonary or cardiac signs. The lower part of the right side of the chest and upper part of the corresponding side of the abdomen were decidedly bulged. The swelling was rather tender on palpation, and presented in its lower part well-marked fluctuation. The liver dulness began about an inch below the right nipple, extending downwards, in the nipple line, to near the level of the umbilicus,—across, on a slightly higher level, to the left hypochondrium and to the right, and backwards to a proportional extent. The surface, as far as could be made out, was smooth, but presented one or two slight irregularities. The urine was light-coloured and acid, of specific gravity 1008, and contained no albumen. The catamenia had been absent for several months. Family history of consumption, but none of tumour.

An hydatid tumour of the liver having been diagnosed, it was decided that it should be tapped after the patient had been put in as good a state of health as possible by rest in bed. Accordingly on Sept. 11th a puncture was made, and about an ounce of fluid was with difficulty withdrawn with an aspirator. The fluid was glairy and gelatinous, containing, as far as could be discovered, no hooklets or striated membrane.

On Sept. 13th the note is —"Since the operation the patient has been greatly collapsed, and her nails, nose, and lips are singularly blue. Complains of some pain in her right side at the seat of the puncture, and some tenderness also. The tongue is rather furred on the dorsum. Pulse 108; temperature 99·2°."

For the next few days the patient showed signs of severe peritonitis. Her pulse and temperature rose, her tongue became brown and dry, and the abdomen grew very tender. She lay constantly on her back, with her knees drawn up. Her bowels were very constipated.

On the 16th and 18th she had severe rigors, which were followed on the latter occasion by jaundice, and from the marked evening rise in the temperature, with other symptoms of hectic which followed, suppuration in the hydatid cyst was feared. The jaundice increased for a few days, the urine becoming very dark, of sp. gr. 1022, acid, and containing bile, but no albumen. The pain in the tumour increasing, and the hectic continuing, a large trocar and canula were used on the 23rd to puncture the sac. The fluid which exuded being too gelatinous to pass through the attached tube, the instrument was withdrawn, and dressing forceps were inserted into a free opening previously made. By this means about two or three ounces of glairy, and more or less purulent, fluid were evacuated, and a thick-walled hydatid cyst was removed.

After the operation, as soon as the collapse (which was abnormally severe) had subsided, the patient did fairly well for some time. On Sept. 29th there was a large discharge from the wound (still kept freely open), consisting of a great number of hydatids of all sizes, some whole, but most of them collapsed, of gelatinous fluid and pus. During the next fortnight cysts came away on about eight or nine occasions, and the external swelling decreased in size. On Oct. 8th the patient complained much of cough, and by physical examination the base of the right lung was found to be dull on percussion, with crepitation and rough breathing above the area of dulness. The sputum was pneumonic.

From this time the lung symptoms increased in severity, the patient became more and more cyanotic, and died on Oct. 19th, having been light-headed during the two preceding nights.

There were several discharges of hydatid cysts during the ten days before death. In all it is calculated that fully a hundred cysts were discharged through the opening in the side. The temperature during the whole course of the disease, after the first tapping, was always above normal; it varied from 100° to 103° F., being invariably raised in the evening. The pulse corresponded closely with the temperature. Jaundice appeared on Sept. 19th, as mentioned above, and continued throughout the remainder of the case.

The treatment consisted in perfect rest, light food easy of digestion, and, in the way of drugs, opium to allay pain, to keep the bowels quiet, and to procure sleep, an occasional castor-oil injection being used to relieve the bowels.

Autopsy.—On opening the chest and abdomen the liver was seen to be pushed over to the left side, while in the place of the greater part of its right lobe there was a huge, thick-walled sac, containing fluid. This sac communicated with an hydatid cyst in the right pleural cavity at its back and upper part. The communication was a small hole in diaphragm. Thus, from the second rib to below the umbilicus (as the cyst extended downwards to this point) there was a huge sac containing hydatid cysts, with about four quarts of fluid. The hydatid of the pleura had penetrated for a short distance at one point into the substance of the lung. The lung was collapsed except near the part penetrated, where it was solidified, with a granular appearance on section. The left lung was normal. The heart was not diseased or displaced. The left lobe of the liver was about the size of an ordinary right lobe; the right was about three or four inches broad transversely, and then seemed to spread out as a thin layer of liver substance, soon altogether disappearing on the anterior surface of the hydatid. Gall bladder normal. The liver substance was pale, with rounded edge and amyloid reaction. The spleen was slightly enlarged and amyloid. The peritoneum about the cyst was thickened at the seat of old adhesions, and there was also recent lymph about it. The surface of the left kidney was smooth, with one scar like that of an old infarct; otherwise normal. The right was adherent to under surface of cyst of liver, granular and tough. Cortical substance diminished. Several small cysts on surface. Intestines and mesenteric glands natural.

WEST LONDON HOSPITAL.

TWO CASES OF INTERNAL URETHROTOMY FOR NARROW, NON-DILATABLE STRICTURES; GOOD RESULTS.

(Under the care of Mr. Teevan.)

The following cases are interesting as showing the efficiency of the operation, the slight annoyance it occasions, and the brief confinement it necessitates.

Case 1.—George G——, a healthy-looking sailor, aged thirty, was admitted into the hospital on Nov. 2nd. The patient stated that six years ago he suffered from a gonorrhœa, for which he was treated with medicines and injections. The complaint degenerated into a gleet, which hung about him for a long time. A year ago he had an attack of retention, which he overcame by hot gin-and-water and severe straining. Three months ago, when at New York, he had another attack, and the surgeon whose advice he sought was not able to pass a catheter till he had anæsthetised him. When he applied to Mr. Teevan six weeks ago he complained of frequent and difficult micturition, and the annoyance of having his "pants" always wet from the dribbling of urine. Examination detected the existence of a tough stricture three-quarters of an inch long, four inches from the meatus externus. There were also three ring strictures of large calibre in the penile urethra. Gradual and continuous dilatation were both fairly tried, but the deep stricture could only be enlarged sufficiently to admit of the passage of a small catheter, and as it was desirable that the patient should be able to introduce a full-sized instrument for himself, he being a sailor, an operation was indicated. Accordingly, on Nov. 2nd, at 3 o'clock p.m., Mr. Teevan passed a catheter staff, and, having proved its position by withdrawing some urine through it, divided the stricture internally from before backwards. Only a few drops of blood were lost; a large metal catheter was introduced, and the water drawn off quite clear, to demonstrate that the calibre of the urethra was re-established, and that there was no hæmorrhage into the bladder. At 10 a.m. the next morning Mr. Noot, the house-surgeon, found the patient had slept well, and that his tongue was clean and moist, and the skin cool. The pulse was 78, and temperature 98·4° F. Micturition was attended with much smarting. On Nov. 5th the patient was up and walking about the ward; the soreness was nearly all gone. No. 20 (Charrière) metal catheter was passed; on the 6th, No. 22 olivary metal bougie; on the 8th, No. 22 conical elastic bougie; and on the 10th, No. 20 silver catheter. The patient left the hospital the same day quite well in all respects. He has since learned to pass a full-sized elastic bougie with ease for himself.

Case 2.—Robert P——, a thin and rather haggard-looking labourer, aged thirty, applied as an out-patient on Oct. 9th. He stated that he had never had gonorrhœa, gleet, or syphilis; but that fifteen years ago he was rolled over and kicked in a scuffle, and that his urine ran away from him. For the last ten years he has passed a very bad stream of urine, and a year ago was attacked with retention, for which he went to St. Thomas's Hospital. No instrument could be introduced, but he was relieved by a hot bath. At the present time the patient is troubled with difficult micturition, accompanied by much straining. Examination detected a very tough thick stricture, half an inch long, three and a half inches from the meatus externus. Gradual dilatation was tried, but no progress was made, and only the smallest elastic catheter could be introduced. On the 2nd of November the patient entered the hospital, and at 3.30 P.M. the same day Mr. Teevan divided the strictures, internally, from before backwards, having first demonstrated that the catheter-staff was in the bladder by withdrawing some urine through it. About a teaspoonful of blood was lost. A large metal catheter was passed, to prove that the calibre of the urethra was restored. The water which flowed through from the instrument was quite clear. At 10 o'clock the next morning Mr. Noot found the patient comfortable; tongue clean; skin cool; pulse 90; temperature 98 4°. On the 5th, No. 20 metal catheter was passed; on the 6th, No. 22 conical metal bougie; on the 8th, No. 22 conical elastic bougie; and on the 10th, No. 20 silver catheter. The patient left the hospital the same day in all respects quite well. He can now pass a full-sized elastic bougie for himself.

Mr. Teevan observed that he considered no operation upon a passable stricture justifiable unless milder measures had been tried and found wanting. In the cases under notice, dilatation had been employed without success, because the strictures were so tough as to be incapable of being dilated beyond allowing a small catheter to pass. An operation was therefore indicated, and he had selected internal urethrotomy as most appropriate for these particular cases. The great point in the operation was to prove, before cutting, that the catheter-staff or guide had really been passed into the bladder, which he had done by withdrawing urine through it. Provided this, the one thing needful, were done, it mattered but little whether the stricture was divided from before backwards or *vice versâ*. Some surgeons had an objection to the division from before backwards, but the objection could not be maintained, and had arisen from the fact that formerly the division from before backwards had been performed without demonstrating that the instrument was really in the urethra. Hence it was that mistakes had arisen from the urethrotome having been passed into a false passage or the rectum, and thus it was that the principle of division from before backwards had been saddled with the errors of a faulty execution, which really formed no part of the operation. In internal urethrotomy the prostate and neck of the bladder were not touched. This was a most important point, for whatever hæmorrhage ensued it must make its exit at the external meatus, as it could not gravitate backwards into the bladder, its neck being firmly closed. If a blood-clot formed in the bladder a stone might result. Now, this could not occur in internal urethrotomy, but it might do so when a stricture was forcibly dilated, for Civiale had pointed out that in that operation the neck of the bladder might be injured, and allow of hæmorrhage into the organ, and he had been informed of a case where, after the operation of immediate dilatation, a stone had formed on a blood-clot. Of all operations for stricture internal urethrotomy was attended with the least risk. Its twin sister—subcutaneous section—excelled it so far as regards the certainty of ensuring a thorough division of a stricture, but it was not always applicable.

DORSET COUNTY HOSPITAL.

EXTENSIVE INCISED WOUND THROUGH THE CALF OF THE LEG; IMPORTANT AND SATISFACTORY USE OF THE CARBOLISED CATGUT SUTURES.

(Under the care of Mr. John Tudor.)

B. P——, labourer, aged twenty-three, was admitted into the hospital late on the night of August 23rd, 1875, with a semilunar incised wound through the calf of the leg, about ten or eleven inches in length, the course of the wound being in a direction from below upwards, having very much the appearance of a posterior flap in an ordinary amputation. The soleus and gastrocnemius muscles were cut through, and part of the flexor longus pollicis. The accident occurred in the harvest-field, owing to the man running across a scythe whilst chasing a rabbit at full speed.

In consequence of the upward course of the wound, no important vessels were injured. One which bled rather freely was ligatured, and another twisted. The chief difficulty presenting itself was the retraction of the muscles, even to the extent of several inches when the knee was fully flexed, rendering it impossible to secure them in the same sutures as the skin. Taking this into consideration, the muscles were separately brought together by means of carbolised catgut. The sutures were passed, about an inch from their margins, through the entire thickness of the muscles, and tightly secured, thus bringing the opposed surfaces together firmly. Their ends were then cut short off.

The skin was brought together by twelve silver wires; the wound was covered with carbolised oil, lint, and tow; the knee was flexed and secured by a bandage passed over the foot and made fast to a belt around the waist, the limb being then raised and placed upon pillows, resting on its outside. The progress of the case was very satisfactory, the wound healing chiefly by first intention. At the end of three weeks the patient was convalescent and able to walk quite comfortably, and was discharged Sept. 23rd, a month after his admission.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

At the ordinary meeting of this Society, on the 26th ult., the chair was taken by the President, Sir William Jenner, Bart. The chief feature of the evening was a case of acute cancer of the liver, with pyrexia, related by Dr. Murchison, which led to an interesting although somewhat desultory discussion, commencing with the question of pyrexia in cancer and terminating with that of dropsy from venous obstruction. Mr. Lawson showed two interesting cases in which he had removed tumours from the orbit.

Dr. Murchison read notes of two fatal cases of Acute Pyelitis and Nephritis, apparently consequent on Gonorrhœa. These cases occurred several years ago at the London Fever Hospital, and illustrated a mode of fatal termination of gonorrhœa which, although tacitly acknowledged as probable, had yet been but seldom recorded. In "Chelius's System of Surgery" it is stated that John Hunter was of opinion that the irritation of gonorrhœa was sometimes propagated to the kidneys, but beyond that statement Dr. Murchison had been unable to find any records of such cases. Dr. G. Johnson had informed him that he had either met with or read of such a termination of gonorrhœa. The first case was that of a grocer's assistant, twenty-eight years of age, who was admitted into the Fever Hospital on June 4th, 1865, in a state of profound coma, with low muttering delirium and a dry, brown tongue. There was no eruption; the temperature was not taken, and no urine could be obtained. There were moist sounds at the back of each lung. The man died three hours after admission, and after his death it was learnt that he had been for some time suffering from gonorrhœa, the cerebral symptoms being of only two days' duration. On post-mortem examination the entire length of the urinary tract was intensely inflamed and bathed in pus, that in the ureters being thick and yellow; and both kidneys were deeply engorged, in the first stage of acute nephritis. There was no old renal disease and no dropsy. There was incipient lobular pneumonia in the lower lobes of the lungs, which were much congested. The brain was not examined. The second case was that of a lady's maid twenty-five years of age, who was admitted into the same hospital on Jan. 31st, 1866, in a state of unconsciousness, with dusky face and laboured breathing. There was convergent strabismus, a well-marked cerebral macula; no rash. There is no record of the pulse or temperature in this case. There was hypostatic congestion of the lungs, and the patient died on Feb. 2nd, never having regained consciousness. Death was preceded by two convulsive seizures. After death it was learnt that she had been apparently well up to the day before admission, when she had travelled from Paris to London. Arriving in London, she made a good meal, and was subsequently attacked with convulsions, and then brought to the hospital in a state of coma. There was found hyperæmia of the membranes and substance of the brain; no tubercle in the lungs, which were congested; the kidneys were large, smooth, and almost black from the large amount of blood they contained; the ureters and bladder contained a large quantity of pus, and the whole genito-urinary tract was intensely injected.—Dr. Greenhow said that he was reminded of a somewhat similar case which he saw when he was a student at Edinburgh. He was present at the post-mortem examination of a man who had died in a state of coma of thirty-six hours' duration. He was supposed to have been poisoned, but he was the subject of gonorrhœa, for which he had been taking copaiba and using injections. Sir William Newbiggin at the time attributed the symptoms to "cerebral metastasis" from gonorrhœa checked by treatment. — Sir William Jenner asked if it was quite certain that the female patient had gonorrhœa.—Dr. Murchison replied that there was no history to be obtained on this point, but the post-mortem appearances in her case were similar to those in the male patient. In answer to Mr. B. Hill, he also stated that the duration of the gonorrhœa in the male patient was not defined; it had existed for some time. He further stated, in reply to a question put to him by Sir William Jenner, that the man had been under treatment for gonorrhœa, and he could not say that he had taken cantharides. Opposed to the view of the inflammation of the kidney being primary was the fact of the distension of the passages with pus, the ureters appearing as thick cords. Although such extension of inflammation was commonly stated in text-books, he had never come across any others. — Sir William Jenner thought the interest lay in the extension of the inflammatory mischief to the finer structures. Such cases must be rare, else among the many surgeons present there must have been some who had met with them.

Dr. Murchison then read notes of a case of Acute Cancer of the Liver, with Pyrexia, in a man aged twenty-four, which, he said, illustrated a clinical fact of some importance—namely, that the temperature in certain cases of cancer may be elevated. Not much is known as to the range of temperature in cancer. Wunderlich says a high temperature in such cases is usually dependent on complications; a statement confirmed by Dr. Woodman, who adds that the rise of temperature in cancer is rarely above normal limits. The patient was a carpenter, who, six months before his admission (Nov. 6th) into hospital, strained himself, and attributed to this strain a swelling with tenderness of the left testicle. There was no history of malignant disease in his family. Six weeks before admission he began to have pain in the right side of the abdomen, and some enlargement of the liver began to be noticed. This enlargement progressed rapidly, without any rigors, but with profuse night-sweats and much emaciation. On admission, the temperature was 101·3°. He complained of pain in the hepatic region, which was bulged, the liver itself reaching as low as the pelvic brim, and, above, its percussion-limit was about an inch and a half above the nipple. The surface of the liver was smooth, tense, and tender. There was slight jaundice; no ascites. Specific gravity of urine 1018; contained a trace of albumen. There was slight cough. A little sibilus audible over both lungs at back. Pulse 120. The left testicle was twice the size of the right; hard, but not tender. The liver continued to enlarge; he had frequent attacks of vomiting; the jaundice increased; and death took place after several days' delirium, and on one occasion a decided rigor followed by heat and dry skin. The complete record of the temperature was unfortunately lost; but Dr. Murchison gave the following figures on the first few days of observation:—Nov. 6th: Evening, 101·2°. 7th: Morning, 101·1°; evening, 103°. 8th: Morning, 99°; evening, 101·4°. 9th: Morning, 98·5°; evening, 101·2°. 10th: Morning, 99°; evening, 100°. 11th: Morning, 100°; evening, 103°. The liver was found to be greatly enlarged, measuring 12½ inches vertically; and its entire substance was studded with masses of vascular cancer, varying in size from that of pea to that of a chesnut, not softened, but exuding a milky juice filled with large nucleated cells. There was no recent peritonitis, and no inflammatory change in the liver-tissue that remained. A chain of cancerous glands passed up the abdomen in the region of the left kidney; and the left testicle was also infiltrated with cancer. Both lungs presented similar masses of new growth; but there was no sign of recent inflammation in them. The heart was healthy. The case was an obscure one on account of the high temperature, the age of the patient, the history of previous injury to the testicle, supervention of the cerebral symptoms, and of a rigor shortly before death. The diagnosis was that the case was one of pyæmic inflammation of the liver; and the case was of interest in showing how closely a rapidly evolving cancer without any inflammation could simulate pyæmia. — Sir William Jenner asked whether the hepatic tissue between the masses of cancer showed any evidence of inflammation.—Dr. Murchison replied that it was injected, but showed no inflammatory exudation or pyæmic deposit. It had been carefully examined with the microscope. In answer to Dr. Southey he said the testicle was cancerous, and pointed out that it was curious that although that organ was the first affected, the disease had remained stationary there, spreading up by the lumbar and retro-peritoneal glands to the liver.—Dr. Moxon inquired whether the portal veins had been examined. He referred to a case which he had published in the *Medical Times and Gazette* for 1873 (vol. i.) It was the case of a gentleman, twenty-six years of age, who had during life symptoms resembling suppuration of the liver, the temperature rising several times to 102·5°, with rigors and night-sweats. After death the liver was invaded with cancer, and the branches of the portal vein were stuffed with masses of cancer. The liver-tissue between the cancer nodules was swollen and pinkish. He compared it at the time to the union of chlorine and hydrogen as producing heat similar to the union of oxygen and hydrogen, believing simply that pyrexia was an acute phenomenon produced by changes different in kind but equally rapid in progress.—Dr. Murchison replied that there was nothing observed in the larger veins.—Dr. Southey had met with a similar case in which the portal vein was invaded. He thought that in all rapidly growing cancers the chemical changes produced must be varied, and give rise to pyrexia.—Dr. Murchison inquired whether there was any ascites present in the cases mentioned by Drs. Moxon and Southey. No doubt pyrexia might be expected to occur in rapidly spreading cancer, but it had not been so recorded. — Sir William Jenner said that in one of the most rapid cases of cancer he had witnessed, that of a boy, who died a fortnight after the appearance of a tumour in the abdomen, there was no marked elevation of temperature. The cancer was disseminated throughout the pleura and peritoneum, infiltrating the intestinal walls.—Dr. Moxon said there was no ascites present in his case, although the portal vein was so obstructed, but he was not sure whether venous obstruction always led to dropsy. Thus in a case which he brought before the Pathological Society, in which the coronary sinus was entirely closed by a hydatid tumour, the blood finding its way into the auricle by dilated Thebesian foramina; there was no hydro-pericardium. Another case which he brought before the same Society presented complete obliteration of the sinuses of the dura mater by inflammatory growth without there being any effusion. He had seen several cases of uterine cancer in which the veins of the lower limbs were completely plugged without any œdema of the feet.—Mr. Brudenell Carter referred to a case brought before the Clinical Society last session by Mr. Hutchinson, in which there was obliteration of the ophthalmic vein without any swelling of the optic disc.—Mr. Callender asked Dr. Moxon how much of the coronary sinus and in what part of its course was it obliterated?—Dr. Moxon replied that the obliteration took place about one inch from the auricle.—Sir William Jenner said that if the blood were prevented flowing in one direction it must find an outlet somewhere.—Dr. Moxon wished to draw attention to the fact that there does occur blocking of the veins, as the portal, without there being dropsy; so that absence of ascites was no evidence against implication of the portal vein.

Mr. Berkeley Hill made a few remarks on a case of Amputation at the Hip-joint for Fibro-plastic Tumour. The tumour, which was shown at the Pathological Society by Mr. Godlee, involved the whole femur and the femoral vessels. This necessitated making the anterior flap wholly of skin. The flap sloughed, and the patient made a slow recovery, many hundreds of skin-grafts being employed to cover the large granulating surface. The operation was performed on August 12th, and he brought the patient to show the result of the operation. The growth was a round-celled sarcoma.—Mr. Callender remarked that since the introduction of the abdominal tourniquet the old method of performing amputation at the hip by transfixion had fallen into disuse. The plan he preferred was to form an anterior flap, and then to divide the femoral vessels by a clean vertical incision, by which the danger of splitting them was avoided. When this was done, and care taken in making the flap to preserve the branches supplying it, no sloughing followed. He wished to know the *rationale* of the employment of so many grafts in the present case.—Mr. Hill replied that the size and extent of the tumour had obliged him to make the flap by dissecting off the skin from the surface of the tumour; and no doubt he had cut through the branches referred to. He was sure more than a hundred grafts had been used; but when it was remembered what a large surface there was to be covered, including the acetabulum, and that the grafts were made on many occasions, this number was not surprising. The cicatrix obtained was very supple, and proved that many of the grafts had taken.

Mr. Geo. Lawson exhibited two patients from each of whom he had removed a Tumour of the Orbit. They were essentially different, but each presented points of great clinical interest. The first case was that of an elderly woman who was admitted into the Middlesex Hospital, with a large melanotic tumour involving the eye and filling up the whole orbit. This growth Mr. Lawson removed, and then applied the chloride of zinc paste, and in such a manner that he succeeded in saving the upper eyelid. One of the great disadvantages, he remarked, of the use of the chloride of zinc in such cases had been that, owing to the running of the paste into the cellular tissue of the eyelids, both lids had been destroyed by it. The plan which he now adopts, when practicable, is the following:—After the eye and tumour have been excised, pressure is made in the orbit until all bleeding has ceased. The mouth of the conjunctival bag, from which the globe has been enucleated, is now to be held open with two pairs of forceps, whilst the paste, spread on small strips of lint, is plastered round the sides of the orbit. A small piece of cotton-wool is next introduced to keep the strips of lint *in situ*, and the mouth of the conjunctival bag is closed over the whole by a single continued suture. A layer of lint is then placed over the conjunctiva, and upon this the lids are closed and kept in position with a compress of lint and a roller. The patient progressed well, had suffered no pain, and had no recurrence of the disease since she left the hospital on the 25th May. In the second patient Mr. Lawson removed a tumour from within the orbit, without inflicting any injury on the eye. The growth occupied the floor of the orbit, and seemed to spring from the periosteum, far back in the orbit. It was about the size of half a walnut, much flattened when it was pressed between the eye and the orbit, but rounded at its free external border. The specimen was examined by Dr. Coupland, who pronounced it to be a lymphoma.—Dr. Murchison inquired if the first case related by Mr. Lawson was a spindle-celled sarcoma. In reference to this he referred to a case (Path. Trans., vol. xxiv.) in which a spindle-celled sarcoma recurred in the liver, and led to the patient's death eleven years after removal of the primary growth from the orbit.—Mr. Brudenell Carter wished to know whether Mr. Lawson advocated this method for tumours external to the eyeball as well as for intraocular growths. In one case in which he had extirpated a sarcoma of the orbit by means of caustics there was no recurrence, but an unsightly cavity was left. In this case the growth seemed to spring from the periosteum on the inner side of the orbit; and, under such conditions, he feared Mr. Lawson's plan would be inapplicable. The second case related by Mr. Lawson reminded him of a patient, nineteen years of age, in whom the right orbit was filled by a growth pushing forward the eyeball. The eyeball was enlarged, and the eyelids and eyelashes were hypertrophied. The growth was congenital, and had grown rapidly up to the third or fourth year, and then advanced but slowly. He made a long incision along the lower margin of the orbit, and removed a large growth, which was pronounced to be a degenerated nævus. The deformity was much relieved by the operation, and, with the exception of the larger size of the lids and of the eyeball, there was but little difference seen in the two orbits. Two years after the patient returned with the eye again projecting, and the operation being repeated, a similar growth was removed, on this occasion from above the globe. This operation was followed by erysipelas and suppuration, and now the eye has fully receded. Very probably Mr. Lawson would have recurrence of the growth in his case.—Mr. Lawson, in reply, said that those cases only were fitted for treatment by means of the zinc paste in which a bag of conjunctiva could be left behind so as to receive strips of lint bearing the paste.

Mr. Brudenell Carter then introduced a patient on whom he had performed his new operation of iridectomy. (See page 561.) The case was one in which the effects of the operation could be well seen, the patient having green irides. The artificial pupil was made in an external direction.

The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

At a meeting held on the 22nd ult., Dr. Routh, President, in the chair, Mr. Francis Mason exhibited a most interesting case of Tumour of the Palate. The patient, who was thirty-four years of age, and whose voice was not impaired, had remarked thirteen years ago a small growth on the hard palate. This increased in size, and was, previously to the man being seen by Mr. Mason, the seat of hæmorrhage, which was reproduced profusely on examination. An ulcer and cavity at the back of the tumour were discovered, and the bleeding was treated with perchloride of iron on admission into St. Thomas's Hospital. Mr. Mason said that the tumour had perceptibly diminished, and that he thought it was of a cystic character. His object in bringing the patient forward was to inquire if similar cases had been seen, as he thought this kind of tumour to be rare, and he wished to hear any suggestions as to operative interference. —Mr. Adams dilated on the rarity of tumours of the hard palate, but related a case of his own similar to the one brought before the Society, in which he had removed the growth with ease, though he had anticipated considerable difficulty, and he recommended removal in Mr. Mason's case, the tumour being, in his opinion, fibroid and non-malignant.

Dr. Thorowgood then showed the Cirrhosed Liver of a Child ten years of age, who had died after exhibiting abdominal enlargement and blood in the stools. He dwelt on the youth of the patient, and on the absence of any alcoholic stimulation.—To a question by Dr. Leared, inquiring if the child came of intemperate parents, Dr. Thorowgood replied in the negative. — Mr. Adams and Dr. Crisp made a few remarks, the latter speaker alluding to the large quantity of spirits given to children by poor parents.

Dr. Thorowgood exhibited an Inhaler invented by Mr. Carrick, of Glasgow, the use of which was ably demonstrated by the inventor.

Dr. Brunton then read a paper "On the Rational Treatment of Common Tapeworm." After stating the varieties met with in this country, and mentioning the anomalous symptoms to which they give rise (their very anomaly, he remarked, affording a clue to the diagnosis), he stated that the chief points to be observed in the treatment were: a preliminary starvation of twenty-four hours, and the administration of a combination of kamala and male fern—namely, two drachms of kamala to be rubbed up with a little gum-and-water till an emulsion is formed, and then two drachms of oil of male fern to be added, and the whole triturated in a mortar, with a gradual addition of water till a three-ounce mixture is formed, of which half is to be given at bedtime, and the remainder four hours later. This he had never known to fail. He insisted on the quality of the drugs being good, and spoke of the after-treatment by tonics.—In the discussion which followed, Dr. Fothergill said he thought the way in which drugs were administered in these cases was an important point.—Dr. Leared said he himself first introduced kamala into this country, which he first thought had a mechanical effect, but has since found the tincture to be as powerful as the powder.—Dr. Rogers spoke of the inferior quality of the drugs supplied to hospitals and dispensaries.—Dr. Crisp thought turpentine in large doses to be very effective, and did not think worms were ever introduced into the system by vegetables.—Dr. Cook had used the areca nut with success combined with the male fern.—Dr. Theodore Williams never had much trouble with these cases, and thought the worm did not affect the patient's health to any great degree.—Dr. Farquharson thought the tænia mediocanellata to be more common than the tænia solium. He considered male fern to be very effective by itself, and deprecated the long starvation treatment.—Dr. Godson mentioned the good effect of common salt in these cases.—Dr. Griffith lauded the administration of large doses of iron.—After Dr. Brunton had responded the meeting adjourned.

At a meeting held on November 29th, Dr. Routh, President, in the chair, Dr. Griffith exhibited a case of Hermaphroditism. A discussion followed on the sex of the child, in which the President, after careful examination, considered it a female, as no testes could be found; whilst Mr. Sebastian Wilkinson and Dr. Rogers thought the child to be a male; and Mr. Davy suggested it might be of neuter gender.—Dr. Crisp mentioned a case described by Dr. Clutterbuck similar to one of Prof. Wood's referred to by Mr. S. Wilkinson, and the President appointed Dr. Wiltshire and Mr. Davy to examine the present case, with Dr. Griffith to report thereon.

Dr. Crisp then read a paper "On a Recent Epidemic of Scarlatina, Epidemic Sore-throat, and Erysipelas, which occurred chiefly in June last, in the south-west district of Chelsea," the peculiarity of which, he said, was the large number attacked almost simultaneously, and its general mildness and unfatality as regards scarlatina. A table of 98 cases seen by Dr. Crisp in June was appended, 42 being mild cases of scarlatina (of which only 7 occurred in patients above the age of twenty), and 56 of what he called epidemic sore-throat (only 6 of which were under twenty years of age). The invasion of this latter, he went on to say, was generally sudden, beginning mostly with stiffness at the back of the neck, chills and fever, with depression of power; the tonsils enlarged and inflamed, ordinarily without abrasion or creamy patch; in many cases the glands at the back of the neck were much swollen, there was no eruption or desquamation of cuticle, nor did the white tongue with red tip and raised papillæ exist. One case only, in a lady sixty years of age, proved fatal, and this was from an accidental fall against the bed-post; but in another isolated case, in which abscess formed in the leg, the tracheal obstruction and loss of voice were so formidable that tracheotomy was contemplated. The patients, as in the scarlatinal cases, were all in good circumstances, and very little of the disease, as shown by the reports of the parochial surgeons, was seen among the poorer classes. None of the cases of scarlatina were fatal; they were unusually mild and rarely attended with any kidney complication. The general state of the drains, the opening of the old sewer at the end of Beaufort-street, and the deposit of sewage upon the mud of the river (the disease being confined to an area along the river of about half a mile in length and 500 or 600 yards in breadth) were supposed to have been the chief exciting causes. Erysipelas also prevailed to a great extent; six cases of this disease were seen in infants after vaccination.—In the discussion which followed, Dr. Buchanan thought the method of the spread of erysipelas, sore-throat, &c., required investigation, and mentioned the propagation of erysipelas by vaccination from a subject which showed symptoms of the disease; he also alluded to the spread of scarlet fever through the cream supply, the result of which, however, was as yet inconclusive.—Dr. Theodore Williams supported this view.—Mr. Milton stated that scarlatina had been increasing in severity since the days of Sydenham, although the sewage works in London are more complete at the present than they were at that time. He thought the milk supply not to be the cause of the present outbreak.—Dr. Fothergill, Dr. Farquharson, and Mr. M'Donagh also made a few remarks, and after Dr. Crisp had responded, the meeting adjourned.

Reviews and Notices of Books.

The Diseases of the Heart and of the Aorta. By Thomas Hayden, F.K. & Q.C.P. Dublin: Fannin and Co. 1875.

The treatise which Dr. Hayden has added to the many already existing on diseases of the heart and great vessels is one which has little to fear from rivalry or comparison. Written in a special way, it will have a special value. It outdoes all its compeers, at any rate in size. A thick volume of more than twelve hundred octavo pages is a large work on a special subject. It is, indeed, awkwardly large. Had it been compressed to half or two-thirds of its present size, it would have gained in convenience, and we are not sure that it would have lost in utility. Its size is due to its encyclopædical comprehension of all work on the subject, whether of historical or scientific interest, which sometimes is very small. The facts and statements of other writers, which are reproduced in abstract, constitute probably two-thirds of the work. They are sometimes criticised, but hardly ever digested. They are presented to the reader in equable succession, and, in spite of the many merits of Dr. Hayden's treatise, we are somewhat reminded of the Chinese method of composition of a medical book, according to which the writer invariably describes first what every preceding writer has said upon the subject, and then to the undigested series he adds his own opinion. This is very much what Dr. Hayden has done, but the collection of facts and statements is of great value, and can have been accomplished only by great industry.

The first hundred pages are devoted to the anatomy and physiology of the heart. The additions to our knowledge which have been made by successive workers, from Vesalius to Pettigrew, are detailed. Every important research on both the anatomy and action of the heart is included; the modern theories of the mode of its innervation are given at length. No less than sixteen woodcuts are introduced to illustrate the various theories concerning the time occupied by the various elements of the cardiac action. That accepted by the author is the division in common use in this country.

The mechanism of the sounds of the heart is discussed at great length, and a long table is introduced of the various causes to which the sounds have been ascribed; copied from Longet, and augmented by the author, whose own explanation, with which it closes, is the common one, with the exception that he does not allow the muscular action of the heart to enter into the composition of the first sound, on the ground that this would involve a want of synchronism in the fibrillar contraction.

Passing, in the second chapter, to the phenomena of the heart's action in relation to its modification by disease, Dr. Hayden considers the causes and mechanism of displacements of the heart, and discusses the theory of their mechanism suggested by Dr. Douglas Powell, that the displacement is the result of traction by the unaffected lung. He rejects this explanation both on theoretical considerations and on the ground of an experiment of his own, in which the sudden collapse of an over-distended lung had no effect in moving the mediastinum beyond its normal position. Reduplication of the first sound is explained by Dr. Hayden as the resolution of the sound into its constituent elements, the impact of the heart against the chest-wall, and the tension of the auriculo-ventricular valves. He founds this explanation on the character of the portions of the reduplicated sound, and the explanation ignores the very obvious analogy with the reduplication of the second sound. The clear dependence of the latter on a synchronism of the two sides of the heart renders Dr. Hayden's different explanation of the reduplication of the first sound at least improbable. The account of the mode of action of the heart is drawn largely from Dr. Sibson's work, and is followed by a description of the phenomena attending the pulse.

In the chapter on physical signs of disease of the heart, the various murmurs indicative of valvular disease, or due to other causes, are considered at length.

In his account of dynamic murmurs Dr. Hayden discusses incidentally the relationship of heart murmurs and of chorea. His experience gives great weight to the opinion which he expresses, and which, of special interest in connexion with the late discussion on the subject, is at decided variance with that of many modern authorities. He denies all rheumatic relationship of chorea, and does not believe that it is ever due to valvular lesion of the heart, rheumatic or non-rheumatic. The frequency with which vegetations are found post mortem in cases of chorea he considers has not the significance often attached to it, and, on the other hand, shuts off from the advocates of the embolic theory their negative refuge, "that absence of murmur is no proof of the absence of even serious organic disease of the valves of the heart." Further, he turns upon them their own weapons, and asserts that whilst a (permanent?) murmur may be due to other causes than structural alteration of the valves, "the latter, in a degree capable of deranging health and appreciable to the eye of the anatomist, must and actually does always give rise to murmur so long as the heart acts with ordinary vigour."

Twenty-five pages are devoted here, and as many further on, to the history of the presystolic murmur, of the significance of which Dr. Hayden was a very early advocate. Every article which has been published on the subject is analysed in more or less detail. Murmurs occurring between the sounds and not connected with either—"intersonal" murmurs, as he terms them,—Dr. Hayden considers we must reckon as a numerous class, and gives examples of post-systolic, pre-diastolic, and post-diastolic varieties. The two latter varieties appear to have been associated in Dr. Hayden's cases with partial incompetence of the aortic valve, and are new rather in name than in fact.

The short chapter on the causes of heart disease is less exhaustive in its style than the rest of the book; it consists of brief extracts and tables from various writers strung together with a few unimportant remarks. The treatment of this subject is indeed disappointing. When we turn, for instance, to learn what most modern opinions teach on the influence of syphilis as a cause of heart disease—a subject of great interest, of which something is known, and much more is, with reason, suspected,—we find it dismissed with the inadequate remark that "Ricord describes morbid changes of the heart and other organs which he compares to syphilitic tumours or nodes." A few facts about nodular syphilitic growths in the heart are given further on.

The long account of pericarditis is chiefly remarkable for an interesting collection of cases of pericardial adhesion, compared as to the effect upon the walls of the heart. The cases are drawn from the records of the Pathological Societies of London and Dublin, and Dr. Hayden's own note-book. He finds, from a comparison of the fifty-four cases, that only seven can be adduced in support of the doctrine that simple adhesion of the pericardium is competent to give rise to hypertrophy of the heart; and even these are not reported in such a manner as to inspire confidence, since in several the urine was not tested, nor was the disease of the kidneys excluded by examination after death. He therefore believes that, when hypertrophy of the heart is met with in cases of adherent pericardium, the connexion is, in the majority of cases, purely accidental. Dr. Hayden's treatment in acute pericarditis is invariably to administer mercury in small and frequently-repeated doses, half a grain of calomel every hour, pushed to slight salivation, subsequently iodide of potassium and counter-irritation; and for the removal of fluid, diuretics and purgatives, not blisters. Some cases of pericarditis are appended.

The section on diseases of the walls of the heart is chiefly remarkable for the exhaustive account, historical and clinical, of the conditions of hypertrophy, dilatation, and fatty degeneration. In the description of the first of these there is little that is new. Aneurism of the aorta is removed from its list of causes on the ground of some original observations which show, in Dr. Hayden's opinion, that aneurism of any part of the aorta is more frequently associated with a normal ventricle than with either hypertrophy or dilatation, and that the association of hypertrophy with aneurism, frequently observed, is accidental. The causes and symptoms of fatty degeneration are examined by the help of some extensive and valuable tables compiled chiefly from the Pathological Society's records. From these he believes that it is a disease of middle rather than of advanced life (although the figures point to the latter), and that men are affected twice as frequently as women. The "Cheyne-Stokes breathing," the peculiar rhythmical irregularity of respiration which has attracted so much attention, is discussed at length, and Dr. Hayden offers for it this explanation. The only lesion of structure commonly found in the cases being atheromatous and calcareous change, with dilatation in the arch of the aorta, he suggests that in sleep and repose, when the heart's action is most tranquil, the systemic capillary circulation fails from want of the contributory aid rendered in health by the elastic reaction of the aorta. Hence arise a suspension of tissue respiration and accelerated breathing, and as the systemic capillary circulation becomes established, the *besoin de respirer* is less urgent, and respiration gradually subsides till a period of apnœa arrives, to which the exhaustion of the patient contributes.

An extensive table presents the circumstances, symptoms, physical signs, mode of death, state of the aorta, state of the valves of the cavities and walls of the heart, of the fibres, and of other organs in eighty-eight cases of fatty heart. It is intended to be supplementary to the tables published by Dr. Quain in 1850.

Other forms of degeneration of the heart and growths in its tissue are subsequently described, and then the symptoms and signs of endocarditis. It is interesting to find that Dr. Hayden confirms the opinion of many careful observers that the murmur of endocarditis never commences suddenly; that its gradual development can always be detected in an alteration of the sound before a distinct murmur is perceptible. In the treatment of endocarditis Dr. Hayden adopts the same vigorous measures which he employs in pericarditis, leeching, and mercury to salivation, being his usual measures.

Diseases of the several orifices of the heart are described at great length, with the addition of numerous illustrative cases, and a very interesting table is given of eighty-one cases of mitral stenosis. This and other chapters are illustrated by numerous sphygmographic tracings. Neuroses of the heart are described at length, and among them angina pectoris and exophthalmic goitre receive their due attention. Both in this chapter and in the last, on diseases of the aorta, Dr. Hayden gives us the same wide review of contemporary and historical facts and opinions, as well as numerous cases.

The work is certainly not one for students, but as a conspectus of the scientific literature of diseases of the heart and aorta, and as a record of original experience and opinion, it deserves an honourable place in medical literature.

DRS. T. LEWIS AND D. D. CUNNINGHAM ON THE SOIL IN ITS RELATION TO DISEASE.

THE Appendix to the last Annual Report of the Sanitary Commissioner (Dr. J. M. Cuningham) with the Government of India, contains an excellent paper "On the Soil in its Relation to Disease," by Drs. Lewis and D. D. Cunningham. Since Professor Pettenkofer directed attention to the composition of the air in the soil, and proposed the carbonic acid in it as a measure of its impurity, various researches have been made, the general result of which is not on the whole favourable to Pettenkofer's proposal. The permeability of the soil—i.e., the freedom with which atmospheric air enters it, as well as the composition of the soil itself, so affects the amount of carbonic acid in the air in the interstices, as to render it probable that the carbonic acid cannot be taken as a measure of ground impurity. But this, while it throws a difficulty in the way of forming an opinion as to the amount of impurity in soil-air, does not at all lessen the belief that a knowledge of the composition of soil-air is of great hygienic importance.

The report of Drs. Lewis and Cunningham is the best we have yet seen on this topic, and it is a most creditable piece of work. It examines into all the conditions during an entire year; the amount of carbonic acid in the soil-air in two localities at 3 ft. and 6 ft. in depth in each case; the temperature of the ground at those depths; the temperature of the atmosphere; the velocity of the wind; the rainfall and the height of the ground-water are given; and a series of graphic representations place the results before the eye of the reader very clearly.

In Calcutta the lower stratum of ground-air is richer in carbonic acid than the higher stratum. The maximum monthly amount in the first locality occurred in September, when it reached 12 volumes per 1000 of air; the minimum was from March to July, when it was nearly 8 volumes per 1000. In the 3-foot stratum the air was at its maximum also in September, when the monthly average was 11 per 1000, and at its minimum in May, when it was only 4 per 1000. The carbonic acid was, therefore, less in quantity 3 feet from the surface than at 6 feet, and suffered greater fluctuations, but the period of maximum and minimum coincided in the two depths. The authors compare these results with the Munich rates, but we will not enter into this. In the second locality the observations were only carried on for six months, and the remarkable fact appears, that while the fluctuations in the amounts of carbonic acid in the two localities fairly corresponded, the amount of carbonic acid was considerably less in the second locality than in the first. These localities were only 50 yards apart, and to all appearances the nature of the soil was the same; and yet, while in locality No. 1, at 6 ft. from the surface, the maximum carbonic acid was 12 and the minimum 7 per 1000 volumes, in locality No. 2 at the same period the numbers were 7 and 5. The authors remark that "the processes going on in the soil must have differed materially in degree if not in kind, and if such processes have any influence on health, it is obvious that people inhabiting one end of the building must have been exposed to different hygienic conditions from those living at the other end." This is possible, but to us the inference would rather be that carbonic acid is really no measure of the processes going on in the soil, and that some other measure must be devised.

On comparing the amount of carbonic acid in the soil-air with the temperature of the soil, the authors found that the lines of temperature neither directly nor conversely corresponded with those of the carbonic acid. At the same time, one point came out—viz., that the periods of greatest difference in the amounts of carbonic acid in the 3 ft. and 6 ft. strata coincided with the greatest difference in temperature between these strata. Perhaps this was a mere coincidence; at any rate, it was the only indication of any relation of carbonic acid to soil temperature. The soil temperature was at its lowest in January, when the weekly mean at 3 ft. reached 68°, and at 6 ft. 72°, and at its highest in July and August, when the temperatures were 83° and 82°.

The atmospheric temperature in no way influenced the carbonic acid in the soil-air. The rainfall had a distinct influence on the carbonic acid, the main periods of elevation of which occurred with the rainfall, and the period of depression occurred with drought. There was also a general coincidence with the water-level. The velocity of the wind did not apparently affect the carbonic acid, except that in April and May, when the movement of the wind was great, the carbonic acid in the 3 ft. stratum of one of the localities which was exposed suddenly sank, while in the other more sheltered locality no such sinking occurred. The authors think this discrepancy may have been due to the wind.

The outcome of the whole inquiry as to the carbonic acid in soil-air is thus, we think, to show that no great results arise from it; at the same time, we trust that this investigation may still be carried on in Calcutta, and the question definitely settled.

Another very interesting point referred to by the authors is the relation of the total Calcutta mortality and the prevalence of fevers, dysentery, and cholera to the soil. Nothing obvious was made out, except with regard to cholera. The authors give a graphic plate, showing the weekly cholera mortality in Calcutta in connexion with the water-level, rainfall, and temperature of air and soil. They remark that the "only remarkable coincidence appears to lie in the converse relation which water-level, and in a less marked degree rainfall, bear to the prevalence of the disease;" when the latter is "at a maximum the water-level is at a minimum, and when the water-level is at a maximum the prevalence of cholera is at a minimum." On looking at the table, however, we think this expression is rather too strong, and the point is of so much importance that we will give the figures for the whole year.

Week ending—	Distance of soil-water in feet and inches from surface at Alipore near Calcutta.	Deaths from cholera in Calcutta in the week.
July 5th, 1873	15ft. 0in.	13
12th, ,,	14ft. 11in.	11
19th, ,,	14ft. 6in.	14
26th, ,,	14ft. 2in.	15
Aug. 2nd, ,,	13ft. 5in.	15
9th, ,,	12ft. 9in.	4
16th, ,,	11ft. 7in.	14
23rd, ,,	11ft. 0in.	3
30th, ,,	10ft. 8in.	4
Sept. 6th, ,,	10ft. 5in.	5
13th, ,,	9ft. 9in.	9
20th, ,,	10ft. 1in.	4
27th, ,,	10ft. 3in.	6
Oct. 4th, ,,	10ft. 8in.	8
11th, ,,	10ft. 11in.	6
18th, ,,	11ft. 9in.	5
25th, ,,	12ft. 3in.	4
Nov. 1st, ,,	12ft. 4in.	4
8th, ,,	12ft. 4in.	2
15th, ,,	12ft. 11in.	5
22nd, ,,	13ft. 4in.	5
29th, ,,	13ft. 5in.	5
Dec. 6th, ,,	13ft. 8in.	9
13th, ,,	13ft. 10in.	5
20th, ,,	14ft. 2in.	3
27th, ,,	14ft. 1in.	12
Jan. 3rd, 1874	14ft. 4in.	7
10th, ,,	14ft. 6in.	11
17th, ,,	14ft. 9in.	6
24th, ,,	14ft. 9in.	23
31st,	14ft. 10in.	27

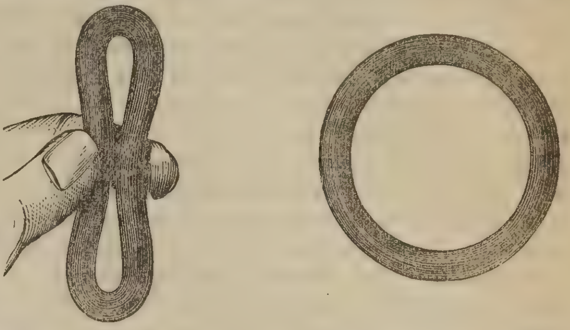
Week ending—	Distance of soil-water in feet and inches from surface of Alipore near Calcutta.	Deaths from cholera in Calcutta in the week.
Feb. 7th, 1874	14ft. 10in.	46
14th, ,,	14ft. 10in.	47
21st, ,,	14ft. 10in.	43
28th, ,,	14ft. 10in.	37
March 7th, ,,	14ft. 10in.	40
14th, ,,	14ft. 11in.	38
21st, ,,	15ft. 0in.	44
28th, ,,	15ft. 0in.	40
April 4th, ,,	15ft. 1in.	58
11th, ,,	15ft. 0in.	60
18th, ,,	15ft. 2in.	36
25th, ,,	15ft. 1in.	54
May 2nd, ,,	15ft. 2in.	93
9th, ,,	15ft. 2in.	70
16th, ,,	15ft. 2in.	70
23rd, ,,	15ft. 2in.	37
30th, ,,	15ft. 2in.	32
June 6th, ,,	15ft. 2in.	27
13th, ,,	15ft. 2in.	20
20th, ,,	15ft. 2in.	25
27th, ,,	15ft. 2in.	18

We have given this table in full not only because it is the most complete yet published, but because there is sure to be difference of interpretation. From July to Sept. 13th the water rose in the soil until it was five feet nearer the surface. The deaths from cholera, never very many, fell in August, and, at the time of highest water, had fallen to 21 in the preceding month. But from Sept. 13th the water fell with great regularity to the end of the year, and yet the cholera deaths remained practically the same. In the four weeks of September there were 24 deaths; in the four weeks of December, 29. Not until January 17th does a decided rise occur in the cholera deaths, and then the water was 14¾ feet from the surface. The deaths remained at nearly the same number until May 2nd, when they reached the maximum of 94. But between January 17th and May 2nd the water sank only five inches, and that was at a depth of 15 feet from the surface; while in the previous four months it had sunk 4 feet—namely, from 10 to 14 feet—without any more marked influence on the cholera deaths, although the drying ground was much nearer the surface. To this it may be said that the influence of the drying soil required time to act, and that we must look at the whole coincidence instead of trying to dissect it. But if this be so, how can we account for the last part of the table? The water-level remained from May 2nd always at its lowest point—viz., 15 ft. 2 in.—from the surface until June 27th, and yet during the whole of this time the cholera deaths were rapidly falling from 93 to 18 per week. If, then, the drying soil required time to act, what stopped its continued action after May 2nd? Why did it not increase the cholera after May 2nd? The temperature of the ground was then rising; the water-level was as low as it could be, and yet cholera declined. The coincidence, not it appears to us strong anywhere, fails here completely. At the same time it would be rash to say that the question is at all clear. In Calcutta the rule as to cholera is that it begins to increase in February, and is most fatal in March, April, and May. April appears, from Macpherson's tables, to be the worst month (19,328 deaths in twenty-six years), and August the best month (3440 deaths in twenty-six years). Now, in April, the water-level is lowest (15 ft. from surface), and in August is rising to its maximum of 10 ft. from the surface, which it reaches in the middle of September. Here, then, it may be thought is a coincidence too striking to be put aside. It may be so, but, as already pointed out, the table before us shows, it seems to us, points which are not to be reconciled with this view. At any rate, we trust the observations will be continued, and the matter as regards Calcutta set at rest.

New Inventions.

NEW FORM OF PESSARY.

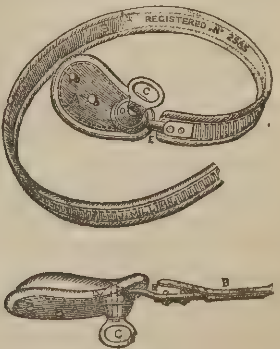
The pessary of which an engraving is given possesses manifest advantages. It consists of a watch-spring coiled spirally, with the extremities left free; this is encased in caoutchouc, and in its external appearance resembles many of the various ring pessaries at present known. The advantages of this pessary will appear by reference to the engraving on the left, where it is shown collapsed for facilitating its introduction; when *in situ* it expands to the circular form, as shown on the right of the figure, or assumes such other shape as may best accommodate its contact with surrounding parts. The pessary is made in sets of three, and has the additional merit of being inexpensive. A detailed explanation of these pessaries appeared in a recent number of *Le Progrès Médical.* It is manufactured by Messrs. Salt and Son, Birmingham.



IMPROVED TRUSS.

Medical men are often troubled by patients with regard to their trusses, which they cannot fit so as to keep up the hernia. Upon examination it is frequently found that the pad simply requires to be turned a little to the right or left, or a little upwards or downwards, or inwards, as the case may be. The pad soon works back into its old position, and the hernia passes as before, so that the truss has to be sent back to the instrument-maker with instructions to alter the direction of the pad.

Mr. Millikin, of 35, St. Thomas's-street, Borough, S.E., has put before us a truss which seems to overcome many disadvantages. It will be seen from the diagram that the truss consists of the old German pad and spring, between which is placed a ball-and-socket joint, which can be fixed in any direction whatever, and also allows of great or little pressure, to be exercised at will. The fixing handle, c, folds down upon the truss, so that it does not show through the dress. The pad may be placed in any position. The extra weight and thickness are inconsiderable. The instrument is well made and is not expensive.



THE LANCET.

LONDON: SATURDAY, DECEMBER 4, 1875.

If we have seemed to oppose, with unusual pertinacity, Mr. Marshall's proposal to institute a compulsory examination in Anatomy at the Royal College of Surgeons at the end of the first winter session, it is not because we are ignorant of the existence of some of the evils which that scheme is intended to remedy, but because we feel that it will not only not remedy them, but will call into activity others that are at present practically dormant and of no effect. Mr. Marshall has recognised the existence of the disease, but has failed to detect its cause, and has therefore erred in the measures he proposes for its treatment. We fully admit the large number of the rejections at the primary examinations, and are not unwilling to believe that the knowledge of anatomy acquired by many of the candidates is both scanty and imperfect; nor can we gainsay the statement that much valuable time is wasted in the first year of the student's curriculum. But while Mr. Marshall would account for these things by the mental incapacity of the average student, the want of training and of intellectual discipline of those who *now* enter the medical profession, and the inherent idleness and moral depravity of medical students, we prefer to acknowledge other causes—namely, the scanty and irregular supply of subjects for the purposes of dissection furnished to the medical schools by the Inspector of Anatomy, and the false and defective method of testing the candidate's knowledge adopted by the Board of Examiners and sanctioned by the Council of the College. If this explanation be correct, it is manifest that the College has in its own hands a simple remedy that is both effectual and satisfactory, without hatching a scheme that, if rigorously carried out, would inflict great hardship and injustice on the student, whilst it left the *fons et origo mali* untouched.

In another column we publish a return of the subjects supplied by the Inspector of Anatomy to the Metropolitan Medical Schools since the commencement of October. A glance at that return will suffice to show that there are at the present moment many students, both first and second year, who must perforce remain idle for want of the opportunity to dissect. As we showed last week, for every hundred first-year's students at least fifty subjects will be required in the course of the winter session to furnish an upper and a lower limb to each student. In addition to this, each student ought to dissect all the parts of the body in the course of the twelve or eighteen months that intervene between the end of the first winter session and the first professional examination; and at least fifty subjects will be required for every hundred second- and third-year students, in addition to the parts of the subjects supplied for the first year's men that are available for senior students. But besides these, five or six subjects will be required by the teachers and lecturers at each school for the purposes of demonstration and instruction. In the course of one year, therefore, where there is an anatomical class of two hundred students, half of whom are first-year and the other half second- and third-year, about one hundred subjects will be necessary to ensure adequate study and instruction; whereas the supply in some instances is not much more than half of this. It may be objected that this estimate is too high, and that if a student dissect the limbs during his first year he need not dissect them again in his second or third year. We maintain, however, that this estimate does not exceed the actual requirements, and that to allow the necessarily imperfect dissection of the limbs in the first year to exempt the student from dissecting these parts again in his second or third year would be a short-sighted policy. An intimate acquaintance with the anatomy of the muscles, vessels, nerves, bones, and ligaments of the limbs is of the highest importance to the surgeon. The reduction of fractures and dislocations is greatly facilitated, indeed sometimes only possible, by the aid of an accurate knowledge of the shape of the bones, the nature of the articulations, the position of the ligaments, and the situation and action of the muscles that move the limb or protect the joints. The arrest of hæmorrhage and the safety of life or limb are often entirely dependent on the surgeon's knowledge of the position and relations of the bloodvessels that pass from the trunk and are distributed in the limbs; and the records of surgery prove that, unless the surgeon be thoroughly acquainted with the anatomy of the extremities, irremediable errors in diagnosis and serious misapplications of treatment may at any time occur. Compared with the extremities, the other portions of the body are of minor importance to the majority of practitioners, so that, even if the student were to satisfy the requirements of the elementary examination on the anatomy of the limbs at the end of the first winter session, he should still be compelled to dissect them again before the ordinary Primary Examination. To enable him to do so, a supply of subjects equal to that we have named would be desirable. If the College of Surgeons wishes to attack the evil at the fountain-head, it should use its influence to secure the adoption of some measure by which an adequate supply of subjects would be ensured to the medical schools, even if it be necessary to put a little pressure on the venerable Inspector of Anatomy, whose post seems of late to have lapsed into a sinecure. What is especially wanted is a good supply of subjects at the early part of the session, to enable students to commence dissections without delay. The alteration made in the Anatomy Act in 1871 empowered the lecturers on anatomy to collect and preserve subjects during the four months prior to the beginning of the winter session, but owing to the difficulty of procuring the bodies it is almost impossible to reap the full benefit of that regulation. There are complaints from several teachers, who were prepared to receive any number of subjects during the vacation, that they were unable to procure anything like enough for their purpose. The result of this deficiency is, as we pointed out last week, that two or three months of the session pass away at the large schools before any of the first-year students can obtain parts for dissection, and it is not until after Christmas that every student has been able to get a part. Whereas, if there was a proper supply of subjects early in the session, each student would be able to begin dissection as soon as he had learnt osteology, and, having no temptation or excuse to be idle, "would," to use the words of Mr. Marshall, "feel at once that he must work without delay; he would understand for what and how, within defined limits, he is to devote his time and energy, cultivate his powers of observation, arrangement, and memory, and use his opportunities of anatomical study." And to have work on which students could at once begin "would probably be the means of diverting some students every year from an idle and profitless course of life; and it would save others, now injured, perhaps ruined, from want of a defined purpose, from irresolution, inexperience, and defective foresight."

We venture to believe that, if the suggestions we have thrown out were acted upon, a healthy stimulus would be given to the industry and ambition of students and to the efforts of teachers, and that, as soon as the College had adapted its mode of examination to the requirements of modern times, the evils which are now so deeply deplored would be reduced to a minimum, if not entirely eradicated.

That a causal connexion exists between constitutional syphilis and aneurism has long been a matter of faith with many, which has now and then found expression, but seldom in a more striking and, at first sight, even convincing manner than in the paper read before the Royal Medical and Chirurgical Society at its last meeting, by Mr. Francis J. Welch. Enjoying unusual opportunities for the study of diseases of the vascular system and of syphilitic lesions, he has arrived at the conclusion that the unusual prevalence of aneurism of the aorta among soldiers is in great measure owing to the prevalence of syphilis in the ranks. He has found that as many as 50 per cent. of the cases of aneurism he met with, and 46·1 per cent. of examples of aortic disease, were the subjects of well-marked syphilis, the lesion being an endarteritis, leading to dilatation of the vessel and to new growth in the walls of the aneurism. In round numbers, he places 66 per cent. of the cases of aneurism, all presenting this particular endarteritic change, to the account of syphilis, the remainder being chiefly divided between alcoholism and rheumatism. With this broad and clear proposition before them—viz., that syphilis is a direct cause of aneurism by its leading to a distinct change in the inner coat of the aorta,—it cannot be wondered at that several objections were raised to its acceptance by the speakers in the debate which ensued upon the reading of the paper—objections which were fairly faced by Mr. Welch, who candidly admitted that he was astonished at the results he had obtained. The question raised in the course of the debate as to the precise significance attached to the word "syphilis" in the Army Returns need not be followed here.

The pathological side of the question is, however, one which may fairly well be reviewed, because it is here, if anywhere, that we may expect to find points of agreement between the civil and military records. And, firstly, it cannot be denied that syphilis does play a certain part in the etiology of aneurism, but withal a subordinate one, and certainly not to such an extent as Mr. Welch would have us to believe. That syphilis does lead to fibroid disease and degeneration of the bloodvessels is an admitted fact; but that it is only one factor, and by no means an important one, is, we think, shown by reference to recorded cases of aneurism. One argument, not without weight, is that adduced, we believe, by Mr. Myers in his paper "On the Prevalence of Aortic Aneurism in the Army" (Pathological Transactions, vol. xx.); to the effect that if syphilis be a potent cause in the production of aneurism, how are we to account for the striking disproportion between the prevalence of the latter affection among the male and female portions of the community? In one of the metropolitan hospitals for the seven years ending 1873 (we quote from the Registrars' Reports), we find that, out of 39 cases of aneurism of the aorta under treatment, there were but 5 females; whereas in the same institution during the same time there were of constitutional syphilis as many as 221 males and 283 females treated in the medical and surgical wards. Or if we refer to the volumes of the Transactions of the Pathological Society, we find that of specimens of aortic aneurism shown at that Society since its foundation no fewer than 105 occurred in male subjects, and 17 in female subjects. Yet of this large number of cases, in 110 there is no mention at all made of syphilis in the previous history of the patient, its presence being signified in only 7 cases, and its absence noted in but 5. We would by no means desire, however, to lay too much stress upon statistics such as these; for it is but fair to mention that it is only in the later years that we find any reference, positive or negative, made to syphilis in these cases at all. At the same time, were any of these subjects "saturated with syphilis," that fact could not have escaped notice, and would have been recorded. In one case, indeed—that of a specimen of "nummular aortitis," shown by Dr. Goodhart last year,—there were evidences of syphilis obtained after death, although no history of the disease was extracted from the patient. In these records, too, the fact of intemperance is noted frequently, and of rheumatism occasionally, where syphilis finds no place.

There remains, however, another aspect of this question—viz., how far must we accept the view propounded by Mr. Welch that the endarteritic changes he describes are syphilitic? A similar opinion has been long held by Dr. Aitken, who, however, so far as we understand him, would have us to believe that there is a specific feature stamped upon the lesion by which it can be recognised. Mr. Welch, however, admits that this nodular endarteritis terminating in atheroma is met with in states other than syphilitic. Now of this we are certain: that there is a special form of arterial disease—not an endarteritis, but an affection rather of the outer coats of the vessel—which is undoubtedly syphilitic. It is met with perhaps most frequently in the cerebral arteries, and is a not unusual cause of thrombosis. But endarteritic changes are met with daily in post-mortem examinations in at least one-half of the cases examined. Following the author of the paper on this point, we should get one-fourth of the cases examined in the deadhouse to be subjects of syphilis; and as these cases may be supposed to be representative of the whole community, we may fairly infer that in that proportion does syphilis exist amongst us! Such a result would not be, to say the least, encouraging in the civil community, in whatever light it may be regarded in the army. Then the intimate pathology of the change in question bears on it nothing distinctive of syphilis. To be sure, this is not saying much, at any rate in the present state of pathological science, which apparently sees nothing in syphilitic lesions distinctive from "chronic inflammation"—whatever that vague and unsatisfactory phrase may mean. But this, at any rate, we do know—that changes such as these are produced by undue strain upon the vessels; and we cannot help thinking, with Mr. Myers, that to this cause is due the great prevalence of aneurism among soldiers. Aneurism is proportionately almost as prevalent among hammermen and smiths, and we do not invoke syphilis to its etiology in these classes. The contention, indeed, lies within a narrow compass—viz., whether syphilis is a direct or a predisposing cause. Mr. Welch thinks the former; his opponents the latter, and regard undue vascular tension to be the chief factor in the production of aortic disease and of aneurism. The comparative infrequency of syphilitic disease of the heart among soldiers, as pointed out by Dr. Powell, is certainly significant.

Although, then, we may differ from Mr. Welch, we accord him all praise for having raised this question and placed it before us in so striking a light. It will serve the very useful purpose of directing attention to the subject, and will lead doubtless to the publication of facts bearing upon it culled from other branches of the community than the public services. To all those who intend to take up the subject we would venture to give one word of warning—viz., to be particularly careful as to the data upon which the question of the existence or non-existence of syphilis is based. There are notoriously few subjects more difficult to elucidate from the history of the patient himself than that of syphilis, and much of the material accumulated on this head must be regarded with suspicion, unless there be recorded clear and distinct evidence of the syphilitic taint. In such an investigation, too, the subject must be viewed from all sides; and, having obtained a history of syphilis, any other possible cause of vascular derangement and deterioration must be sought for, and its absence proved, before it will be possible to state positively that the disease in question is at the root of the arterial lesion. As the case stands at present, most of us would agree with the cautious and thoughtful words of Dr. Parkes—"There is no reason to think that syphilis prevails more among soldiers than among the civil male population of the same class. It is therefore unlikely that an excess of syphilis, if it really occurs among soldiers, and if it actually predisposes to aneurism, as seems probable, could produce eleven times as many aneurisms as in civil persons."

* * *

The great trial for murder which has engrossed public attention for so many weeks past was brought to a conclusion on Wednesday. The verdict of "Guilty" against Henry Wainwright was the only one which it was possible for the jury to return, so complete in all respects was the chain of circumstantial evidence against the prisoner; but the complicity of Thomas Wainwright, even as an accessory after the fact, was a matter which was far less clearly demonstrated by the prosecution. Much of the evidence, and the most important evidence, bore upon facts having a medical interest; and seldom has the science of medical jurisprudence been laid under heavier contribution than in the present instance.

The first point to be determined was as to whether the deceased was the victim of suicide or murder. The counsel for the defence dwelt with some emphasis on the possibility of the unhappy woman having committed suicide; but a calm consideration of the facts renders such a view, in our opinion, absolutely untenable. Two bullets were found within the skull, one in the cerebellum, and another lying over the body of the sphenoid bone. The line of the former was marked by very considerable extravasation, so that it was probably the first fired, and certainly entered the skull during life. A third bullet had been fired, apparently from behind, and had lodged in the hair-pad worn by the deceased. Of these bullets it may be said that the wounds caused by two of them were sufficient to produce almost instantaneous death, while the concussion of the third which lodged in the pad was probably sufficient to produce insensibility. Apart from other facts, it would be in the highest degree improbable that the bullet found in the pad had been fired by the deceased herself. In addition to the bullet wounds, a deep gash dividing the trachea and big vessels, and having the appearance of having been cut *from right to left*, was found in the throat. Although this wound had divided the big vessels, it had bled only slightly, so that its infliction was certainly at a time subsequent to the injuries inflicted by the bullets. The counsel for the defence urged that it might be possible for a person with two bullets in the brain to inflict a suicidal wound in the throat, and he stated that he had read of cases in "Taylor" which gave credence to such a belief. It is true that in the work referred to several cases are recorded in which consciousness was retained after very severe injuries to the head, but such cases are mentioned as exceptional, and in the case under consideration the almost entire absence of hæmorrhage from the throat wound, and the strong probability that one bullet was fired directly from behind, seem to render the theory of suicide absolutely untenable.

The next point was, how long had the deceased been dead? To this the medical witnesses very properly gave a most guarded reply, that, judging from the amount of mummification and adipocerous change, at least a year had elapsed. On this point both Mr. Bond and Mr. Larkin were asked in cross-examination "whether it was not a fact that the process of decomposition was divisible into two well-marked stages, one characterised by evolution of inflammable gases, and the other characterised by mummification?" We confess we have been unable to discover the import of this question, and we desire merely to place it on record as a forensic curiosity. It is at least a presumed fact that the evolution of gas can be hardly recognised in bodies buried immediately in the earth.

The great medical interest of the trial centred in the identification of the remains, which were too far decomposed to allow of any superficial recognition. The presence of the female organs of generation placed the sex beyond a doubt, and it was rendered highly probable from the discovery of a wedding ring and "keeper" in the grave that the deceased had at least stood *in loco uxoris*; but, from an examination of the uterus, Mr. BOND and Dr. MEADOWS (although they both agreed as to the impossibility of speaking with certainty on the point) had come to different opinions, the former speaking in favour of, and the latter being opposed to the view of previous pregnancy.

That the colour of the hair of the deceased coincided with that of HARRIET LANE was not disputed, and consequently the question of the effect of chloride of lime on the hair was not raised, albeit that it seemed one out of which counsel might have made some capital.

The age of the deceased was a point of great importance, and we cannot admit that it was established with as much certainty as it might have been. The witnesses relied entirely upon the evidence afforded by the wisdom teeth, three of which were fully and one partially cut. From this it was inferred that the age of the deceased was about twenty-five. Surely, however, this was a somewhat hasty conclusion from such data. The period of the eruption of the wisdom teeth is generally stated to be between seventeen and twenty-five, and it is not unfrequently delayed even later. The condition of the teeth of the deceased would show that she was certainly over seventeen, but we cannot see that any other conclusion could be drawn from this fact. It was to be regretted that no examination was made of the epiphyses of the bones, from which, we think, much valuable information might have been derived.

Mr. AUBIN's evidence about the sutures of the skull was wholly inexplicable, and it was said that his confusion was so great under cross-examination, that the counsel by whom he was called found it difficult to account to the jury for his answers on those subjects to which he had come to speak as an expert.

With regard to the scars, that on the right leg was fully established, while that alleged to exist on the left leg remained in the condition of a mere allegation. It is certainly surprising that neither side made any attempt to demonstrate the presence or absence of lineæ albicantes upon the abdomen.

The height may be considered to have been fully established, and the trifling discrepancy of three-eighths of an inch, if not due to faulty apposition of the limbs, may be considered as accounted for by the theory put forward by Mr. BOND as to the shrinking of the intervertebral cartilages.

The case will long be remembered as one which presented points of unusual difficulty to the medical jurist, and it was undoubtedly due to the great care shown by Mr. BOND and Mr. LARKIN in carrying out the necessary investigations and examinations that the satisfactory bringing home of the charge to the prisoner was due, and we are glad to observe that the services rendered by these gentlemen received a handsome recognition from the Lord Chief Justice.

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THE proceedings of the meeting of the Medical Defence Association held this week present features of considerable interest to a large number of our readers. Apart from the general and very difficult question of the way in which unqualified medical practice should be dealt with, the special experience of this Society, or rather of the Eastern Branch of it, as a prosecuting Society, is both interesting and instructive. Under the guidance of their able legal advisers, Messrs. GREEN and PRIDHAM, of Bedford-row, this branch has instituted no less than three successful prosecutions against unqualified practitioners who abound at the East-end of London, and who are too often protected in some way by members of the profession. The curious thing about these prosecutions is, that they have been carried out, not under the Medical Act, but under the Apothecaries Act. It is very remarkable, after the medical legislation of 1858, that we should be reverting to that of 1815. But the fact is easily explained. The use of the Medical Act, as far as the punishment of unqualified practice is concerned, is very limited. It only contemplates the prevention of the false use of titles. To a considerable extent it has succeeded in this. But a quack, while avoiding the false use of any recognised titles, may easily give his house or shop a name which has the effect of conveying the impression to the public that he is a medical practitioner. But the Apothecaries Act is available for punishing a man for practising. It would, after all, be very monstrous if there were no such law. The Legislature in its wisdom has recently made it penal for men to sell poisonous drugs without being licensed to do so by a Society constituted for the purpose of examining men in their knowledge of such things. With what consistency could it abstain from forbidding ignorant men, under the guise of medical practitioners, from dispensing potent drugs? This would be to permit a greater evil while prohibiting a lesser one. And the profession is not a little indebted to the Eastern Branch of the Medical Defence Association for reviving the use of this comparatively forgotten Act.

As regards the general question, we entirely agree with the President, Dr. RICHARDSON, and other speakers at the meeting that, if the Association is to succeed and to command attention and respect, it will have to look at unqualified practice rather from a public standpoint than from a professional one. It augurs well that this view of the matter was general and found clear expression in one of the amendments. It cannot be too frequently or plainly stated that the public suffers more than the profession by unqualified practice; that deaths happen which should not happen; and that worthless information as to the cause of death is taken in great quantity from unqualified practitioners by the registrars of the country, and with the consent of the Registrar-General, thus vitiating the public records of mortality. As Dr. ROGERS said, if the public get the idea that the sole object of the members of the Association is to protect the medical profession, the Association will fail. It is to be hoped that ere long we shall have a public prosecutor who will initiate and carry through prosecutions against breaches of the Medical Acts. Pending this the medical corporations ought to do the work. But, failing them—and they are very indifferent,—we do not see how the work is to be begun unless it be undertaken by some such Association as that under discussion. We see that such action on the part of a Medical Association—still more of a medical man—is invidious and liable to misconstruction. But we must hope for such a display of wisdom and prudence in these prosecutions as will prevent such misconstruction. And we would urge upon the Association to use its influence to procure the appointment of a public prosecutor who should relieve it of prosecuting functions.

Annotations.

"Ne quid nimis."

"THE LANCET" COMMISSION ON LUNATIC ASYLUMS.

NOTHING marks the recent progress of medical science more clearly than the increased attention bestowed on mental disease. Not many months ago it was the reproach of our educational system that the merest tyro, armed with a diploma in surgery, might sign away the liberty and lifelong fame of a fellow subject, although his qualification for the possession of this power did not guarantee his having read a page of any work on mental disease, heard a single lecture on the subject, or seen a case. Something has been done to amend this deplorable state of matters, by at least one licensing body. This glimmer of light perhaps only makes the general darkness more apparent, but it may be welcomed as a portent of better days. Before, however, the study and treatment of disease of the mind can be placed on a footing of equality with the study and treatment of disease of the body, much remains to be accomplished. The first step should be to collect the facts in regard to insanity, its conditions, cure, and mortality. Such data can only be obtained in the asylum. With a view to obtain and arrange the information required, we have instituted an inquiry at some of the principal institutions in and near London. The first of a series of Reports embodying the facts observed and collected will be found in this day's issue. The asylum selected for the introductory notice is the most recent in construction, and, on that account, will offer points of interest with which other asylums may be conveniently compared. By devoting some space to this first report, we shall be able to curtail the summary of features calling for description in the reports which follow. The deductions as to matters of moment, such as the distribution of cases in institutions, on the basis of a classification into "curable" and "chronic," and the success or failure of particular methods of treatment, will be deferred until all the reports are before the public, when comparisons may be fairly instituted. Such evils and abuses as may be discovered will be fearlessly exposed, but it is needless to say the inquiry has not been undertaken in any spirit of suspicion, and the aim is primarily scientific and professional. To the public an inquiry like that now in progress can scarcely fail to prove of vital interest. It will show how far the needs and comforts of the insane are cared for, the distressing symptoms of their mournful maladies alleviated, and their pains and griefs assuaged. The urgent necessity for such an investigation cannot, we think, be over-estimated or its practical value too highly appraised.

THE MARINE MEDICAL SERVICE.

IN accordance with a request from the medical inspector of emigrants for the port of London, we sent him last week the names of two emigrant ships stated by us (on excellent authority) to have sailed from that port with unregistered surgeons in medical charge. Mr. Humphreys informs us, in reply, that the surgeon on board the *St. Osyth* was registered in January, 1869, and that the *Blairgowrie* (the second vessel referred to) embarked her emigrants at Plymouth (clearing, however, from the port of London), so that the London emigration office was not responsible for the surgeon. We are glad to place Mr. Humphreys' communication on record at once, as it shows that the emigration medical officers are fully alive to the importance of carrying out the law in its integrity. But we may fairly paraphrase in effect the remarks of the *Pall Mall Gazette* on this subject, and ask what steps would or could be taken by any Government officer if he found an unregistered or unqualified surgeon on board? And, moreover, what machinery exists for discovering the qualifications of surgeons on board ships other than emigrant ships? It must be remembered that vessels carrying only cabin (i.e., first-class) passengers, do not come under the notice of the emigration officers at all, nor have these officers, of course, anything whatever to do with large telegraph and other steamships that are compelled by the 230th section of the Merchant Shipping Act, 1854, to carry a surgeon. It is, as we suppose, chiefly on this account that *The Times* comments on the subject; for, as may be seen in a Parliamentary paper just issued, it is quite possible for a large steamship to start for New York, or a sailing and first-class passenger ship to sail for Melbourne, with a medical officer in charge not only unregistered, but unqualified.

Certain lucubrations that have appeared in provincial journals indicate that some of the medical inspectors of emigration are very much "exercised" as to these official returns, and our remarks thereon. But the question is one that (taken, as it undoubtedly should be, in its widest aspects) is entirely beyond their control. Of the fifteen unqualified men quoted in the Parliamentary Returns referred to above, nearly all shipped on whalers, and of the rest, one only could possibly have come under the notice of the emigration medical officers.

These and other remarks as to ship surgeons are made very much in the interests of our own profession as well as of the public. It is our duty to try to raise the status of medical officers in the Merchant Service, as well as in the Royal Navy, to a proper footing. And that status, either as to pay or position, will never be properly attained so long as it can be shown to the public by Parliamentary documents that the law has been broken, and that persons have been sent to sea in medical charge of large ships who would not be allowed to hold an appointment under the Admiralty, the War or Home Offices, the Local Government Board, or, in fact, under any imperial or local department in the kingdom.

EARLY DIAGNOSIS OF SCARLET FEVER.

AT the present moment it is very important for medical men to be acute in the early detection of scarlet fever. Such acuteness is creditable from a scientific point of view, and it is valuable as giving timely information to friends which enables them to isolate the case early, and reduce to a minimum the number of things and persons brought into contact with the patient. For the purposes of this early diagnosis the throat symptoms are most important. The sore-throat of scarlet fever is very different from other forms of sore-throat, and it is one of the earliest available symptoms, being noticeable from the first day of the attack. The appearance is that of an erythematous redness, affecting the soft palate extensively, thus differing materially from the ordinary forms of tonsillitis, which affect the tonsils only in the first instance. As Trousseau says—whose description of scarlatina is worthy of serious study—"In scarlatina, from the first day of the attack, the veil of the palate has a red hue, analogous to, but deeper than, that of the skin." When this condition of the throat is met with during an epidemic of scarlatina, with a very hot skin and a very quick pulse, accompanied with or preceded by vomiting, with a tongue with thick creamy fur, red borders, and prominent papillæ, the shrewd practitioner will be prepared for a case of scarlet fever. Dr. J. Lewis Smith, of New York, in his excellent work on the Diseases of Children, tells us, in his account of scarlet fever, that vomiting occurs in most cases within the first twenty-four hours, and has considerable diagnostic value. In 90 out of 117 cases which he carefully examined, he found vomiting to occur within the first twelve or eighteen hours. Of course when the eruption appears in addition to the above symptoms, the case is clear enough; but the practitioner who has carefully watched the group of facts which we have described will be as likely to discover the eruption for himself as to have it pointed out to him by others or by the patient.

THE CONTAGIOUS DISEASES ACTS.

THE opponents of the Contagious Diseases Acts have shown that their spirits are reviving. Ours are going down, but for very different reasons from those which they would ascribe to us. The annual conference of the various associations comprising the Northern League for the repeal of the Acts was recently held at Sheffield, and followed by a series of public meetings. If we may judge from the report of one of the meetings at the Albert Hall, at which the Right Honourable Mr. Stansfeld and Mr. Mundella were the M.P.s present, a very large audience seems to have been attracted by the subject and the speakers. The hall was filled in every part, the platform, balcony, orchestra, and stalls being largely occupied by ladies—many of them young,—who, we are informed, appeared deeply interested in the proceedings. Among the speakers, a medical gentleman whose name has stood forth conspicuously as an opponent of the Acts, from a statistical standpoint especially, seems to have proved too much, for he declared that wherever the Acts had been in operation, disease had not diminished but increased. But what we desire to call attention to is the fact that he gave examples of the working of the Acts, and "contended with considerable plainness of detail" for the conclusions he was advocating. Mr. Stansfeld fought, as might be expected, for the position which he has taken up against the legislation of the late Government, of which he was a member, with all the fervour and impetuosity of a convert; and Mr. Mundella advanced a great many statements in regard to the proceedings of the Royal Commission on which he sat as a member for six months, about which we should like to ascertain the testimony and opinion of other members. The great difficulty with which anyone really desirous of learning the facts has to contend is that it is impossible to say what is merely unsupported assertion and what is not. One never knows where to meet the opponents of the Acts, for when driven from a position they either resume it in a short time or bring forward old arguments with new faces. But on one point we should hope there can be no difference of opinion—viz., the indelicacy, indeed the indecency, of discussing such topics before crowded and mixed audiences. The *Sheffield Daily Telegraph* mainly addresses itself, in an able and excellent leader, to this point. Our contemporary says that the audience heard one side only, and they heard much that was utterly unreportable in print. A subject which modest men approach with a certain shamefacedness, or recoil from with irrepressible aversion, is, it seems, fit to be taken up by modest ladies! We cordially concur with our contemporary in all that it says when mincing misses fresh from school, and pious matrons, are asked in a tone of cheerful innocence to occupy their minds with a medical question which cannot be judged of aright unless there is a full knowledge of details, and the details of which are inevitably and unutterably indecent. It refuses to discuss the other side in its pages, holding that a debate on such a matter would itself be a contagious disease of rather a startling character, and one calling urgently for moral deodorisers and disinfectants.

THE WALLS OF THE UTERUS AFTER PREGNANCY.

THE difficulty of determining, from the state of the uterus alone, whether or not a woman has borne a child, was illustrated this week by the medical evidence given before the Lord Chief Justice at the trial of the brothers Wainwright. The difficulty in this case arose, not from the fact that the uterus was in a state of decomposition, but because no marks are left in the uterus which has once been gravid whereby the previous existence of such a condition can be established. At the same time, there are appearances which, when present in the womb, militate against the supposition that the organ has been gravid, though they do not exclude the possibility of such a condition having existed. One of these is unusual thinness of the uterine walls. In the great majority of women who have borne children the walls of the uterus remain permanently thicker than they were in the virgin state of the organ, for involution rarely takes place in such a degree as to reduce the womb to its original size. Yet cases do now and then occur in which the process goes on beyond its normal limits, and the uterus becomes reduced to a size considerably smaller than that of the virgin womb; indeed, it may be reduced to such a size as to elude detection by the most careful vaginal examination.

Other marks which may be left on the uterus as the results of pregnancy and delivery, such as fissures of the cervix, thickening of the lips, changes in the shape of the external orifice, may also be produced by disease and its treatment, so that singly or together they are almost valueless for the determination of the existence of previous gravidity. Some of the witnesses stated that it was not possible to form a positive opinion whether the woman had borne children or not. This accurately expresses our present knowledge of this question, and any further expression of opinion, however elicited, could only lead to conflicting evidence, such as that witnessed at the recent trial.

SANITARY CONDITION OF NORTHFLEET.

THE parish of Northfleet, at the last census in 1871, contained a population of 6515 persons, the considerable increase in which upon the number returned in 1861 was referred in the Census Report to "the extension of cement factories." According to the Registrar-General's last quarterly return, of 56 deaths registered in the Northfleet registration sub-district during the three months ending September last, 13, or more than 23 per cent., were referred to the seven principal zymotic diseases, including 5 from whooping-cough, 3 from fever, 3 from diarrhœa, and 1 each from small-pox and measles. It appears that since the end of September small-pox has become fatally prevalent in Rural-vale, Barrack-field, and Samaritan-grove; and scarlet fever in Wood-street and Bow-street; the whole of these localities being situated within the parish of Northfleet. These facts afford strong evidence of unsatisfactory sanitary condition, and it may be useful to consider who constitute the sanitary authority which is responsible for the public health of this community. The parish of Northfleet forms part of the Union of North Aylesford, the Poor-law guardians of which were, by the Public Health Act of 1872, constituted the Rural Sanitary Authority of North Aylesford, and were invested with the full responsibility in health matters for the whole of the union, excepting Strood, which forms part of the urban district of Rochester and Strood. Following the example of so many other rural sanitary authorities, the guardians of North Aylesford appointed their two Poor-law medical officers as medical officers of health within their respective districts, with small additions to their previous salaries.

RESEARCHES ON THE MODE OF TERMINATION OF THE NERVES IN THE CONJUNCTIVA.

In a short paper devoted to this subject in the *Archives de Physiologie* M. Poncet observes that the branches which innervate the conjunctiva proceed from the infratrochlear, frontal, and lachrymal nerves, with a few branches from the ciliary ganglion. In 1859 Krause first published his researches on the terminal corpuscles of sensory nerves. His conclusions were accepted by Kölliker, Ludden, Rouget, Frey, and Ciaccio, but have been lately opposed by Waldeyer. Arnold was also unable to admit their accuracy. Krause found about eighty club-shaped terminal corpuscles in the interior of which the nerves ended. These corpuscles he named *End-Kolben*, or terminal bulbs. The terminal bulbs consist of an envelope of connective tissue, containing a semifluid granular material. One or two nerves, with doubly contoured outline, run to these, twine round them, and penetrate into their interior, where they give off one or two branches that appear as fine short pale fibrils, terminating by slight enlargements. M. Poncet criticises several points in M. Krause's description. In the first place, working with chloride of gold and osmic acid, which were not in use when Krause made his observations, he finds the nerves do not coil round the outside of the corpuscles before penetrating them; secondly, that all the sensory nerve-fibres do not terminate in such corpuscles as Krause supposed; thirdly, that the part of the conjunctiva in which they are most commonly found is the upper and outer segment. This part of the conjunctiva is endowed with exquisite sensibility.

THE ANSTIE MEMORIAL FUND.

The committee of this fund met on Tuesday night at the house of Dr. George Johnson, Savile-row, and unanimously adopted the report of the executive committee, which we published last week. The executive committee must be congratulated on the happy and successful issue of this business, pleasing alike to the family of Dr. Anstie and to the numerous subscribers to the fund. Speaking roughly, about £1500 of this fund has come from the profession, and about £1000 from the general public. It may be easily imagined that such a sum has not been collected without much work on the part of the executive committee, and especially of the honorary secretaries, Mr. Brudenell Carter and Dr. Wharton Hood. They have their reward in the response of four or five hundred persons in and out of the profession. The rare and mingled virtues of Anstie will be long commemorated by the lofty inscription for which we are indebted to Mr. Simon, and let us hope they will be reproduced and perpetuated in those children whom he loved so much and left so soon, and to whose education the money of the fund is to be mainly applied.

ARMY MEDICAL DEPARTMENT.

Notices of the next examination of candidates for commissions in the Medical Department of Her Majesty's Army have appeared in our columns. The examination will be held on the 14th of February, 1876, and forty appointments are announced to be open to competition. The many and, as they seem to us, just complaints of army medical officers have been so fully and repeatedly set forth in our pages that it is simply a waste of time and space to discuss them further. That there is a very great amount of discontent in all grades of the medical service is undeniable. We hear it on all sides, and we do not hear of any attempt being made to remedy it. Mr. Gathorne Hardy has been interviewed by deputations of various kinds, questioned by members of the House of Commons, and the state of the departments was made the subject of a motion in the lower House, which was only withdrawn by Dr. Lush on the War Minister's declaration that the grievances of medical officers were engaging his most earnest attention. He has been frank enough in his apologies for the delay, but up to the present moment he has made no sign, and it is to be presumed that an expression of his intentions will only be yielded to Parliamentary pressure and the growing decadence of the service. Such are the facts, and the advertisement to which we have referred must be read by the light of these facts.

THE SMALL-POX AT KEIGHLEY.

The writer of two very sensible letters in the *Leeds Mercury* on "Anti-vaccination Fanaticism" opportunely and forcibly draws attention to the fact reported by the Registrar-General of the great mortality from small-pox in Leeds and Keighley. Three or four millions of people in London just now are enjoying almost absolute immunity from death by small-pox—one of the most horrible modes of death. It is not so with the much smaller population of Yorkshire. They have had in the last quarter twenty-eight deaths from small-pox, of which twenty-five have occurred in Leeds and Keighley. It must delight the hearts of Mr. and Mrs. Hume Rothery to know that small-pox thrives at Keighley, for it is a part of the strange fanaticism of anti-vaccinationists to have as much kindly feeling to small-pox as they have horror at the very thought of vaccination. The Keighley Guardians have at last been compelled, strongly against their inclination, as we may suppose, to give way to superior authority. At a meeting of the Board on Wednesday a motion was carried, with but four dissentients, that the time had arrived when no further resistance to the writ of *mandamus* should be made by the members, but that they accept the decision of the Court of Queen's Bench. A further motion was then proposed that the vaccination officers of the union be instructed to produce their books at the next meeting, with a list of defaulters, with a view of carrying out the compulsory clauses of the Act. This was also carried, the chairman and two others only voting against it. We hope to see shortly a diminution of small-pox in Keighley.

THE UTERUS OF HARRIET LANE.

At the meeting of the Obstetrical Society, held on Wednesday last, Dr. Alfred Meadows read a note containing a description of the uterus (supposed to be that of Harriet Lane), which was submitted to him for examination, and with reference to which he gave evidence at the trial of Henry Wainwright. It seems that the organ measured at the fundus one inch and three-quarters in width, the canal was two inches and a half in length, and the uterine walls of unusual thinness, one measuring rather less and the other rather more than a quarter of an inch in thickness. The os uteri had been injured and its character destroyed by post-mortem examination to such a degree as to render it impossible to discover its original condition. The inner surface of the organ presented a convex appearance, an appearance generally met with in the virgin, but not believed to exist in a uterus which has been gravid. From these characters Dr. Meadows thought it impossible to form a positive opinion with regard to the existence of a previous pregnancy, though he was inclined to the opinion that the organ was nulliparous. Owing to the scientific as well as public interest of the point in question, the discussion of the paper was postponed until the next meeting of the Society, to be held in January.

RESEARCHES ON MECONIUM.

Zweifel (*Archiv für Gynæcol.*, Band viii.) has recently investigated the contents of the large intestine in stillborn children, and has made the interesting observation that they contain hæmatoidin-crystals, which present the characteristic reaction described by Gmelin—namely, that the chloroform extract when evaporated yields bilirubin crystals. The crystals of hæmatoidin and other morphological constituents of meconium are no longer discoverable in the yellow evacuations. The chemical constituents found in meconium are biliverdin, bilirubin, the biliary acids, cholesterin, mucin, traces of formic and other volatile as well as some non-volatile fatty acids. No grape sugar, glycogen, paralbumen, leucin, tyrosin, albumin, peptone, nor lactic acid could be found. The amount of water in meconium was 80 per cent.; the ashes formed 1 per cent.; the fatty constituents 0·772 per cent.; and the cholesterin 0·797. Examination of the ashes showed, in contrast with the fæces of adults, a high proportion of sulphuric and a small proportion of phosphoric acid.

THE FREE MEDICAL SCHOLARSHIPS OF EPSOM COLLEGE.

The acting treasurer of the fund designed to establish these free scholarships, which are limited to the fifty foundationers after they have matriculated in the first class, University of London, has been visiting Liverpool and Manchester with the object of bringing their claims before the profession and the public. Dr. Carr has, we understand, been well received and very successful in his mission both among medical men and the wealthier classes. We are acquainted with few objects which have stronger claims on the truly charitable than these free scholarships, which give a helping hand to the orphan in order that in due time he may provide for himself. We would, therefore, hope that all who are able to contribute should lose no time in doing so, in order that the fund, still wanting £2000, may be completed.

DELIGATION OF THE CAROTID ARTERY FOR NEURALGIA OF THE FACE.

At the annual meeting of the doctors of Gräz, Dr. Patruban read a paper on this operation, in which he offered no theory as to the mode in which it acts, but grounded his defence of the operative measure on the results obtained. He proposes to operate in this manner when all other means have failed, and the patient insists upon relief at any cost. He himself had tied the carotid artery under these circumstances thirteen times, and had never noticed any of the symptoms mentioned as often occurring, such as cerebral congestion, vertigo, double vision, squinting, &c. The idea of the operator had been gained by the relief obtained, in some cases, by simple pressure of the carotid. The author added that no accidents need be feared if the operation is well done.

It has probably struck some of our readers, who are or have been in one of the services, that it would be most desirable to offer medical officers of the army and navy greater incentives to prosecute original work. There are honourable exceptions on land and on sea, but it must be admitted that the ruck of surgeons in both services, after admission, settle down into a somewhat somnolent performance of the actual duties demanded of them, and interest themselves but little in the progress of medicine and surgery. Many who perhaps consider that there is little inducement to work at present would, we have no doubt, be stimulated into exertion by the prospect of adequate rewards. We are led to make these observations by the recent announcement of the award of the Gilbert Blane gold medals. These prizes founded by the late Sir Gilbert Blane, Bart., were this year bestowed on Fleet-Surgeon T. J. Haran, for his Journal of H.M.S. *Glasgow* in 1874, and Fleet-Surgeon R. Eustace, for his Journal as Staff Surgeon of H.M.S. *Himalaya* for 1873. In accordance with the bequest of the founder, the medals are given by the joint concurrence of the Director General of the Medical Department of the Navy, and of the Presidents of the Royal College of Physicians and the Royal College of Surgeons.

At the late meeting of the Social Science Congress at Brighton a paper was contributed to the Public Heath Department by Mrs. M. A. Baines on "Some Unsuspected Sources of Infectious Diseases," which is now published in the form of a pamphlet. Mrs. Baines is a prominent lady sanitarian, whose facile pen has for some years been devoted to the cause of domestic sanitation. Her last contribution, which evinces considerable acquaintance with some of the conditions by which disease is generated, brings especially under notice those frequently unheeded evils, pig-tubs and dustheaps. Mrs. Baines also sensibly and opportunely points out the danger which may be incurred by sending clothes to be washed at the homes of the very poor, where the presence of disease is the rule rather than the exception, and expresses her opinion that laundries should be subjected to sanitary supervision. Ladies desirous to find a "mission" may with advantage peruse Mrs. Baines's works.

The introductory lecture in connexion with the commencement of the session of the Rotundo Lying-in Hospital, Dublin, was delivered last week by Dr. Lombe Atthill. After dilating on the great facilities of obtaining a thorough knowledge of obstetrics enjoyed by the students of the institution, the lecturer compared the short period of six months, which is deemed sufficient in which to study not midwifery alone, but also the nature, symptoms, and treatment of the large and complex class of diseases which are peculiar to females, with the three years ordained for the clinical study of medicine and surgery, and contended that it would require unremitting attention on their part to attain even a moderate proficiency in that short time. "The mass of students," said Dr. Atthill, "go forth into practice absolutely ignorant of these subjects — i. e., diseases of women,—and lamentable results consequently follow."

At a General Council of the University of St. Andrews on the 26th ult. Dr. B. W. Richardson was elected assessor, the office having become vacant by the resignation of Mr. Patrick Anderson. We congratulate the University on the election. Dr. Richardson is not only a distinguished physician and *savant*, but is conversant with Parliamentary business—an acquisition decidedly necessary to the exercise of the office. At the same meeting a desire to introduce certain innovations was manifested, and a resolution to appoint a committee to consider the expediency of obtaining entrance examinations in connexion with the University was unanimously carried.

The recognition by the Glasgow University of the teachers of the Andersonian has been persistently urged for some time past. We are glad to find that, at a recent meeting of the Glasgow University Court, it was resolved to recognise the lectures on Surgery delivered by Dr. James Dunlop in Anderson's University as qualifying for graduation.

Dr. Taaffe, medical officer of health for Brighton, has just issued a report of the health of the town during the last quarter. The annual death-rate in the period was 18·7 per 1000 of the estimated population. The mortality of children under five years old was 42·2 per cent. of the whole deaths. Of 61 infants who died of diarrhœa it was ascertained, by a special inquiry into the methods of feeding which had obtained, that 11 only had been nursed by the mother. The rest were fed by the various artificial foods, such as arrowroot, corn flour, condensed milk, &c. It is pretty clear that an immense amount of infantile fatality in this country is due to improper feeding and inadequate nursing. Dr. Taaffe gives some interesting details of a special house-to-house inspection which was made. It was found that in a great number of houses the interiors were connected, directly or indirectly, with the drains and sewers. No less than 420 of the best class of houses proved to be so defective. In 469 instances the house and closet were supplied from the same cistern with water, while in 173 houses the closet had no regular water-supply at all. These revelations must cause surprise, and cannot but injure the reputation of Brighton.

According to a military contemporary, enteric fever has recently prevailed in the 1st battalion of the 12th Foot at Kinsale. We understand that the outbreak in question was of a sudden and severe character, the greater number of cases of the disease having made their appearance within a comparatively limited period. The insanitary state of the barracks is blamed for the outbreak. The troops were at first placed under canvas, but have since been removed to Cork. Several of the cases proved fatal, but the disease has now ceased.

A St. Petersburg paper informs its readers that during the past year 171 pupils received instruction in the Female Medical College established in the capital of the Russias. Of these 102 are noble, 17 are daughters of merchants, and 12 of clergymen, the remaining 24 belonging to other classes of society. It would appear that the young ladies are extremely diligent in the pursuit of knowledge, and in especial display a marked predilection for dissecting-room work.

Mr. Robert McDonnell, F.R.S., surgeon to Dr. Steevens' Hospital, has announced his intention of being a candidate for the Vice-Presidency of the Royal College of Surgeons in Ireland at the next vacancy in June. Mr. McDonnell is well known, not only as a skilful surgeon, but also as a physiologist of no ordinary attainments. Mr. Ledwich's name has also been mentioned as a probable candidate, but we believe we are correct in stating that the announcement is premature.

We have received a copy of the seventh series of *Vanity Fair* portraits, which fully maintain the reputation created by the previous editions of the albums. Their scope is now pretty well known. We observe that Sir W. W. Gull, Bart., Mr. Lyon Playfair, M.P., and Mr. W. H. Russell of *The Times*, have places in the present series.

Mrs. Morison, widow of Mr. Alexander Morison, of Bognie and Mountblairy, has carried out his expressed wishes by erecting and completely furnishing a Cottage Infirmary at Forgue, Aberdeenshire, at a cost of nearly £2000, and endowing it with £2000.

Dr. J. C. Bucknill has resigned his appointment of Visitor in Lunacy. The salary of the vacant office is £1500 a year with travelling expenses.

The Lords of the Admiralty have placed H.M.S. *Clio* at the disposal of the authorities of the *Cornwall* school-ship, and she will in a few days be brought round to Gravesend, and take on board all the healthy boys. They will remain on her probably for some weeks, as the future of the *Cornwall* is still undecided. The patients at the Seamen's Hospital, as well as those on board the Corporation's hospital-ship *Rhin*, are, with two exceptions, all progressing favourably.

Messrs. Sampson Low and Co. have now issued Vol. V. of Ziemssen's "Cyclopædia of Medicine." No sequence is preserved in the issue of the volumes, as Vol. IV. has not yet appeared, while the last volume was the tenth. This, however, does not detract from their intrinsic value, or from the admirable manner in which the publishers have done their work.

We made a slight inadvertence in stating last week that Dr. Sedgwick Saunders had been placed on the Commission of Lieutenancy for the City of London. We were misled by a newspaper paragraph. Dr. Sedgwick Saunders has been a Commissioner since 1868.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

The purposes of the present inquiry are:—

To ascertain the general character and efficiency of the provisions made for the Insane in Asylums, and the conditions of their daily life;

To discover the measures, and, as far as may be possible, to formulate the system, of treatment adopted for the cure of remediable, or recent, and the relief of incurable, or chronic, cases;

To collect and collate statistics of cases occurring within the last ten years, at the asylums visited, with a view to estimate the results.

It is believed that such an inquiry will help to furnish the profession with the much-needed data for personal opinion on many urgent questions, relating to the treatment, in public and special institutions, of patients labouring under the various forms of mental disease. It should also contribute to the sum of evidence required to determine moot points with respect to the diverse methods of treating insanity. And it may do some service by exposing, and thereby tending to the removal of evils and the redress of grievances affecting the insane, if any should be found to exist.

The inspection will be conducted with the approval, and it is hoped the co-operation, of the medical superintendents and officers of asylums.

The area of the inquiry, and the number of asylums visited, will be determined by the results obtained, and the extent to which responsible managers of these establishments may be found willing to submit their arrangements to the scrutiny it is desired to institute.

The exigencies of space for publication will necessarily limit descriptive detail in the reports presented, but no point of moment or interest will be overlooked in the inspection, and the general results will be given as concisely as possible.

No special order will be observed in the sequence of Reports, but the same general arrangements of topics will be followed as closely as may be convenient in each statement.

BROOKWOOD ASYLUM.

THE HOUSE AND ARRANGEMENTS.

This is the second asylum for the county of Surrey. It was opened on June 17th, 1867, to meet the pressing need of fresh cases which could not be received at Wandsworth. It is much to be regretted that, being provided with all the most approved appliances, Brookwood was not jealously kept to its true purpose as a hospital for the cure of new cases, instead of being at once crowded with chronic cases removed from other asylums and licensed houses. This economic blunder is now visited on the county by an urgent demand for a third asylum; a need which will crop up about every seven years, at the present rate of increase of insanity in Surrey, unless the policy is changed. In design and construction the establishment evinces considerable care. It is the boast of Her Majesty's justices for the county that the architect visited the best asylums in England and France before preparing his plans, and that this course was pursued "for the first time in England." The result is a series of buildings of by no means repulsive aspect, pleasantly situated on an elevated site about one mile from Brookwood, and three miles from Woking station, on the South-Western Railway, in the parish of Woking. The asylum, as it exists to-day, is composed of the original blocks, to which additions have from time to time been made, and some new and very superior buildings which have only just been completed. The story of the first construction has for its moral the economic wisdom of appointing the medical superintendent of an asylum in time to secure the advantage of his practical experience in aid of the architect. It was not long before the superintendent of Brookwood discovered defects and deficiencies in the edifice which it became his object to remedy. For example, the common error of limiting the accommodation so that an almost immediate increase becomes necessary, and that of forgetting the requirement of proportionally larger space on the female side of such an institution, were committed in the construction of this asylum. The advice of an experienced superintendent would have prevented these mistakes, and others equally unaccountable. The area of room allotted for day use was inadequate, only 19 superficial feet per head, inclusive of epileptics, all told—or 24 feet inclusive of corridors and passages—instead of 35 or 40, being available for the purpose. This deficiency was pointed out in the earliest report of the superintendent. But the faults of arrangement at the outset were not due to parsimony on the part of the county authorities, and they have been compensated by spirited and wise liberality in the subsequent conduct of affairs. The original aim seems to have been to give the asylum a thoroughly domestic character, and in this its designers were successful, perhaps too much so, as in the construction of dormitories allowing only 550 cubic feet of air for each patient. The old buildings are throughout not sufficiently commodious. The ceilings are too low, the corridors narrow, the staircases tortuous, and the whole constructionally cold and comfortless. By dint of building out, adding bay windows, and opening arched communications—where the safety of party walls would admit—from the wards into adjacent corridors, the superficial space has been raised from 19 to 39 feet per patient; and with the aid of wall-paper, colour, and floor-cloth, the interior has been made to assume a bright and cheerful aspect, exceedingly creditable to the ingenuity by which overwhelming difficulties have been overcome. The new buildings are incomparably better, not less homely, and, including the furniture, which has for the most part been made in the asylum, not more costly than the old. Indeed, they leave little to be desired as a healthful and appropriate residence for the insane.

The visitor to Brookwood will be strongly impressed by its simple and homely characteristics. There is nothing prison-like or Poor-law-stricken in the exterior. No high walls, massive casements, gloomy iron bars, or other tokens of restraint, inspire repugnance. The place looks like a cheery hamlet of almshouses, with its winding paths, undulating pleasure-grounds, well-planted shrubberies, and picturesque detached chapel, to which the inmates repair for service every Sunday, with all the charm of rural "church-going." Within, the institution wears an air of quiet repose and cheerfulness. The day-rooms are fitted with plain and convenient furniture, embellished with stands of flowers, plants, and aviaries, and provided with pianos, bagatelle-boards, cards, dominoes, draughts, books, and pictures. The walls are decorated with coloured prints, in cheap but elegant frames; and the apartments are so arranged as to produce a most agreeable impression on the mind of a stranger, with doubtless a corresponding influence on the residents. The patients, when not in the grounds or work-rooms, sit about among the plants or at the little tables, in groups or alone, as the mood takes them, contented and enjoying as high a sense of liberty and pleasure in life as their cases admit. The melancholic are less depressed, and the turbulent less excited, for the interesting and genial associations with which they are provided. The surrounding objects divert, as far as possible, the mind of the patient from that brooding self-consciousness which constitutes one of the most formidable obstacles to recovery in curable cases, and the severest sorrow of the confirmed lunatic's dreary existence. The fireplaces are open, like those of ordinary houses, and not fenced off with grim guards suggestive of mischief. The chimney-pieces are prettily decorated with inexpensive ornaments, and the pictures on the walls are hung within reach of the patients, but scarcely anything has been injured or disturbed. The policy has been to place the inmates of Brookwood Asylum as nearly as may be amidst the surroundings of sane life, and then to treat them as children under a perpetual personal guardianship. They are neither provoked by obtrusive prohibitions, harassed and incited to mischief by that suggestive sort of protectorship which the disordered intellect always distorts into an ever-present temptation to wrong-doing, nor left dependent for immunity from accident upon mechanical safeguards. Attendants have no excuse for neglect of constant supervision, because there are no appliancesupon which they can rely in the abstinence from duty. They *must* watch, and, recognising the impossibility of shirking personal responsibility, their task is habitually performed and becomes easy. It must not, however, be supposed that any requisite precautions against peril are omitted. From the locks on window-frames to prevent their being thrown up to a dangerous height, to an ingenious arrangement by which a continuous rush of water is made to denote the presence of any patient in a water-closet, we found all known and many novel contrivances for the safety of the inmates provided, and, which is equally important, kept in working order. The dormitories are so arranged as to give the attendants on duty efficient command of the beds. They can see and hear all that is going on. The rooms are lighted, for the most part, by gas-jets outside the apartments and showing through panes of glass. The bedsteads are of birch, in preference to iron, fitted with battens—except for the epileptics, who are laid on webbing,—and in all cases supplied with a hair mattress and straw palliasse. Great care has been taken in the construction of the furniture, and it would be difficult for an epileptic or suicidal patient to fall into danger. Every ward is amply provided with requisites for the inmates. The arrangements for washing and dressing are commodious, and comfort is considered, down to the detail of placing a bottle of filtered water for drinking for each dormitory. It would be better if the bottles were replaced by small filters. It is in minor matters like this that the efficiency of management most clearly expresses itself.

The provisions for recreation are very considerable. The airing courts are tastefully laid out, with especial regard to pleasure and safety. Instead of the regulation walks and formal grass plots, each court is a garden. Sun-shades, arbours, grounds for croquet and other games, tell of the wisdom no less than the sympathy with which all has been planned. A large recreation hall has been provided, in response to the request of the medical superintendent, with every convenience for theatrical and other entertainments, and it is seated with benches of admirable construction, made in the asylum. There is a well-arranged cottage hospital, wholly detached from the main building, and with all its offices self-contained. This, also, is a recent addition. It will be used as a residence for convalescent cases which it is desirable to separate from the general body of the patients, in times of health, and applied to its special purpose in case of need. The ordinary infirmary wards are well situated and appointed; and with special forethought a detached mortuary, with post-mortem room and all conveniences, has been erected in an obscure part of the grounds, approached from the main buildings by a masked path. This is an excellent feature. The asylum generally is well ventilated by wall-shafts in the wards and in the single rooms, which are sufficiently though not very numerous and suitably furnished. A perforated plate near the floor admits cool air, and is protected with sliding shutters. An opening just below the ceiling allows the egress of foul air. There are no "strong" or padded rooms in the institution. The system of treatment adopted does not recognise or require such appliances; but of this we shall speak presently.

The boundary path of the asylum provides a walk of nearly three miles within the grounds, and the use of sunk walls instead of high fences secures the great advantage of an unbroken view from every point. The prospect is interesting and extensive. The Mid-Surrey hills, the Frimley ridges, and the Basingstoke canal which bounds the estate on the south, are pleasing objects in the landscape. Much of the ground on which the buildings stand has been made by transfer of materials, and considerable skill has been evinced in landscape-gardening and general culture. The Bagshot sands, with gravel and clay, underlie a thin and poor soil, which, however, has been greatly enriched by utilising the sewage of the asylum. The farm is well managed, and of great value to the establishment, both as supplying healthful occupation to a large class of male patients and on account of its produce. The residences of the medical superintendent, the chaplain, the farm bailiff, and the gardener are detached. The two latter have been adapted for the reception of a limited number of patients draughted from the principal buildings, and forming little working communities, under especially sociable influences which are highly appreciated and of great value to the cases so disposed. The water-supply has from the outset constituted a great difficulty. The quantity has been eked out by drawing from the adjacent canal. Every precaution has been taken to ensure purity by filtration, and repeated analyses by competent referees show that the quality has been fairly good; but the source is wholly *surface-water*, and we are glad to be assured that measures will shortly be taken to obtain a better supply by sinking an artesian well. This will need to be carried to a considerable depth—we fancy greater than the experts consulted estimate,—and the works must be proportionately expensive; but the need admits of no palliation, and will not tolerate further delay. The sewage, as we have stated, is "utilised," and the drainage appears satisfactory. The original arrangements were obviously defective, but very much has been done to improve matters; and, under the present management, there is little doubt that the necessity for amendments, being clearly recognised, will be fully met.

The daily life of the patients is well ordered. The time is filled up without being excessively burdened with engagements. There is neither the measured haste of an oppressive industrial *régime*, nor the monotony of prison discipline. A kindly and sympathetic intelligence seems to hold the reins of government in perpetual control, and its modifying influence is apparent at every point of the system. The feeble and infirm patients are not ruthlessly routed from their beds, while those who would drift into habitual inertia are judiciously urged to activity by encouragement and example, instead of being irritated and coerced. Those who have witnessed the results of a dissimilar practice at some asylums will not fail to recognise how much the substitution of this more considerate method involves and implies. The service of the attendants is as orderly and effective as a well devised system of checks and counter-checks can make it. The remarkably small number of "wet" and "dirty" cases reported, observed by the Commissioners in Lunacy from time to time, or recorded in the books, which we were allowed to inspect, speaks well for the attendance. The number of patients "raised" bears significant proportions to the instances of misadventure. The personal responsibility of the officials is clearly well enforced, and the principle of minimising safeguards and appliances, which too commonly prove excuses for neglect or carelessness, is in large measure successful, and productive of watchfulness and diligence. The patients are suitably clothed, but the depressing effect of a uniform, especially marked in the case of females, is wisely avoided. The dietary is sufficient and well varied. It includes a liberal supply of vegetables and fruit. An occasional fish dinner has recently been added, and one of Australian meat, admirably prepared, is greatly relished. Patients are carefully weighed every month, and the results recorded, so that any failure of nutrition requiring a change of food is promptly detected. The allowance of extras is governed solely by the needs of the special case for which they are prescribed. The arrangements for the health and comfort of the inmates may be fairly summed-up in the language of one of the medical reports: Brookwood Asylum is a hospital for the cure of curable cases, not a huge depôt for chronic cases. The efficiency of the ordinary medical superintendence was seriously and suddenly tested by an outbreak of small-pox in 1871. The expedition with which the epidemic was stamped out proved the completeness of the sanitary system and the vigour of the staff. The provisions against risk from fire, always of the greatest importance in an institution of this class, are respectable. Hydrants are placed on all the principal floors and levels, and connected with a large tank at the summit of a tower. This was not as well filled *as it ought always to be* when we visited the asylum; but the point is not overlooked. There is a fire-engine and a fire-escape in an out-house, and a corps of firemen has been organised under the command of the engineer of the asylum, and is regularly drilled. A periodic inspection by Captain Shaw would be of service. We commend the suggestion to the Visiting Committee. The cost of patients is now only ten shillings and sixpence a week per head, inclusive of all charges and expenditure. We come next to the

Treatment.

"Insanity is so essentially a disease of debility," remarked the medical superintendent, in his first annual report (1868), "that, as a necessary starting-point to its successful treatment, a good and generous diet is required." This, as we have stated above, is provided. The general discipline is equally satisfactory. Courtesy, patience, thoughtfulness, watchfulness, truthfulness, and sympathy are the virtues expected and required from officials in their daily dealings with the sane; and the cultivation of these qualities is enforced by an admirable code of rules of conduct, which every attendant is obliged to study and obey. Great care is exercised in the appointment of suitable attendants for the wards—1 to 10·5 patients on the male side, and 1 to 12·6 on the female. As far as we can judge from appearances, and from the condition of the wards, which commonly affords a fair indication, the service is fairly satisfactory. This impression is confirmed by careful examination of the Commissioners' reports, and by the measures taken in cases where the attendants have failed in their duty. A wise discretion has been shown in choosing persons who have not previously been engaged at other asylums, where they may have picked up, not only "experience in the *management* of the insane"—at best a very equivocal qualification,—but acquired habits of expertness in the evasion of rules and perfunctory performance of the duties required of them, with a facile skill in deceiving those in authority over them and shifting the obligations of direct responsibility. A very complete and apparently effective system of registers and reports is in force, and, if fully carried out, the details, symptoms, and behaviour of each case must be brought under the cognisance of the medical officers. We are assured that this system is tested at all points and checked by observation, and the demeanour of the patients certainly conveys the impression that they live as orderly, healthful, and pleasant lives as their condition admits. The fundamental principle would seem to be to place every patient as much at ease as his or her state will allow, and to obviate the feeling of restraint at the same time that provocation to displays of temper and excitement are carefully avoided. The physical condition of each patient on reception is minutely examined and noted. In the case of every person sent in from a workhouse, a special statement of the condition in which he reaches the asylum is forwarded to the local board of guardians. Since this procedure has been adopted, a marked improvement in the method of removal and in the state of such patients has been observed. The bodily health of a patient is the object of primary care. As regards the general method of treatment, the following passage, which we extract from the report of the medical superintendent at the close of 1874, is significant:—

"Mechanical restraint has not been employed since the opening of the asylum, and there has been no instance of seclusion since the year 1870."

Previous to 1870, "seclusion"—i. e., placing a patient in a room alone, and locking or otherwise securing the door—was adopted in seventy *instances*, distributed over sixteen *cases*. For example, in 1867 there was a case of puerperal mania of unusual severity. Opium had been largely administered before admission. The patient was secluded for short periods thirty-six times. Eight other cases during the same year were secluded, in all, thirteen times. The asylum was opened on the 17th of June, and to the 31st of December—

in 1867	there were	9	cases, comprising	49	instances.
„ 1868	„	3	„ „	15	„
„ 1869	„	2	„ „	4	„
„ 1870	„	2	„ „	2	„
		16		70	

The Report of the Commissioners in Lunacy, dated June 17th, 1870, contains a significant paragraph:—

"Upon this subject (seclusion) Dr. Brushfield states, as the result of his experience and observation, that special care and treatment in the open wards is preferable in all cases of violent excitement to seclusion. He is strongly of opinion, that not only is the benefit to the patient thereby promoted, but the effect is to ensure vigilance and the more efficient performance of their duties on the part of the attendants."

The circumstances, that the asylum was a new one undergoing continual alterations, and that the staff of attendants was scarcely in working order, together with the exceptional severity of some of the cases occurring before 1870, must count for much in the explanation why the medical superintendent did not earlier act on his personal convictions. We do not understand from Dr. Brushfield that he entirely abandons "seclusion" as a method of treating excitement; but the cases in which it might, in his opinion, be of use are so seldom met with that shutting a patient up alone to play out his passion in a padded room, or to "calm down" his excitement in solitude with nothing but the demon of his own disease by way of companionship, is practically eliminated from the system of treatment. Next to the folly of attempting to overcome violence by violence, so forcibly exposed by Dr. Conolly years ago, or of seeking to dispel deceptive persuasions by deceit, this trouble-saving artifice of seclusion is conspicuously irrational, and might well be wholly discountenanced. The method now adopted with particularly excited cases at Brookwood is to place the patient in a single room, of small size but in no other way peculiar; to tell off one, two, or, if necessary, more attendants for the special duty of quieting and, with moral influences, protecting and controlling him; and then gradually withdraw the demonstration of strength as the excitement subsides, until a single attendant sitting outside the room with the door open will suffice for effectual guardianship. Scarcely any cases so controlled call for physical force, and, when indispensable, it is employed without mechanical appliances, and with studious calmness and moderation. All pressure on the chest and body is peremptorily interdicted. During our visit we had the opportunity of seeing a woman of violent temperament and in considerable excitement so treated. In a padded room she would have been furious. We have known less turbulence produce wild havoc in a chamber elaborately padded from floor to ceiling. In this instance the patient walked about good-temperedly, leaving and re-entering her room at pleasure, always closely, but not unpleasantly, attended by the official on duty, and was quite content to vent her impulses in an occasional outburst of vehement chattering or loud singing. In the absence of anything to exasperate the emotions, or to quarrel with, her excitement was kept at its lowest point, and therefore incomparably less injurious to the brain and morbid will, and much more easily restrained by suasive influences. A less boisterous case was stamping with harmless energy in an open ward, and evidently passing through a paroxysm under the watchful eyes of attendants and the amused gaze of quiet inmates, many degrees below the fever-heat of conventionally restrained madness.

What may perhaps be designated the negative treatment of insanity is wholly of this class at Brookwood. Everything is so ordered as to tone down excitement and spare strength. Exhaustion is never desired, much less courted, or even intentionally brought about by the measures adopted, with a view to reduce the more formidable and troublesome symptoms of mania. There are no punishments properly so called. The shower-bath is *never*, we are assured, under any circumstances, employed as a measure of discipline. When required for physical treatment, it is especially explained to the patient that the reason of its use is purely medical, and he is generally induced to enter the bath himself and pull the valve-string "for his own benefit." The only correctionary discipline takes the form of a deprivation of some privilege or enjoyment not essential to health, and this can never be administered except by direct personal order of the medical officer. The attendants have no "power," and nothing is left to their discretion.

The positive remedial treatment is essentially moral and mental. Patients are provided with suitable and interesting employment, and sedulously diverted from their own broodings phantasies. The out-door labour and the works carried on within the asylum are so arranged as to afford a varied source of interest. The patients are allowed to work *with* the attendants, not to perform a task *under* their surveillance. It was difficult, in many cases impossible, to tell which were the attendants and which the patients, so cheerfully did the two classes work in companionship. More purely diverting appliances, such as stage-plays, concerts, conjuring *séances*, panoramas, balls, illustrated lectures, and exhibitions of divers kinds, are employed, systematically and at short intervals, as means of taking the mind out of itself and leading it back to normal trains of thought and methods of thinking, through new channels. The asylum band, composed of the attendants and officials, numbers sixteen. Neither pains nor expense are spared to perfect this valuable repertory of mental remedies. No means of reaching and swaying the mind are neglected. The patients are never left without restorative and healthful agents at work around and upon them; and it is by the continuous operation of such constraining and persuasive mental influences that the cure of curable cases is sought to be effected. Of course the chronic cases, and those complicated with epilepsy and general paralysis, are not susceptible of remedy by mental treatment, if at all; but even in these deplorable instances much is gained by the ameliorating though transient influences exerted. This, however, brings us to the consideration of

RESULTS.

The subjoined table will serve to place the medical statistics of Brookwood Asylum, from the date of its opening to the end of 1874, conveniently before the reader. It may be premised that with the additional accommodation afforded by the new buildings just completed, the institution will be able to house 1060 patients, instead of 633—the largest average number resident any year during the period to which these returns relate.

The summary is reproduced, with modifications, from the returns required by the Commissioners. Additional particulars embodied in the fifth column have been obligingly supplied by the medical superintendent from the case-books. The first point that calls for comment is the very small proportion—26·49 per cent.—which the "curable" cases bear to the total number of admissions. This is most unfortunate. As far back as 1871 Dr. Brushfield called attention to the disadvantage of allowing a "hospital for the proper medical treatment of recoverable cases" to "assume more the character of a hospital for incurables." The appropriation of special establishments for chronic cases, under the control of the Commissioners in Lunacy—not, as is the case with some of the asylums professedly set apart for that purpose, under the Local Government Board, and classed as *workhouses*,—is an expedient which cannot long be delayed. The very extraordinary course pursued with regard to ex-criminals, who are now discharged from the criminal asylums into the county houses, to the serious detriment of the latter, increases the urgent need of reform in this direction. What we have to say on this point will, however, come better at the close of our remarks, when the facts are all before the public. The small proportion of curable cases is due to the large number of general-paralytics and epileptics at Brookwood, a circumstance especially to be regretted when the efficiency of the institution as a hospital is considered. The proportion of cures to curable cases —65·39 per cent.—which constitutes the best measure of success, is satisfactory. The percentage of deaths on the average number resident is by no means high, but must be further qualified by the number of deaths whose immediate cause was general paralysis. This incurable malady accounts for 31·4 of the total mortality, or 140 out of 451 deaths in all, from the opening of the asylum on June 17th, 1867, to Dec. 31st, 1874; which gives a gross proportion of deaths of 29·94 on the total number of admissions—1740—for the same period. The percentage of "recoveries" on total admissions is 28·06. But the percentage of cures upon "admissions" affords no useful indication as to the results of treatment. Obviously the outcome must depend upon the kind of cases admitted, and mere numbers show nothing to the point. Calculating the percentage of cures upon cases "deemed curable" supplies a better inference. Although medical superintendents differ widely as to the cases they deem hopeful, each asylum is tested upon the basis of its own prognosis. A comparison of the columns showing, respectively, the number of "recoveries" and "deaths" within six months of admission will enforce the expediency of dealing with *recent* cases apart and promptly, for these only are "hopeful." It will be seen that the prognosis of curable cases at Brookwood at the close of the year 1874 gave only 37 as hopeful. We reserve general remarks until the state of our inquiry renders it possible to compare the results obtained at other asylums. Our warm acknowledgments are due to the great courtesy and frankness of the excellent medical superintendent, Dr. T. N. Brushfield, and his assistant medical officer, Dr. James L. Barton.

Surrey County Lunatic Asylum at Brookwood.

Year.	Cases admitted.				Cases discharged.				Cases remaining on Dec. 31st.		Average number resident.	Analysis of recoveries.				Analysis of deaths.						Casualties reported.
	Total number.	Transferred from other asylums.	Readmitted.	Deemed curable.	Recovered.	Relieved.	Not improved.	Died.	Total number.	Deemed curable.		Proportion per cent. on admissions.	Proportion per cent. on cases deemed curable.†	Proportion per cent. on average number resident.	Numbr. within six months of admission.	Proportion per cent. on total of admissions.	Proportion per cent. on average number resident.	Immediate cause: General Paralysis.	Average age at death.	Numbr. within six months of admission.	By suicide or accident.	
1865	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	328	245	1	31	10	...	2	9	307	...	173	3·04	32·25	5·78	10	2·74	5·19	2	...	8	...	...
1868	342	112	9	75	62	9	9	51	518	40	442	18·1	82·66	14·02	50	14·91	11·5	9	49·7	33	1	...
1869	226	59	7	53	56	5	7	56	620	37	546	24·7	60·21	10·25	28	24·77	10·25	15	49·	25	1	...
1870	186	15	11	57	63	2	21	83	637	27	640	33·8	67·2	9·84	32	44·62	12·9	24	49·84	30	...	...
1871	180	41	11	48	41	7	64	77	628	22	633	22·7	54·66	6·47	24	42·77	12·1	24	53·5	21	1	2‡
1872	135	6	14	49	65	4	10	50	634	19	631	48·14	91·54	10·3	32	37·03	7·92	14	48·6	17	1	1
1873	166	73	9	65	44	10	54	57	635	19	643	26·5	52·38	6·84	28	34·33	8·87	26	45·5	19	2	...
1874	177	12	11	83	84	6	9	68	645	37	645	47·5	82·25	13·0	62	38·41	10·5	26	51·45	26	...	...
...	1740	563	73	461	425	43	176	451	...	...	544	28·06	65·39	...	266	29·94	...	140	...	179	6	3

* This asylum was not opened until June 17th, 1867.

† This percentage is upon the total of "curable" cases remaining on Dec. 31st of the previous year (11th col.) and those admitted during the current year (5th col.)

‡ These were patients bitten by adders in the grounds.

SUPPLY OF SUBJECTS FOR DISSECTION.

LOUD complaints are made by almost all the teachers of anatomy in London of the scarcity of subjects for dissection. When, in 1871, Professor Humphry, of Cambridge, interested himself in securing some changes in the Anatomy Act of William IV., whereby the period within which the certificates of interment to be transmitted to the Inspector of Anatomy was extended from six weeks to a period not exceeding six months, it was thought that anatomical teachers would be able to collect and preserve bodies during the four months prior to the commencement of the winter session, and by that means obviate the difficulties that had been previously experienced from the want of bodies. Unfortunately the experience of the last three years has shown that the alteration has not been productive of as good results as were anticipated. A considerable difficulty has been felt in preserving bodies in a fit state for dissection for three or four months; but, as we showed in the Report on the Preservation of Bodies, in October, 1872, this difficulty may be overcome to a great extent, if only the Inspector of Anatomy could be encouraged to make an effort to supply an adequate number of bodies. It is an anomalous state of things that, in a community numbering over three millions and a half, anatomical study should be thwarted for the want of material. Thousands of unclaimed persons, whose bodies should be available for anatomical purposes, die in London every year. But the fact is that it seems to be no one's business in particular to look after the supply of subjects, and therefore the work is not done. The Inspector of Anatomy has clearly proved that it is no part of his duty, and the Poor-law officials are not always actuated by a desire to advance scientific pursuits. Those teachers who recollect the excellent administration of Sir Rutherford Alcock must sympathise with the teachers of anatomy of to-day. Although we have now entered upon the third month of the session there are in the large schools many first, and even second, year's students who have not been able to procure one part for dissection.

In reply to our inquiries, the teachers of anatomy in the metropolitan schools have kindly supplied us with the following information respecting the supply of subjects and the number of *bonâ fide* students in the anatomical classes:—

	Subjects.		Students.	
	Total.	Inspector of Anat. since Oct. 1st.	First year.	Total.
Guy's	28*	10	93	240
St. Bartholomew's	22†	6	108	225
University College	14	8	86	203
St. Thomas's	11	5	50	158
St. George's	9	5	43	83
King's College	6	3	32	80
Middlesex	5	4	38	72
London	12‡	10	35	71
Charing-cross	2	2	28	45
Westminster	4	1	12	26
	113	54	525	1203

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* Eight post-mortem examinations had been held, so that only the limbs were available. Several were from the hospital, and four have been received this week. † Seven of these were from the Hospital.

‡ Two from the Hospital. This School is in a very populous district and a large parish.

There have been, therefore, from all sources, and including those preserved before the commencement of the session, 113 subjects supplied to ten metropolitan medical schools for the purposes of dissection this session, of which only 54 have been furnished by the Inspector since October 1st, while the total number of students desiring to dissect is 1203, of which 525 are first-year. It need scarcely be said that this supply is quite inadequate. As one body is generally allotted to six or seven students, we shall say seven, about 200 bodies should by this time have been supplied, because at this period of the session many students should have completed one part, and been far advanced in a second part, especially those students who are preparing for the January and April examinations.

It will be seen that we have not included St. Mary's in the above table. The reason of this is that we have not received a return from the lecturer on anatomy of that school. The main facts will not, however, be materially influenced by the omission of this school, which is, we hear, always kept well supplied with subjects.

Correspondence.

"Audi alteram partem."

ARMY SANITARY COMMISSION.

To the Editor of The Lancet.

Sir,—On the 24th November I asked you to be good enough to insert a statement of facts regarding the work of the Army Sanitary Commission. This statement was directed against charges of incompetency brought against the Commission on account of certain remarks of theirs on reports referred to them from India, in which they had failed to discover evidence of the spread of cholera by water poisoning. I was not then in a position to state what views the Commission had actually expressed, because the papers had not been published. They have, however, since appeared, and I can now state exactly what the Commission did.

A severe epidemic of cholera broke out in 1872 in the North-west of India, and the Government of India directed special local inquiries to be made by medical officers of the British and Indian armies at affected stations. This led to the production of reports on 108 outbreaks at 44 stations, the notes of which appeared in the report of the Sanitary Commissioner with the Government of India, which came before the Army Sanitary Commission in the usual way. At the same time Dr. Cuningham laid before the Commission a series of questions on these reports. The replies to these questions were first drawn up, and then the remarks on the reports, and it happened that both documents were sent to the India Office on the same day; the questions giving the answer in detail, the remarks giving merely the result. Had both documents been printed together in last year's India Office Report, the case would have been evident enough, but the remarks were published in last year's report, and the replies have just been issued.

The following is Dr. Cuningham's question, together with the reply:—

"*Question:* Is there anything in the evidence given in my report to support the idea that cholera was spread by a specific poison drunk in water?—*Answer:* Without prejudging the results of more extended inquiry, and supposing that every obtainable information on this subject during the epidemic of 1872 has been recorded, the Committee has been unable to discover any evidence in support of the conveyance of cholera infection in drinking water."

You will see that this gives a very different aspect to the action of the Commission, and had the facts all been printed at the same time, the recent attacks on the Commission in this matter would have been superfluous. As the case stood, however, it must in fairness be confessed that the terse expression in the remarks, "there is no evidence to sustain a current theory that cholera poison conveyed in water is the cause of cholera," although intended to be read in the light of the reply, when taken by itself, and without the reserves in the reply, looks like a decision on the whole case on the evidence as it stood. The reply gives the exact position taken by the Commission in the discussion.

I might stop here, but it appears to be only an act of justice to the authorities in India to state that they did make further inquiries by sending copies of the reports to all the medical and other officers who had supplied the information originally, with a request that mistakes might be corrected and any additional information inserted.

The result, as stated by the Sanitary Commissioner with the Government in India, in his report for 1873, is that "no mistake on any important matter of fact has been brought to notice, nor has any additional information of value been furnished."

I am, Sir, yours, &c.,

London, Nov. 27th, 1875. John Sutherland, M.D.

EFFUSED BLOOD.

To the Editor of The Lancet.

In reference to some remarks of mine in a clinical lecture you published the other day, on the various modes in which effused blood may be disposed of, will you allow me to relate the following case? It illustrates what must be, I think, a very uncommon course of events.

Some months ago I removed an encysted tumour, about the size of a filbert, from over the parotid gland of a girl aged fourteen. No vessel needed a ligature, and the edges of the wound were, of course, brought accurately together, and covered with a pad of lint secured by a bandage. After forty-eight hours, when the pad was removed, the wound looked well. Its edges were in close contact, apparently united, and there was no sign of separation of its surfaces, or of any untoward disturbance. But in the course of the next day or two, although the pad was carefully replaced, the wound was gradually raised, and the adjacent parts distended, by an effusion beneath them, so that it then looked very much as if the tumour were still there. From the absence of all signs of inflammation or of any disturbance, I was sure that this could not be pus—that it must be either blood or serum. The child declared that there was no pain, nothing beyond a little stiffness. On the third or fourth day, to avoid the risk of leaving any pent-up fluid, I introduced, through the middle of the wound, which readily yielded, a very fine probe. The point moved freely in a cavity, but nothing whatever escaped, and when it was withdrawn the end was stained with blood. The swelling remained, showing for some days no sign of decrease, but there was no further local disturbance of any kind. At the end of nine or ten days the sense of fluctuation was still so marked that I again introduced the probe, but with only the same result. The wound throughout its length was quite united; it looked perfectly well, but the swelling persisted, and gradually the parts around the wound became discoloured, as if bruised. I could not doubt that there was a mass of blood, more or less coagulated, beneath it, and of course I was much interested to see what would become of it. Would it at length be discharged, provoking suppuration, or would it slowly shrink, becoming absorbed, or might part of it become organised? I mentioned the case and put the question to several friends, and the unanimous verdict was that sooner or later it must come out. But it never did. After remaining with very little change, save wider and deeper discolouration, for a fortnight, the swelling very slowly began to subside, the sense of fluctuation passed away, the surface resumed its natural colour and outline, and at the end of a month or thereabouts evidence of an operation could not have been slighter. Indeed, after some weeks longer the scar was singularly faint, and I fancied that the slender linear depression which one can usually detect had been counteracted by the temporary distension.

Who would not have watched the progress of this case with intense interest? I was anxious, too, for a time, for I feared that suppuration might occur and leave an ugly mark, and in the majority of cases blood so effused would undoubtedly be thus expelled; but in a healthy child, healthy blood, lying in a nest of healthy tissue, was disposed of very quietly and in the simplest way. It provoked no mischief, and the little patient was never even conscious of its presence; and this although no special means were adopted to exclude germs, and I fear that I must, on more than one occasion, have introduced a few with my probe.

The atmosphere, however, must have had but limited, if any, access to this blood; for I have little doubt that before it was effused the lips of the wound had united; so that, although it was associated with a wound, it was really under the condition of blood extravasated in a bruise.

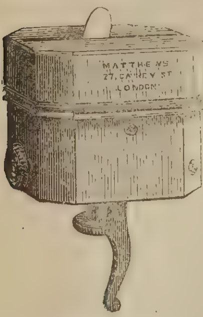
I am, Sir, yours truly,

Brook-street, W., Nov. 30th, 1875. WM. S. SAVORY.

AN IMPROVED SCARIFIER FOR INCISING DROPSICAL LEGS.

To the Editor of THE LANCET.

SIR,—Messrs. Matthews, the surgical instrument-makers, have lately made for me an improved spring scarifier for incising dropsical limbs. The instrument, a sketch of which is here given, is, in fact, a small cupping scarifier with a single blade. The blade is drawn back by a metal lever, and held by a catch until it is loosened by touching a brass knob. The length of the incision is about half an inch, and the depth is regulated by a screw which raises or lowers the brass cover through a slit in which the lancet makes its sweep.



The main advantage of this instrument consists in the fact that the incision, being made by the rapid sweep of the spring scarifier, is attended with much less pain than results from the slow incision with an ordinary lancet or from punctures made with needles. This instrument, with the semicircular sweep of its blade, is also preferable to one which I formerly used, in which the lancet was thrust straight forward by a spring. The incision made by the sword-like sweep of the one instrument is more rapid and less painful than the dagger-like thrust of the other. The instrument is so constructed that it can be easily opened for the purpose of cleaning the blade, which should be done immediately after its use.

I am, Sir, yours &c.,

Savile-row, Nov. 30th, 1875. GEORGE JOHNSON, M.D., F.R.S.

DEBATE ON MR. WELCH'S PAPER AT THE MEDICO-CHIRURGICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct in two particulars your able and otherwise very accurate report of my remarks in the above debate? I spoke in round numbers of 500 soldiers as being *annually* lost to the British service through diseases of the circulation. Of them 450 died or were discharged on account of heart disease, 50 on account of *aneurism*. In a later sentence I did not mean to imply that the *faintest* venereal excoriations were often recorded as syphilis, which would have been an exaggeration, but that they were recorded (contrasting in this respect with intemperance), and I then gave reasons for thinking that venereal sores were inaccurately classified, thus swelling the numbers of syphilis.

I am, Sir, yours faithfully,

R. DOUGLAS POWELL.

Henrietta-street, W., Nov. 30th, 1875.

BEQUESTS, &C., TO MEDICAL CHARITIES.—Mrs. Teresa Ann Carmichael, of St. Stephen's-square, Bayswater, bequeathed £300 to St. George's Hospital; £200 each to the Royal United Hospital, Bath, the Cancer Hospital, the National Hospital for Diseases of the Heart and Paralysis, King's College Hospital, and the Hospital for Sick Children; and £100 each to the General Hospital, Bath, and the Dental Hospital of London.

Medical News.

UNIVERSITY OF LONDON.—The following is a list of candidates who have passed the recent M.D. examination:

Crocker, Henry Radcliffe, B.S., University College.
Duncan, Andrew, King's College.
Eastes, Thomas, Guy's Hospital.
Philpot, Joseph Henry, King's College.
Sturge, William Allen, University College.
Yeo, Isaac Burney, King's College.

The following have passed the recent B.S. examination:—

FIRST DIVISION.

Hullard, Jean Arthur, B.Sc., University College.
May, Bennett, Birmingham General Hospital.
Maclean, Thomas Edwin, University College.

SECOND DIVISION.

Hobson, Lewis John, University College.
Jameson, Leander Starr, University College.
Rose, William, King's College.
Voelcker, George Henry, University College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 25th:—

Fonmartin, Henry de, Lying-in Hospital, York-road.
Mahony, Laurence Francis, Amherst-road, Dalston.
Roberts, Gordon Money, Finchley-road.
Stephens, Meredith Lloyd, Belper, Derbyshire.

The following gentlemen passed the Primary Professional Examination on the same day:—

Ernest H. Buckell, University College; Daniel Colquhourn and Arthur Greenwood, Charing-cross Hospital; Frederick Alexander Hyne, Guy's Hospital; Eugenius A. Roche, St. Mary's Hospital.

HOSPITAL SUNDAY in Belfast has been permanently fixed for the last Sunday in each year.

A WOMAN named McEvoy died last week in the County Down, Ireland, at the advanced age of 106 years.

Deputy Surgeon-General Andrew A. Stoney, L.R.C.S.I., of Frankford, has been placed on the Commission of the Peace for King's County.

IN London last week 1504 deaths were registered, including 54 from measles, 120 from scarlet fever, 7 from diphtheria, 55 from whooping-cough, 25 from different forms of fever, and 14 from diarrhœa. No death from small-pox was recorded, making in all the nineteenth continuous week in which such a satisfactory announcement has been made. The deaths referred to diseases of the respiratory organs amounted to 374. The London Fever Hospital contained last Saturday 102 patients, including 85 cases of scarlet fever, and 12 of enteric fever.

RUMSEY TESTIMONIAL FUND.—Those desirous of subscribing to this fund are requested to do so at once, as the list will be closed before Christmas. Subscriptions may be forwarded to Dr. Buchanan, New Government Offices, Whitehall; to the Honorary Secretary; or to Messrs. Robarts, Lubbock, and Co., bankers. Cheques should be made payable to the "Rumsey Testimonial Fund" or bearer, and crossed "Robarts, Lubbock, and Co." Post-office Orders should be drawn on the Curzon-street Post-office, and forwarded to the Honorary Secretary.

THE SKIPTON GUARDIANS.—We are informed that only one candidate, and this one possessing but a single legal qualification, offered himself for election as medical officer to the Skipton Workhouse and Infirmary, at the salary of £35, which had been refused by the late medical officer under the circumstances mentioned in our issue of Nov. 13th. This candidate was elected, subject to the approval of the Local Government Board. We understand there are three or four doubly qualified practitioners in the town willing to take the appointment at a fair salary.

WHARFEDALE CONVALESCENT HOME, ILKLEY.—The committee of management of this institution has issued cards to the members of the medical profession announcing that the home will be opened for the reception of convalescents during the whole winter months, and that the arrangements for heating and ventilation are of such a nature as to ensure the most perfect warmth and comfort to the inmates. This determination has been arrived at through the strong wish of the founder, Mr. Charles Semon, to extend to others the benefits which can be obtained by richer people at kindred establishments.

The first meeting of the Surgical Society of Ireland was held at the College of Surgeons on the 26th ult., the opening address being given by Mr. E. Hamilton, president of the society.

At a meeting of the St. Pancras Vestry, held on Wednesday last, a letter was received from Dr. Thomas Stevenson, medical officer of health for the parish, tendering the resignation of his office, which he has held for a period of seven years, and stating as the chief cause of his doing so to be, "that while I am held responsible for the sanitary condition of the parish, I am denied that assistance in out-door inspection of houses, either visited with contagious diseases or habitually in an unsatisfactory condition, which I believe to be necessary. I feel that the severe condemnation which a house-to-house visitation of the poorer parts of the parish has received from a majority of the Sanitary Committee must of necessity hopelessly weaken my authority with the sanitary inspectors, and render nugatory my efforts to carry out the Sanitary Acts." The Vestry resolved to postpone the consideration of the letter until their next meeting, when some matters connected with the sanitary condition of the parish will also be considered.

Medical Appointments.

Abbott, C. E., M.R.C.S.E., has been appointed Surgeon to "The Atlas" Steam-ship, Cunard Line.

Bark, J., L.K.Q.C.P.I., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

Barlow, T., M.D., M.R.C.P.L., has been selected as an Assistant-Physician to the Charing-cross Hospital, vice Poore, appointed an Assistant-Physician to University College Hospital.

Bartlet, G., M.R.C.S.E., has been appointed Medical Officer to the new Cottage Infirmary, Forgue, Aberdeenshire.

Bennett, J. H., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Redcar Urban Sanitary District: £15 per annum.

Boast, B. R., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the No. 3 District of the Henstead Union, Norfolk, vice Morgan, resigned.

Cremonini, J., M.R.C.S.E., has been appointed Resident Medical Superintendent of the Hoxton House Lunatic Asylum, vice Hunt, deceased.

Dale, W., M.D., M.R.C.S.E., L.M., has been appointed Honorary Physician to the West Norfolk and Lynn Hospital, vice Cossar, resigned.

Davison, F. V., M.B., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

Goodwin, R. D., F.R.C.S.E., has been reappointed Medical Officer for the Mayfield District of the Ashbourne Union.

Gray, J. R., M.B., C.M., has been appointed Medical Officer for the Borrowby District of the Northallerton Union, Yorkshire, vice Buchanan, resigned.

Hall, J., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Leigh Urban Sanitary District.

Hayward, W. T., L.K.Q.C.P.I., M.R.C.S.E., has been appointed House-Surgeon to the Liverpool Infirmary for Children, vice A. James, M.B., resigned.

Jackson, W., L.R.C.P.Ed., has been appointed Medical Officer to the Skipton Union Workhouse, vice Birtwhistle, resigned.

Jumeaux, B., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Physician to the North Staffordshire Infirmary, Hartshill, vice Walter.

Lloyd, W., M.B., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1 District and the Workhouse of the Carmarthen Union, and Medical Officer of Health for the Carmarthen Sub-district of the Carmarthen Rural Sanitary District, vice D. Lloyd, M.R.C.S.E., deceased.

Mahon, C. J., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Easkey Dispensary District of the Dromore West Union, Co. Sligo, and Medical Officer to the Workhouse, vice Scott, appointed to the Ballina Dispensary District.

Matthews, J. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Cloghan Dispensary District of the Stranorlar Union, vice Keys, appointed to the Castlefin Dispensary District of the Strabane Union.

Miles, G. E., M.R.C.S.E., has been appointed Assistant Medical Officer (temporarily) to the North Wales Counties Lunatic Asylum, Denbigh, vice Ellis, appointed Medical Officer to the Dinas Mawddwy Slate Quarries &c.

Milner, E., M.R.C.S.E., has been appointed a Surgeon to Out-patients of the Lock Hospital and Asylum, vice Shillitoe.

Pitt, C. W., M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for the No. 1 District of the Malmesbury Union, Wilts.

Purcell, F. A., M.D., has been appointed a Physician to the Westminster General Dispensary, Gerrard-street.

Quinton, R. F., B.A., M.D., C.M., L.M., M.R.C.S.E., has been appointed Resident Medical Officer and Secretary to the Newark-on-Trent Hospital and Dispensary, vice Maybury, appointed a Medical Officer to the Colchester Union.

Shain, J. M., M.R.C.S.E., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

Shillitoe, B., F.R.C.S.E., has been appointed a Surgeon to the Lock Hospital and Asylum, vice Lane, resigned.

Smith, S. J., M.D., L.R.C.S.E., has been appointed Medical Officer for the Etwall District of the Burton-on-Trent Union, vice Kitchener, resigned.

Twigge, T. N., M.R.C.S.E., has been reappointed Medical Officer for the Hartington District of the Ashbourne Union.

Walter, W., M.B., has been appointed House-Surgeon to the North Staffordshire Infirmary, Hartshill.

Willan, R. M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the North Witchford Union, vice Wilson, resigned.

Winslow, Dr. L. S. F., has been appointed Lecturer on Psychological Medicine at the Charing-cross Hospital Medical School, vice Hunt, deceased.

Births, Marriages, and Deaths.

BIRTHS.

Atthill.—On the 25th ult., at St. Osyth, the wife of R. C. Atthill, L.R.C.P.Ed., of a son.

Gray.—On the 20th of Oct., at Cinnemara, Jorehaut, Assam, the wife of Edward Gray, M.B., C.M., of a son.

Lownds.—On the 23rd ult., at Egham-hill, the wife of T. M. Lownds, M.D., of a son.

Rice.—On the 28th ult., at Cadogan-place, the wife of M. W. Rice, M.D., of a daughter.

Sturton.—On the 23rd ult., the wife of H. W. S. Sturton, M.R.C.S.E., of Greenwich, of a daughter.

Taylor.—On the 25th ult., the wife of Dr. H. O. Taylor, of Castle-gate, Nottingham, of a daughter.

MARRIAGES.

Brebner—Simpson.—On the 28th of Oct., at Christ Church, Georgetown, Demerara, William Brebner, M.B., C.M., M.G.C.U.E., H.M.P.S., to Ellen Inniss, eldest and only surviving daughter of James B. Simpson, S.C.P. No Cards.

M'Kelvie—Gaedicke.—On the 22nd ult., at Berlin, civilly, and on the same day at the British Embassy, by the Rev. R. Bellson, English Chaplain, Robert M'Kelvie, M.D., of Cromer, Norfolk, to Mathilde, only daughter of the late Johann Daniel Gaedicke, Ph.D., Rector of Prenlau, Prussia.

Rigby—Thompson.—On the 23rd ult., at Barry-road Chapel, Peckham-rye, James Arthur Rigby, M.B., of Winckley-square, Preston, Lancashire, to Sarah Elizabeth Atherden (Lillie), eldest daughter of Joseph Thompson, Esq., of Manor House, Camberwell, Surrey.—No Cards.

DEATHS.

Brown.—On the 19th ult., at Burtholme, Cumberland, Robert Brown, F.R.C.S.Ed., aged 43.

Hardy.—On the 9th ult., at Warrington, Geo. Willmott Hardy, M.R.C.S.E., aged 74.

Leith.—On the 28th ult., at Etherton-lawn, near Tunbridge-wells, Dr. A. H. Leith, late Inspector-General of Hospitals, Bombay Medical Service.

Peterson.—On the 5th of Oct., at Bombay, Richard A. Peterson, M.D., aged 29.

Ready.—On the 26th ult., at Bootle, Michael Ready, M.R.C.S.E., aged 59.

Torrance.—On the 25th ult., at Dunchurch, David Torrance, M.D.

Tulloch.—On the 27th ult., at Pembridge-place, Bayswater, James S. Tulloch, M.D., aged 56.

Wales.—On the 31st of Oct., at Wimbotsham, Norfolk, Robt. J. Wales, L.S.A.L., aged 79.

Webster.—On the 24th ult., Wm. H. Bayley Webster, L.S.A.L., of Woodbridge-road, Ipswich, aged 83.

Wilson.—On the 16th ult., at Clachanton, Ayrshire, W. Wilson, L.F.P. & S. Glas., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Hermann's Physiology.
The Climate and Diseases of America during the Revolution.
Dr. Peau: De la Forcipressure.
Mr. Gorman: Christian Psychology.
Mr. Brunton: Experimental Investigation of the Action of Medicines.
Dr. Bauduy: Lectures on Diseases of the Nervous System.
Haeckel's History of Creation. Vols. I. & II.
Holmes's System of Surgery.
A Manual of Hospital Nurses.
Dr. Black: Bright's Disease.
Transactions of the Pathological Society.
Dr. Bulkley: Archives of Dermatology. Vol. I.
" " Analysis of 1000 Cases of Skin Diseases.
Dr. Lindsay: The Superannuation of Officers in British Hospitals for the Insane.
Dr. Macdonald: Water Analysis.
Dr. Ziemssen: Cyclopædia of the Practice of Medicine. Vol. V.
Professor Küss: New Manual of Physiology.
Quain's Anatomy.
Mr. Storie: The Dietetic Errors of the People.
Dr. Frieberg: Gerichtsärztliche Gutachten.
The Second Christian Epoch. By a Christian.
Vernon Galbray; or the Empiric. Second Edition.
Mr. Milne: German Grammar.
White's Grammar School Texts. Virgil's Æneid: Eutropius.
Lamartine's Toussaint L'Ouverture.
Dr. Macdonald: On Death, and how to divest it of its Terrors.
Mr. Smiles: On Thrift.
Christianity *versus* Paganism.
Strange Tales from "Vanity Fair," by Silly Billy.
Vanity Fair Album.
Messrs. Cassal and Marcher: Graduated Course of Translations from English into French.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

The Lancet Office, Dec. 2nd, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 26	30·02	N.E.	33	55	...	37	31	...	Overcast
„ 27	30·00	N.E.	35	36	...	39	32	...	Snowing
„ 28	30·15	N.E.	35	36	...	39	35	...	Overcast
„ 29	30·05	N.E.	...	35	...	38	34	...	Overcast
„ 30	29·87	N.E.	...	33	...	39	31	...	Overcast
Dec. 1	29·86	E.	...	31	...	35	29	...	Snowing
„ 2	29·81	N.E.	...	33	...	...	30	0·08	Snowing

Notes, Short Comments, and Answers to Correspondents.

The Eucalyptus Globulus.

Some time ago the Army Sanitary Commission forwarded a memorandum to the Government of India regarding the alleged benefits which were expected to follow the cultivation of the Eucalyptus globulus in malarious districts. The reports that have since reached this country from India are such as finally to dispose of the question. It appears that the Government of India have been importing seeds of the tree for many years past at a considerable expense, but that the only places where it has been cultivated with success are Raneckhet, in the South-West Provinces, and the Neilgherries, in the Madras Presidency. All attempts to rear it in the plains, where its alleged anti-miasmatic qualities would be most appreciated, have proved failures. Mr. O'Connor observes: "It is a native of the cool temperate zone of the Australian continent and Tasmania, and its unsuitability to the tropical plains of this country seems now manifest." After enumerating the virtues currently attributed to the tree, he adds: "This catalogue of the virtues of the blue gum tree makes me think of the wonderful powers supposed 300 years ago to be possessed by that 'most holy herb,' tobacco." Clearly such statements want confirmation before they can be accepted. They bear, indeed, on their face the mark of exaggeration. In one of the papers in which an account of the properties of the tree is given it is stated that the British Government has largely grown it in India and on the West Coast of Africa, with astonishing results in the diminution of fever. Now, we know that in India no such results have been obtained, and on the West Coast of Africa attempts are only now being made to introduce the tree. Mr. Broughton, the Government quinologist, says that he has examined the bark and leaves of the Eucalyptus globulus, and that neither quinine, quinidine, chinchonidine, nor chinchonine is contained in the plant in any proportion.

A Subscriber should get the information from his medical attendant.

Animal Vaccination.

To the Editor of The Lancet.

Sir,—I was glad to see from the short report in your last impression that the subject of animal vaccination has been brought forward for discussion at the Medical Society of London. It is a question of the utmost importance at the present time. The growing distrust of vaccination and of vaccine lymph in this country, especially in the large towns, must be patent to all. It is being used by anti-vaccination agitators for their own purposes, and much mischief will be caused if we do not supplement our present vaccine supplies, especially in times of epidemic or vaccination panics, with a lymph which shall be above suspicion. I have shown elsewhere* at length that the Russians are before us in this matter; that in the Foundling Hospital at St. Petersburg, where most of the public vaccination is carried on, calf lymph has been used side by side with human lymph for the last five or six years. It is equally protective, and the failures in primary operations have, by care and perseverance, been reduced as low as two per cent. Surely what is possible in St. Petersburg is possible in England, and difficulties which have been surmounted by Germans in Russia should not be an impassable barrier to the countrymen of Jenner. Our Government should take up the question, and put it to the practical test of experiment and observation; for it would be worth much to have a lymph which should command public confidence, as well as admit of indefinite multiplication in the event of an epidemic. Difficulties might arise in regard to its carriage and storage; then use it fresh on the spot, and send reliable human lymph abroad. The use of calf lymph might not, it would not, do away with the many constitutional skin affections which follow the first irritation of the system, whatever it may be, whether teething or vaccination, in scrofulous subjects; but these could no longer be paraded as a terror to ignorant or nervous persons under the head of vaccino-syphilis.

The difficulties attending "animal vaccination" have been so strongly set forth by Dr. Seaton in the Report of the Medical Officer of the Privy Council for 1869 that there is danger lest its more encouraging features should be left out of sight. If Dr. Drysdale's paper serves to revive an interest in the subject, and to put the question more fairly before the profession, I think we may yet see calves attached to every large vaccination station, and the confidence of the public in the efficacy and safety of vaccination restored.

I am yours faithfully,

Cheltenham, Nov. 24th, 1875. Edward T. Wilson.

Audi Alteram Partem.

Dr. Metzquer lately read two papers before the Academy of Medicine of Paris, wherein he strives to prove the non-inoculability of tubercular matter. "I have had the honour," says the author, "of bringing before the Academy 31 experiments, which prove that, with non-tubercular matter, lesions may be produced identical with those excited by tubercular substance. 13 experiments prove that the nodules thus produced may become absorbed. These 44 experiments added to those of my first paper amount to 130 experiments, controlled by Messrs. Morel, Michel, and Feltz. I have shown that the nodules resulting from these inoculations may become absorbed, and really disappear in the majority of cases. I have proved that we can, at will, produce pulmonary or, speaking more generally, organic lesions, which have been erroneously looked upon as tubercular. To prove this, we need but inoculate solid matter of sufficient volume and easily reduced, either putrid or impregnated with putrid matter." The author then reviewed, critically, M. Villemin's experiments and the meaning he attaches to them. Finally, M. Metzquer said: "I maintain, after 130 experiments, that the nodules developed after the above-named inoculations have no analogy with tubercles, because—1st, they become absorbed in the majority of cases; 2nd, because they can be produced by the inoculation of different substances; 3rd, because, when experiments are undertaken with actual tubercular matter, no results are obtained except that matter be in an advanced stage of decomposition. The committee appointed to report upon these papers is exceptionally numerous, comprising Messrs. Villemin, Hérard, Colin, Henri Roger, T. Guérin, Hirtz, and Béhier. The first three are well known for their labours on this intricate question.

Mr. George Brown is thanked. The matter is unworthy of our notice.

Typhoid and Distemper.

To the Editor of The Lancet.

Sir,—I have much pleasure in answering the questions put by your correspondent, Mr. T. Paton, and am glad to find that the subject has been taken up by him as a veterinary surgeon.

Before communicating the evidence, I took every possible care to find out whether there could be any source other than that mentioned which could have produced the disease. I could find nothing, and therefore concluded that the dog alone was the source from whence the poison came. The house is perfectly familiar to me, and therefore I can speak of the sanitary arrangements with confidence. The drainage was thoroughly looked to only about a year ago. The cesspool is ventilated by a pipe passing up above the roof of the house, and the closet is in an entirely distinct part of the house to that occupied by the man. The family had only left the house about three weeks before the man was attacked, so there was no time for any alteration in the ordinary arrangements. The house was also occupied at the time by a housekeeper and several children; but no one else was attacked save his friend who visited him at the stable, and who was present when the stench was experienced. Immediately on discovering the nature of his disease, he was removed to his own room over the stable. No other cases have occurred in the neighbourhood, so the evidence still points to the dog as the only source from whence the poison was derived.

I am, Sir, yours faithfully,

Nov. 27th, 1875. H. H.

Medical Advertising.

The *Western Gazette* seems to be getting a favourite medium through which medical men who are averse to hiding their lights may notify their accomplishments to an admiring public. A registered practitioner lately sought by means of an advertisement in its pages to obtain at once a wife and a practice. In a more recent number of the paper, and under the heading of "Trade Announcements," we find the following advertisement:—

> "Dr. Brennand, having purchased the late Mrs. Culling's practice at West Lydford, feels justified in calling the attention of his patients to the fact, and in trusting to a continuance of their goodwill towards the same. Lydford House, West Lydford, Nov. 16th, 1875."

Sun Steam Engines.

M. Mouchot, Professor of Mathematics at Tours, brought lately before the Academy of Sciences of Paris an apparatus, by which the rays of the sun are concentrated, and heat the boiler of a steam engine. It consists of a conical reflector, a gas receptacle, and a boiler with blackened walls. The reflecting side of the mirror is turned towards the axis of the apparatus at an angle of 45°, which allows of a short and powerful concentration of heat. The rays come in contact with the boiler, and heat the same. It requires only eight minutes to bring five quarts of water to the boiling point. M. Mouchot has erected a large engine at Tours, which sets in motion an engine of one-horse power, quite regularly, from the rising of the sun to eight o'clock at night. The Academy has appointed a committee to report upon this invention. The names of the members are a guarantee that this learned body were much impressed by M. Mouchot's communication. They are, Messrs. Dumas, Bertrand, Faye, Hervé-Mangon, and Lesseps.

Dr. Sinclair, (Dublin.)—The subject shall be noticed next week.

Calabar Bean.

To the Editor of The Lancet.

Sir,—I should feel much obliged if you or any of your correspondents would tell me where Dr. Munro's cases of tic cured by Calabar bean, referred to by "M.D. Lond." in your impression of Nov. 20th, are to be found. I am anxious to try this same treatment to an obstinate case of neuralgic (periodic) headache, which has hitherto resisted all treatment, but before doing so wish to know more of the details.

Yours &c.,

December, 1875. Inquirens.

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* St. George's Hospital Reports, vol. for 1875: Questions connected with Vaccination, by E. T. Wilson.

"Confectionery."

THE *Pall Mall Gazette* states that while cooks in this country have yet much to learn, confectioners are almost too skilful in their art, and occasionally manufacture delicacies out of the most horrible compounds. An example of what apparently may be done in this line is afforded by an application made the other day to the magistrate at the Manchester Police Court, by the superintendent of markets, for an order for the destruction of thirteen tubs of unwholesome butter which had been found on the premises of a wholesale confectioner, whose employés were making it up with flour into paste for what are termed "Eccles cakes." The city analyst, who had examined a sample of this mixture, said that "it had evidently been made up of the refuse of butter casks, and was altogether unfit for human food. It smelt very badly, and there were evidences of decomposition, owing to too large a proportion of fatty acids." A promise being given on behalf of the confectioner that the stuff should not be applied for the purpose of confectionery, but should be given up to a soap-boiler in the presence of an inspector, an order was made by the magistrate accordingly. A summons, it was stated, would be issued against the confectioner for having the "butter" in his possession.

Vomiting after the Administration of Morphia either per Orem or per Cutem.

DR. FRICKENHAUS has found that he can avoid this unpleasant symptom by using atropine in combination with the morphia. The solutions used are two per cent. of morphia, and one per cent. of atropine. The syringe has twenty-five cross lines filled with the morphia solution, and five with atropine. Of course cases may be met with where atropine is contraindicated, and it may also be objected that vomiting is hardly so frequent after the absorption of morphia as the author seems to think.

Mr. Thomas Bell must excuse us. It would be contrary to our custom to do so.

Camphor Poisoning.

To the Editor of THE LANCET.

SIR,—On Tuesday, Nov. 9th, I was hastily summoned at eight o'clock in the evening, eight miles into the country, to see Alice T——, aged five years, who by mistake had administered to her by her mother half an ounce of liniment of camphor in place of her mixture. The child was just recovering from an attack of scarlet fever, which she in common with her two brothers had contracted at the village school. The liniment in question was sent to anoint their bodies with, and had been put side by side with the mixture; hence the mistake. She at once complained of its taste, and burning of the mouth, throat, and stomach, and in ten minutes was sick, hot water being given to her to help its removal from the stomach, and on my arrival I saw two or three ounces of half-digested cake and fluid, strongly impregnated with camphor and oil particles, floating on its surface. During the vomiting, and in fifteen minutes (so I was told) after its administration, violent convulsions came on. When I saw her, three hours afterwards, she was black in the face; the body arched backwards; the teeth so firmly clenched that nothing could separate them; the eyes were wide open, pupils quite insensible to a strong light, but neither contracted nor dilated; the eyeballs were rapidly rolling from side to side, and there was great subsultus tendinum; the pulse was at times hardly to be felt, at others it was full and bounding; the breathing was gasping, with long intervals between each gasp, so that those watching often thought the child was dead; the surface of the body was warm, but not hot; I had no thermometer with me in my hurry. The treatment I adopted was to put the body into warm water, and apply to the face and head cold affusion, which very soon told upon the congested condition of the brain, and in an hour quite changed the colour of the skin to a light florid red; the pulse soon afterwards became more regular, but the convulsions did not quite disappear for seven hours. At one time I felt inclined to abstract some blood, but the irregular state of the pulse made me afraid she would die if I did so. As soon as she could swallow, three-grain doses of bromide of potassium were given, and repeated every two hours for four doses. After that she sank into a quiet sleep, and the next day, with the exception of a blistered condition of the tongue and a soreness at the stomach, which milk and fluid magnesia soon removed, she was quite well.

I remain, Sir, yours truly,
Bridgnorth, November, 1875. W. THURSFIELD, M.D.

A Tyrannical Paragraph in Austrian Law.

THE Government are introducing a new penal code into Austria, and both Houses are now discussing it. Paragraph 455 enacts that medical men, midwives, and apothecaries are liable to a fine of 100 florins or less for refusing or delaying their assistance in urgent cases. Petitions, signed by Medical Societies, are pouring into the Houses, complaining of this clause. It is evident that the application of it would be fraught with great difficulty, as it is not easy to define what an urgent case is. Besides, such a clause is an attack upon individual liberty, and, from the general bearing of the medical profession, perfectly uncalled for.

Chloral and its Effects.

To the Editor of THE LANCET.

SIR,—I should be obliged if, through the medium of your extensively circulated journal, I could obtain any information upon the following points:

1st. Whether the taking of chloral for several years, varying in amount from at first twenty to thirty grains up to of late 100 to 120 grains per diem, has been known to induce a condition of gastro-enteritis, characterised during life by frequent vomiting, great abdominal tenderness, pain, and constipation, with the passage of hardened fæces covered with opaque white mucus; and also after death by a highly injected state of the whole alimentary canal.

2nd. Also, whether such use of chloral has been known to produce some perversion of the moral feelings, with complete alteration of disposition and temper.

I am, Sir yours &c.,
December, 1875. F.R.C.P.

Charity and Humanity.

THE details of a curious will case were lately made public, which showed that the testatrix must have been actuated by an unusual consideration for dumb animals. After evincing her charitable feelings by bequeathing £2000 to the Cancer Hospital, and £500 each to St. Thomas's Hospital, Guy's Hospital, and the Earlswood Asylum for Idiots, the deceased lady directs that the cob mare and greyhound which were her late husband's are not to be sold. The mare is to be kept in a comfortable, warm, loose box, as it has been kept since her husband's death; is not to do any work either in or out of harness, and its back is not to be crossed by any member of her late husband's family, but is to be ridden by some person of light weight not more than four days in each week, and not more than one hour in each day, at a walking pace. A sum of £65 per annum is left for the support of the mare, and £5 per annum for the keep and care of the greyhound.

A Handsome Present.

IN Germany, France, and other countries, the recurrence of a Christian name in the almanack is celebrated by those who have been given that name at their baptism. Professor Dittel, of Vienna (who lately recommended the elastic ligature), rejoices in the Christian name of Leopold; and on the occasion of Leopold's day, quite lately, Baron Sina, one of his patients, sent him a beautifully worked casket, in which were twelve bank notes of 1000 florins each (about £1000). It is quite refreshing to record such acts of recognition on the part of patients towards their medical attendants.

Mr. J. Bunting is thanked. It is to be regretted that such circulars are issued by medical men.

Treatment of Ringworm.

To the Editor of THE LANCET.

SIR,—In your issue of Nov. 20th I observe a notice of the treatment of ringworm by means of a solution of boracic acid, as recommended by Surgeon-Major Watson. The plan I have adopted for many years is quite as simple, more easily applied, and requires no precautions as to the parts being prepared, or care taken that they should afterwards be allowed to dry, that the acid be not rubbed off. Practising among a class where the disease appears frequently, it has been my method to paint the parts affected with the ordinary tincture of iodine. The brush is brought not only over the spot, but a little beyond the margins. This I do on three successive days, and then order the patient to appear a week after the last application for inspection. Not in one case in a hundred have I to repeat the application. The advantages of this plan of treatment are:—1. It is easily and quickly applied. 2. It gives no pain. 3. It requires no dressing of any kind, and cannot be removed by accident. 4. The power of contagion is at once arrested. 5. It never fails to effect a cure. I am confident that whoever tries it will never think of using anything else.—Yours truly,
Kinghorn, Nov. 24th, 1875. JAS. WELSH, M.D.

Incontinence of Urine in Children.

DR. ULTZMANN thinks that the chief cause of incontinence of urine in children lies in the weak state of the sphincter, through which circumstance the detrusor acquires unusual power. He advocates the induced current. A small brass plug is to be placed in the rectum, and one of the poles connected with it, whilst the other may be placed over the symphysis pubis or the upper part of the thigh. The sittings should last from five to ten minutes. Dr. Ultzmann mentions nine cases, in some of which he met with success. The use of belladonna remains, however, of great importance in these cases.

M.R.C.S.—They can be prosecuted under the Apothecaries Act, and fined £20 if the magistrates perceive the legal offence.

Preservation of Morphia Solutions.

To the Editor of THE LANCET.

SIR,—I notice in the issue of THE LANCET of Oct. 30th an article to the effect that M. Vidal has succeeded in rendering solutions of morphia "less liable to spontaneous change" by the addition of a certain amount of chloral. Having been unfortunately obliged during the past five months to employ hypodermic injections of morphia upon myself, I have found, after over 700 trials, that a solution of any strength of the sulphate (I use sixteen grains to the ounce), if made with boiling water, with the addition of one minim of carbolic acid to each ounce of the solution, will not only preserve it clear and free from deposits of all kinds for an indefinite period, but may be employed without the slightest particle of soreness ever following the puncture of the hypodermic needle. This I have found to be the case, not only in my own individual instance, but in scores of others where I have used it.

Yours respectfully,
New York, November 15th, 1875. CHARLES A. BUDD, M.D.

Vivisection Extraordinary.

THE *Evening Echo* of the 17th ult., in recording the purport of a telegram from Berlin to a contemporary, makes a revelation which must, we think, prove a little startling to English readers. Certain rumours against the solvency of an eminent banking firm of Berlin and Stettin had, it appears, been set afloat. These having turned out to be groundless, their author was, we are told, summarily handed over to the "public prosecutor." This is indeed horrible. Are there no Huttons in Germany?

A. B.—Insanity is not a ground for divorce. Cruelty is a ground for a judicial separation, and when coupled with adultery forms ground for divorce. If the party complained of were shown to be lunatic during the whole time of the occurrence of the acts constituting legal cruelty, we think that it would be difficult to obtain a judicial separation; but if the party continued lunatic, confinement in an asylum would follow as a matter of course, and thus there would be separation, though not technically "judicial."

Microscopical Preparations.

We have received some specimens of histological preparations (normal and morbid), prepared by Arthur C. Cole and Son, of Everton, Liverpool. They are certainly admirable sections, and are beautifully mounted. To the teacher in search of typical specimens for the purposes of demonstration, such preparations as these must be invaluable. From the list of preparations also forwarded to us, we find many objects included which are not easily obtained, and the possession of which is essential to the accurate study of histology. The preparations are divided into three series of twenty-four specimens each: the one including injected specimens, the other normal, and the third pathological structures.

The late Professor Schuh.

The bust of this eminent surgeon was lately unveiled in the General Hospital of Vienna. The meeting was very numerous, and Dr. Salzer delivered an eloquent discourse, in which he dwelt on the skill and genius of Dr. Schuh as a surgeon, and on his qualities as a man and a teacher. The ceremony ended in quite a German manner, by a festive concerted piece, sung by the Choral Society of the Faculty.

Dr. Wardell will see that we have alluded to his excellent letters, which will do good in the newspapers. Of course they will have no effect on the anti-vaccinationists. It is their peculiarity that the more reason there is in an argument, the more are they insensible to its force. And we have given up reasoning with them. But such letters as those of our correspondent do great good in educating and informing the public.

Studens.—Consult our Students' Number.

Salivary Calculus.

Dr. Ultzmann mentioned before the Austrian Medical Society that he had a short time ago under his care a patient who presented a tumour of the cheek, which broke, and turned out to be the seat of a salivary calculus. The latter is as large as a hazel-nut, very hard, and composed of phosphate of lime. In general these stones are brittle, and composed of carbonate of lime.

We are compelled by the great pressure on our space this week to postpone the publication of several articles and communications.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Sir H. Thompson; Mr. Savory, London; Dr. G. Johnson, London; Dr. Corfield, London; Prof. Lecorché, Paris; Mr. Wagstaffe, London; Dr. Sutherland, London; Mr. Marshall, Moulton; Mr. Bell, Uppingham; Mr. Gibson, Finsbury; Dr. Wilson, Cheltenham; Mrs. Baines, London; Mr. Mayne, London; Dr. White, London; Dr. Bon, Paris; Mr. Fleming, Holbrook; Dr. Taylor, Nottingham; Mr. J. G. Brown, London; Messrs. Sampson Low and Co., London; Dr. Nankivell, Chatham; Mr. Harris, London; Dr. Rogers, Ottawa; Messrs. Brown and Polson, London; Mr. Goyder, Bradford; Mr. Purvis, Greenwich; Dr. Sinclair, Dublin; Dr. D. Powell, London; Dr. Welsh, Kinghorn; Mr. Howse, London; Mr. Tindall, London; Dr. Leadon, London; Mr. T. Smith, London; Mr. Walker, Wakefield; Mr. Tegg, London; Mr. C. B. Murray, London; Mr. Whitaker, London; Dr. Weir, Nottingham; Mr. Sheer, Cardiff; Dr. Parkin, Brighton; Mr. Humphreys, London; Mr. Pick, London; Dr. A. Meadows, London; Dr. Charteris, London; Mr. J. Graham, Southsea; Dr. John Williams, London; Mr. Watkin; Mr. Bunting, Tottenham; Mr. Potts, Newcastle; Dr. Gilland, Wallingford; Mr. Elliott, London; Mr. W. D. Jones, London; Mr. Huss, Stirling; Dr. Fox, Winchester; Dr. Hayward, Liverpool; Mr. Pike, Gloucester; Dr. Davies, Ebbw Vale; Mr. Shenton, Edinburgh; Mr. Black, Chatham; Mr. Edwards, Bury St. Edmunds; Mr. B. Bevan, London; Mr. Patterson, Hailsham; Mr. Danvers, Uppingham; Dr. Budd, New York; Mr J. G. da Cunha, Port Louis; Dr. Humble, Corfe Castle; Mr. Harris; Mr. Colman; Mr. Ensor, Port Elizabeth; Mr. Morris, London; The Secretary of the Harveian Society; A Subscriber; M.R.C.S., Leeds; W. H. P.; The Editor of *Vanity Fair;* Surgeon; Studens; J. S.; R. W. P.; Delta, Chesterfield; The Registrar-General of Edinburgh; G. L.; Rusticus; M.D.; J. A.; L. D. Y.; C. F.; F.R.C.S., London; The Secretary of the Necropolis Company; A. K. C.; A. B., Norwich; A. K. C.; Peter Plain; The Editor of the *Veterinary Journal;* Iatros; Inquirens; H. H.; &c. &c.

Letters, *each with enclosure,* are also acknowledged from — Mr. Rigby, Preston; Mr. Wigg, Tunbridge; Mr. Whalley, Bradford; Mr. Thomas, Manchester; Mr. Vanes, Birmingham; Dr. Dickinson, Stalybridge; Rev. J. E. Clarke, Battersea; Mr. Walker, Corwen; Mr. J. Hebblethwaite, Bawtry; Mr. Evans, Seaford; Mr. Blasson, Edgware; Mr. Barnett, Weston-super-Mare; Dr. Kennedy, Fort William; Alpha, Durham; J. J. B.; M. L.; M.D.; H. M.; Medicus, Southport; L. L., Feltham; W. H.; Medicus, Welshpool; B. B.; L.R.C.P.; Douceur; K. K., Billingborough; Alpha, St. Helens; M. M.; Medicus, Newcastle; Alcazar; B. A.; P. W.; J. R.; T. E.; J. C. D., Petworth; M.D. Lond.; Medicus, Sheffield; T. M.; S. L. H., Islington; F. M., London; L. S. A., Padstow.

Newcastle Chronicle, Liverpool Post, Western Morning News, Birmingham Morning News, Welshman, Local Government Chronicle, Manchester Guardian, Record, Western Gazette, Weston-super-Mare Gazette, Surrey Advertiser, East London Observer, West Cumberland Times, Cork Constitution, Staffordshire Advertiser, Oldham Standard, Wrexham Advertiser, and *Keighley News* have been received.

Medical Diary for the ensuing Week.

Monday, Dec. 6.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10½ a.m. each day, and at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1½ p.m. each day, and at the same hour.

St. Mark's Hospital.—Operations, 9 a.m. and 2 p.m.

Metropolitan Free Hospital.—Operations, 2 p.m.

Medical Society of London.—8½ p.m. Mr. Maunder: Exhibition of Arm seven years after Excision of the Elbow-joint (living specimen).—Mr. Alfred Freer (of Stourbridge), "On a Case of Impalement, with Post-mortem results four and a half years afterwards."—Dr. Robt. Lee, "On different forms of Pessaries."

Tuesday, Dec. 7.

Guy's Hospital.—Operations, 1½ p.m., and on Friday at the same hour.

Westminster Hospital.—Operations, 2 p.m.

National Orthopædic Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 3 p.m.

Pathological Society of London.—8½ p.m. The following Specimens will be exhibited:—Molluscum Contagiosum; Dilatation of Bile-ducts; Aneurism of Aorta; Obliteration of Superior Cava; Ulceration of Duodenum extending into Vena Porta; Disease of Pulmonary and Tricuspid Valves; Hæmorrhagic Periostitis; Fatty Tumour of Cord; Congenital Deficiency of Common Bile-duct, and consequent Cirrhosis; Injury to Radius; Deformity from Rheumatic Gout; Cirrhosis of Liver in a Child; Recurrent Epithelioma in Chest and Toe after successful Excision of Tongue; Cancer of Heart and Supra-renal Capsules; Cancer of both Breasts and Ovary; Tumour of Clavicle; Aneurism of Aorta opening into Stomach; Arrest of Development of both Forearms; Report of Sequel to Dr. Walker's Case of Recurrent Sarcoma of Leg; Embolic Infarction in Heart Muscle; &c. &c.

Wednesday, Dec. 8.

Middlesex Hospital.—Operations, 1 p.m.

St. Mary's Hospital.—Operations, 1¼ p.m.

St. Bartholomew's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

St. Thomas's Hospital.—Operations, 1½ p.m., and on Saturday at the same hour.

King's College Hospital.—Operations, 2 p.m., and on Saturday at 1½ p.m.

Great Northern Hospital.—Operations, 2 p.m.

University College Hospital.—Operations, 2 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2½ p.m.

Epidemiological Society. — 8 p.m. Dr. John Wortabet (Physician to St. John's Hospital at Beyrout): "Sketch of the recent Cholera Epidemic in Syria."

Thursday, Dec. 9.

St. George's Hospital.—Operations, 1 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Harveian Society.—8 p.m. Harveian Lectures: Dr. Sibson, "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination."

Friday, Dec. 10.

St. George's Hospital.—Ophthalmic Operations, 1¼ p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

Clinical Society of London.—8½ p.m. — Dr. Donkin, "On a Case of Diabetes treated with Skim-milk."—Mr. Haward, "On a Case of Lymphadenoma."—Dr. T. S. Dowse, "On a Case of Thrombosis of Cavernous Sinus; Sudden Loss of Vision; Hæmorrhage into Anterior Lobe."—Mr. Venning, "On a Case of Congenital Tumour."

Saturday, Dec. 11.

Royal Free Hospital.—Operations, 2 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

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A Clinical Lecture
ON THE
PHYSICAL EXAMINATION OF THE URETHRA IN CASES OF STRICTURE.

Delivered at University College Hospital on November 18*th*, 1875.

By Sir HENRY THOMPSON,
SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE HOSPITAL.

(*Reported by* Mr. G. Buckston Browne.)

Gentlemen,—To-day our subject is to be, stricture of the urethra. It naturally comes next in order; but I take it next also because it is generally supposed to be one of the most frequently occurring affections of the urinary organs. Not that it is so; on the contrary, it is certainly not present in a great majority of those who fancy they are the subjects of stricture. Many persons suffering from slight functional disturbance will come to consult you for "stricture." They do so because they find the stream a little twisted or forked, whilst nevertheless the urethra may be absolutely free from any organic change.

[After discussing the pathology and describing the symptoms of stricture, the lecturer proceeded to consider the mode of examining the urethra in order to ascertain the presence of stricture.]

For this purpose there are two separate modes to be followed, as there are two different objects to be attained, each of which is quite distinct from the other:—

There is, first, a simple examination of the urethra, to be used only for the purpose of verifying the presence or absence of any material deviation from the natural dilatability of the urethra;

And there is, secondly, a more minute and exact examination, in order to determine the precise condition of the urethra when it is already known, or there is reason to believe, that long-standing and perhaps considerable obstruction exists.

Now I need hardly say that the first examination is one which is applicable to the vast majority of cases; and that the second is necessary only in a few and exceptional cases. A very simple examination suffices to determine the question which so frequently comes before us—"Do certain not very considerable derangements of the urinary function in any particular patient arise from organic obstruction, and therefore require instrumental interference; or are they due to some other condition, for which instruments are not merely useless but would probably be injurious?"

Now, in reference to this subject, I find a tendency at the present day to employ instruments too readily, and instruments also which are liable to injure the urethra. This over-readiness to interfere with the urethra existed at the beginning of the present century. The mechanical school, as I shall take the liberty to term those who devise and largely employ more or less complex mechanical means for exploration, and for applying dilatation, cutting, or caustic to the unfortunate urethra, was then in the ascendant. I think I could amuse you for hours with the history of the surgical knick-knacks which have been produced by it. But our time is too valuable, and I will content myself with one illustration only of surgical practice in this country at the era I speak of. [Sir Henry Thompson then read some curious reported cases from the work of Sir E. Home, illustrating the extraordinary abuse of the bougie at that time.]

Following the period spoken of came the experience of mischief as its result, and a certain healthy reaction appears to have taken place. The practice of Sir Benjamin Brodie, who was subsequently so high an authority during his long career, was marked by caution and prudence, and his admirable teaching ensured a similar practice among others for some time. I may be allowed to say, perhaps, that my feeble voice has also been raised against the abuse of instruments from the first day that I ventured to pen a line on the subject, some two or three and twenty years ago. And now I perceive a growing disposition to return to the state of things I have referred to. I note an increased tendency to discover stricture, and especially to undertake a considerable amount of operative treatment for strictures of the slightest kind, and sometimes where, in my opinion, they do not exist. There seems now to be a school which has determined for itself a very high standard of patency in what we hear called the "urethral tube," and which is accordingly said to have, or, if it hasn't, that it ought to have, a calibre of so many parts, and very large parts, of an inch, or millimetres, as the case may be. Instruments of astounding magnitude are produced, and if one of them cannot be drawn, with an ease which contents the operator, through the whole of the urethra, the unlucky patient is pronounced to be the subject of stricture; and probably he is submitted to an operation by no means devoid of risk.

Now I don't know that this fashion has as yet been adopted here, but I do know that it exists elsewhere, and I raise my earnest protest against it. I feel it a matter of duty on my part to say what I think about treatment which I am perfectly certain neither you nor I would for a moment entertain the propriety of in our own proper persons; that is, if we entertain a due respect for that delicate passage which an intelligent acquaintance with it will ensure. Let us for a moment revert to the natural form which the urethra takes when it is distended by some fluid material, and observe how unlike it is to the coarse simile of a tube of known uniform diameter. We have already seen that its natural capability for dilatation varies greatly at different points: being much limited at the junction of the membranous and spongy portions; limited again, but less so, and somewhat irregularly, in the anterior part; and again at or near the meatus. Let me assure you also that there are few structures more delicate than the male urethra. Formed of an internal membrane of great tenuity, surrounded by elastic and muscular fibres, interpenetrated everywhere with ducts, fine blood-vessels, and nerves; the whole surrounded in front of the prostate with one of the most elaborate of vascular structures, known as erectile tissue; add to this the sensitiveness to pain of the internal membrane, equalling the conjunctiva in that quality, as anyone may learn for himself by passing the softest instrument he can find. Lastly, and more important still, it possesses another form of sensibility, of a much graver kind, which even the last-named membrane does not possess: I mean a strong tendency to arouse, in the entire nervous system, a state of excitement, evidenced by the striking phenomena of rigors and subsequent fever and prostration, when slight mechanical injury has been done to any portion of it. Now let this picture of the urethra as it is, never be absent from your mind's eye when you put an instrument into it, and both you and your patient will profit. When, therefore, a young man consults you for certain troubles relative to which you desire to learn whether urethral obstruction be a cause or not, do not be tempted for an instant to adopt so unnecessary a course (to say the least) as the introduction of very large instruments, or instruments with huge bulbs at the end of them. But simply take a flexible English gum-elastic bougie, well curved towards the point, with a blunt end (since a tapering point, of course, will not mark distinctly the site of stricture), not larger, as a rule, than No. 10 or 11 of our scale, and pass it very gently and slowly into the bladder. If it goes easily—above all, if it is withdrawn without being held, and slides out with perfect facility, take my word for it he has no stricture, and, *quoad* obstruction, wants no use of instruments whatever.

I dare say I shall be told by someone, that there may be a urethra through which No. 11 can be made to pass, yet which is, nevertheless, the subject of some degree of stricture which it is necessary to treat. Well, I do not deny the existence of that exceptional case. But such an example is very rare, and, further, no man who has the slightest delicacy of tactile sense in his fingers can fail to observe the difference between a No. 11 bougie sliding out with facility, and one which is grasped somewhat as it is withdrawn. This difference is always manifest in the two cases, and is, indeed, very notable. But supposing that the No. 11 stops at any point, and you have assured yourself that it is not one of the natural obstructions to the passage of an instrument through the urethra, of which I shall have to speak hereafter, you will try a smaller instrument of the same kind until you have arrived at one which does pass through and inwards into the bladder. But you may also test your observation by passing a soft tapering French bougie—11 or 12 English size,—and if it is a *natural* obstacle which at first checked your blunt-pointed bougie, the former instrument will probably slip through without trouble.

Now, with reference to these bulbous-pointed flexible explorers, nothing is more easy, especially with an unpractised hand, than to deceive oneself with respect to the existence of stricture by means of them. If not drawn out accurately in the axis of the passage, you may feel a check, and readily find what you believe to be a stricture in the most healthy urethra. And that is precisely what I am so anxious to guard you against; for, in the hands of designing persons, these instruments may be turned to most unworthy purpose. For men outside the ranks of our profession, or holding a questionable position on its outskirts, these instruments are the very thing. That is an additional reason why we should be careful not to encourage their unnecessary use. I have used small bulbous instruments in metal for the diagnosis of narrow and confirmed stricture, on which it is desirable to operate, for twenty years, but for slight stricture never; and I have protested against their use on the two grounds already named: first, that for such the instrument inflicts needless pain; secondly, that it is liable to deceive a young operator not too adroit or familiar with its use.

But now, in the second case—not that of the young man, but of the patient who has a confirmed stricture,—the diagnosis has probably to be conducted with more attention to detail. I proceed as follows, making what may be called a "survey" of the passage. I commence by passing the soft, blunt-ended English gum-elastic bougie as far as it will go; and when this stops, as it may do within an inch or less of the orifice, I make a note of the distance, and next find what will pass with tolerable ease through the obstruction met with. Very likely a No. 4 or 5 (similar instrument to the preceding) will do so, and it may then be carried further to seek another check, which is not unfrequently met with at about five inches from the orifice. Through this, after a trial or two, a very small gum catheter—say No. 1 or 2—may probably be passed into the bladder, drawing off some urine, and so assuring you of its position. I know then the patient has, at all events, a narrowing near the orifice and another at the distance named. I may verify this at once with a bulbous instrument if I choose; but as long as the anterior narrowing exists, it is as well to postpone more minute research until it is divided, as considerable narrowing at that part always requires to be. Such a one, indeed, is never advantageously treated by dilatation. This being done, the No. 11 blunt-ended bougie is passed, and we learn whether any contraction exists in the interval existing between it and the spot originally marked at five inches. If there is one, the stopping of the bougie will indicate its situation. But if the bougie passes easily to the point just named, the canal is sufficiently open, and we have arrived at what, in ninety-nine cases out of a hundred, is the only remaining stricture; for it is rare indeed, where a narrow stricture exists at that distance from the meatus, that any other will be found beyond. This has next to be dealt with, and, as we are speaking now of old and confirmed cases, there is little doubt that the best treatment will be internal urethrotomy. How to accomplish that most perfectly will be discussed in my lecture on that subject.

A word or two about the bulbous exploring instrument. It should, in my opinion, be of polished metal mounted on a slender metal rod or shaft. No other material slides so easily and smoothly through the urethra; and the necessity for it is, after all, not great, so that to employ one which produces much irritation, passes roughly, or distends unnecessarily, is to pay too high a price for the small amount of information it may convey. I am free to say that, although I used the metal bulbous instruments in the earlier part of my career, I can now, with more experience, attain all that is necessary without them. It is said that they enable you to ascertain the length of a stricture. In reference to this, let me tell you, first, that considerable narrowing almost never affects the urethra for any great distance. The passage is often partially implicated for half an inch behind and half an inch before the maximum point of narrowing—an important practical point in relation to operation; but the very narrow spot, which is what the exploring bulb indicates, is almost invariably short, within a quarter of an inch in extent. Secondly, you must take into consideration the fact that the mobility of the mucous lining of the urethra will deceive you if you are not aware of it. A very little pressure in front, on entering the stricture, or from behind, in withdrawing the exploring bulb, if it comes rather tightly through, changes the situation of the contracted portion considerably in relation to its distance from the external meatus.

I repeat, then, if you have to deal with a recent stricture, such a one as you naturally intend to treat by dilatation, the introduction of a large bulbous explorer is wholly useless, only produces unnecessary pain, and tends to excite inflammation.

But in view of any internal incisions for a confirmed or obstinate case, the important thing is simply to know where the narrowed points of the urethra are, and then it is not difficult to apply your cutting instrument properly to them.

But, before proceeding further, I wish to show you the proper mode of passing an instrument through the healthy urethra into the bladder, so as to avoid error arising from certain sources of difficulty which are *naturally* found there, and are often mistaken for stricture. Were the urethra a mere tube of uniform diameter, these would not exist. We shall observe in the particulars of its unlikeness to a simple tube, that such natural obstacles do exist, and have to be avoided.

ON CHLORIDE OF LEAD AS A DEODORISER AND DISINFECTANT.

BY R. H. GOOLDEN, M.D.

I WISH to call the attention of medical practitioners and especially of sanitary officers, through THE LANCET, to the value of chloride of lead as the most powerful and economical agent for eliminating sulphide of hydrogen from the atmosphere, as well as from all organic matter in a state of decomposition or putridity. There is nothing new in this fact. It is known to all chemists, but its application has been practically disregarded, owing to the popularity of other deodorisers, which having been made the subjects of patents are well advertised, and therefore generally adopted, and they certainly do answer the purpose with more or less completeness. Of these I may instance—Chloride of zinc (Burnett's), chloride of aluminium, hypochlorite of soda (Marvel Fluid), hypochlorate of potassa, hypochlorate of lime, permanganate of potassa (Condy's), permanganate of lime, peroxide of iron, peroxide of manganese, powdered charcoal, bog earth, and alluvial earth.

I need not enter into the *rationale* of the chemical action of these several ingredients, nor do I suggest the substitution of chloride of lead for the three last-named substances when it is proposed to convert organic matter into reproductive soil for farming or gardening purposes, but only in those cases where it is necessary to purify a fetid atmosphere, which has to be breathed by living people.

It has already been objected that zinc and manganese have been detected in plants grown in soil manured by stable-dung, which had been deodorised by Burnett's and Condy's fluids. I do not know how far the fact has been established, but even the suggestion is of such importance as to make us very careful in proposing the use of lead, unless it can be shown that lead is not in the same category. I think we may arrive at a strong inductive probability that it is not so; for the lead sulphide is quite insoluble except in strong nitric acid, in boiling hydrochloric acid, and in aqua regia (which is not the case with zinc or manganese); nor is lead sulphide absorbed in the human body when swallowed, but passes on by the bowel as harmless as powdered charcoal; and the affinity of lead for sulphur is so strong that lead sulphide cannot be resolved but at a very high temperature. Another safeguard lies in the very sparing solubility of lead chloride, and also in the very small quantity used in the deodorising process.

The chloride of lead and sulphide of hydrogen react with a simultaneous double affinity, producing an insoluble lead sulphide and hydrochloric acid. Lead is so readily acted upon by sulphur, that metallic lead and oxide of lead in paint, even when protected by the dried oil, is turned black in any atmosphere where sulphide of hydrogen exists. White paint in stables, waterclosets, and in artists' paintings, is soon turned black by it and spoilt.

To prepare it for use, take, for ordinary purposes, half a drachm of nitrate of lead, dissolve it in a pint or more of boiling water—(nitrate of lead is a soluble salt, and very cheap; it may be had in any quantity for about a shilling a pound, and should be much cheaper if bought in large quantities),—and dissolve two drachms of common salt (chloride of sodium) in a pail or bucket of water; pour the two solutions together, and allow the sediment to subside. The clear supernatant fluid will be a saturated solution of chloride of lead. A cloth dipped in this solution and hung up in a room will sweeten a fetid atmosphere instantaneously, or the solution thrown down a sink, watercloset, or drain, or over a heap of dung or other refuse, will produce a like result. Even the tarnishing of gold and silver plate may be prevented by a rag dipped in the solution being hung up in the room or window where it is exposed.

It will thus be seen that one great advantage of chloride of lead over all other deodorisers lies in its great cheapness. The cost of the quantity of nitrate of lead required for use may be estimated at a fraction of a farthing; it is easily carried about, or may be sent by post; it is a dry solid, is not caustic, nor will it discolour or blister the skin; it can be kept in paper or a pill-box, and therefore does not require a glass or other fragile bottle. The exact equivalent proportion of nitrate of lead and chloride of sodium would be 100 to 317 in weight. As it is necessary that the whole of the nitrate of lead should be converted into chloride, a slight excess of salt is desirable, but as chloride of sodium in the solution renders the chloride of lead even less soluble than in water, I have adopted the weights respectively as half a drachm to two drachms—sufficiently correct for all practical purposes. 331 grains of nitrate of lead converted into lead chloride are sufficient for 34 grains of sulphide of hydrogen. Now 36·38 grains of sulphide of hydrogen represents 100 cubic inches—a quantity quite ten times larger than under ordinary circumstances we are likely to have to deal with.

In sick rooms, hospitals, and crowded assemblies, we have to deal with the sulphide of hydrogen and ammonium, given off by the resolution of organic, especially albuminous matter in decay, or eliminated from the living body in fæces through the skin and with the breath; and it must be borne in mind that whenever great numbers of people are crowded together in rooms, as in balls, concerts, theatres, or schoolrooms, the human body gives off an amount of sulphide of hydrogen, and that it is this, and not the carbonic acid, that makes people exposed to such an atmosphere so depressed, and which, when highly concentrated, developes typhus poison. The quantity is indeed very slight compared with its power of offensiveness, as in the analogous case of various flowers whose scent is most powerful, producing a sensible effect upon the human organism, and yet the agreeable or offensive matter composing it is too small to be detected by any test except the olfactory sense; and hence it is that the small quantity of lead chloride contained in the solution is found practically to be quite sufficient to sweeten the most offensive room, and, in my experience, to deodorise any drain, watercloset, or sink.

A not less important direction, in which the use of the chloride of lead would prove of the utmost value to H.M. navy and the mercantile marine, is for the purification of bilge-water, and of the close, fetid atmosphere between decks in emigrant and passenger ships; easy of transport, occupying little room, and safely stowed away in paper or wooden boxes. The sea-water requiring no addition of salt, the solution is made without trouble, and need merely be thrown down into the bilge, where the ship's motion completes the process.

The following cases, which have occurred in my own practice, will illustrate its use and successful application:—

CASE 1.—A lady living in Chester-square, who was suffering from sciatica, consulted me many years ago, and my attention was called to a large tumour in the external part of the hip-joint. The tumour was soft and not very prominent, had been very gradually increasing, and with its increase the sciatic pains became more severe. Believing it to be a fatty tumour pressing on the sciatic nerve, I could only refer her to a surgeon for its removal. It was accordingly removed by Mr. Lane, and without any hæmorrhage at the time, and proved to be a large fatty tumour the size of a child's head. The sciatic pains ceased, and the patient appeared to be in a fair way to recover speedily the effect of the operation. About a week afterwards I was asked to meet Mr. Lane, and found that the cavity from which the tumour had been removed had been distended with blood in a state of decomposition, the patient suffering all the symptoms of blood-poison: small rapid pulse, black sordes coating the mouth, tongue, lips, and nose; wandering, muttering delirium; she would take no food. The room was most offensive, the smell penetrating to the passages and other rooms. Basins containing Condy's fluid, Burnett's fluid, and bog-earth were in various parts of the room, but exercised but little influence over the fetid emanation.

Wishing to try the effect of the lead chloride, we obtained, with great difficulty, a small quantity of nitrate of lead, and prepared the solution as above described. A towel dipped in it was hung up in the room, and *instantaneously* the smell disappeared. The wound was dressed, and over the wound some lint dipped in the solution was placed. The next day we met, and found our patient sitting up in bed, quite cheerful, with a clean tongue and good pulse, enjoying a mutton-chop and some port wine. The room was perfectly free from smell.

I have had many other opportunities of using this solution with equally satisfactory results, especially in paralytic cases, where, towards the end, the fetor of the breath and emanations from the skin are most offensive.

CASE 2.—Three years ago, after a very severe stormshower, the large drain at the back of the United University Club was burst by the flood, and opened to the atmosphere. A more distressing smell in its immediate neighbourhood could hardly be imagined. Carbolic acid was used in the Club, which substituted only one stink for another. I sent the steward for a pound of nitrate of lead, of which half an ounce was used. A towel wetted with the solution was hung up in each room, and the rest poured down the drains and into the sewer, and immediately all smell was gone. The neighbours, who were unaware of what was being done, expressed the greatest surprise at the sudden disappearance of the nuisance. Although the drain remained open for some days until it could be repaired, there was no more inconvenience felt from the smell.

CASE 3.—The wife of a horse-jobber in a very large way of business, apparently suffering from the poison of carbolic acid used to disinfect the stables where she lived, consulted me. She informed me that although the stables were well-drained and well-ventilated, the effluvium from the large number of horses and the accumulation of dung was so offensive that they had been induced to use carbolic acid, which, though painfully disagreeable, was not so offensive as the stable exhalations had been. It appeared also that since the use of carbolic acid they had lost seventeen horses, and that they could not help connecting their loss in some way with it. I recommended the immediate disuse of the carbolic acid, and in its place to try the nitrate of lead and salt. In a fortnight I saw her again in perfect health, and learnt that the stables had, from the first application, become freed from all disagreeable odour, and that the dung-pits into which some of the solution was regularly sprinkled were now sweet, to the great contentment of the horsekeepers and stablemen, with whom the removal of the dung has always been a subject of great difficulty.

CASE 4.—Some years ago, when visiting one of H.M. largest ships, I casually heard loud complaints of the nuisance caused by the bilge water. Through the courtesy of the officers, which was greater than their faith in any possible remedy, I was allowed to try the experiment of removing it, and, having procured half an ounce of nitrate of lead, it was dissolved in a bucket of boiling fresh water, and thrown down the bilge when the ship was rolling slightly. The effect was the instantaneous disappearance of all smell; a large white precipitate, which immediately afterwards became black, subsided to the bottom, and the bilge-water became perfectly clear. The cost was one halfpenny.

I have selected these few cases as leading types of the application and results of chloride of lead as a deodoriser and disinfectant, and only trust that they may be sufficient to lead my readers to continue the experiments in different directions, as I have hitherto found it to be the most simple, the most economical, and most successful of all the processes which have come under my notice.

Sussex-gardens, W.

CASE OF

GUNSHOT WOUND (BY DERRINGER PISTOL) OF CHEST AND ABDOMEN.

AUTOPSY AND REMARKS.

By RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

A. B., aged twenty-one, shot himself with a Derringer pistol about 11 o'clock on the night of Nov. 14th, 1875. Dr. Reece saw him immediately after the injury, and directed his removal to Charing-cross Hospital. I was sent for, and arrived a little before 12 o'clock that night.

The young man had been sick instantly on receipt of the injury, and was in a state of considerable though not severe collapse. A round black wound, about the size of a sixpence, from which trickled down a drop or two of dark-coloured blood, lay over the cartilage of the left eighth rib about four inches from the sternum. No probe could be passed into this opening save for a few lines immediately below the skin, in a direction upwards and outwards. He complained of no pain except at the left acromion, where it was severe.

The Derringer is a very small toy-like weapon, about five inches and a half long, with a bore of four-tenths of an inch in diameter. It is a breech-loader. The cartridge consists of a copper cap, into the open end of which the conical bullet fits, the detonating powder being, of course, at the closed end. The fulminate is of very powerful quality, and a certain specified charge is put into each cartridge. No other propellent is, I am informed, ever added.

Finding, however, at the wound no passage inwards, I thought it well that a search should be made in the young gentleman's clothing, and elsewhere in his lodgings for the bullet, but nothing was found either there or among the undigested portions of food which he had vomited.

Nov. 15th.—This morning the collapse was deeper; he had been constantly thirsty, taking ice in lumps, brandy-and-water, and was also frequently vomiting. I again failed in passing any probe, and explained to my class that the bullet had in all probability passed through the cartilage, which had then closed again behind it like a trap-door. He complained of inability to pass urine, though the nurse said he was constantly doing so. There was no blood either in this excretion nor in the vomit. About 8 P.M. that evening he suddenly had a greater fit of vomiting, and the matter seemed to contain a little blood. He almost instantly died.

Post-mortem (Nov. 18th).—The body was much swollen, and the skin much discoloured, though there was less decomposition in deeper parts. The wound still refused to admit a probe (of course no force was used). On taking away the front of the chest the bruising and blackening was seen to occupy a greater space on the internal than on the external surface. For a long time no opening marking the track of the bullet could be found, although the pericardium, lungs, &c., were examined with the utmost care. At last a small slit was found in the diaphragm with no mark of bruising or extravasation around it. It was barely a third of an inch long, and only to be detected on very careful search. Of course this led into the abdomen, and on opening that cavity a little hole in the stomach was found, and on its posterior wall another; both these openings had a very narrow dark edging of extravasation. Removing the stomach, all trace of the bullet was lost; neither on the fat behind that organ nor elsewhere could any opening be found. The kidney was now removed, and in its upper and inner edge, just in front of the suprarenal capsule, a small crack or chasm was found, the extreme margin of which was blackened by extravasation. Behind the kidney, after careful search, a little split or rift was found in the fascia covering the psoas; it was not stained by effused blood. The probe when passed into this ran backward and a little upward, and on dividing the parts the bullet was found imbedded behind the muscle just above the transverse process of the second lumbar vertebra, its conical end directed almost directly upwards. On trying the bullet on the blackened spot on the eighth costal cartilage, it was found that by exercising rather considerable pressure it could be made to pass through a hole formed by three convergent rifts, which, instantly after the passage, snapped together again like the flaps of a valve, and left no hole nor perceptible trace of passage.

It appears to me that this case is of interest as exemplifying the fearful power of the little pistol—a thing which a man might conceal easily in his clinched fist, and which looks less formidable than many a child's toy; yet it propelled its shot all but through a full-sized man; and, as I saw, it will send a bullet nearly through an inch-thick oak board, shattering to a great distance the wood around its place of exit.

The next singular point is the very little injury the bullet did to the traversed tissues. The wounds in such vascular organs as the stomach and kidney had a dark margin of bruising less wide than the hem of a lady's handkerchief; but parts less richly supplied with blood showed merely minute slits where the bullet had passed, and among fat, as that round the kidney, no track could be found at all.

The symptom, a prominent one throughout, pain at the acromion, must, I think, be ascribed to wound of the diaphragm; the strangury to wound of the kidney.

George-street, Hanover-square.

REPORT ON THE

EFFECTS OF HIGH TEMPERATURES UPON WOOLLEN AND OTHER FABRICS.

By SURGEON-MAJOR F. DE CHAUMONT, M.D.,
CONJOINT PROFESSOR OF HYGIENE, ARMY MEDICAL SCHOOL.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE ARMY.)

IN accordance with the Director-General's instructions of Oct. 18th, 1875, I have the honour to report as follows. The portions of fabrics selected were obtained from the store here, being condemned clothing &c., as under:—

1. Blanket—woollen, white.
2. Coverlets—woollen, coloured.
3. Hospital clothing—flannel, blue.
4. Sheeting—cotton.
5. Bed-slip—canvas.
6. Hospital lining—cotton.
7. Horsehair from mattress.

These were exposed as follows:—

Dry heat,	212° F.,	for	2	hours	
„	„	„	4	„	
„	„	„	6	„	
„	220° F.	„	2	„	
„	„	„	4	„	
„	„	„	6	„	
„	„	„	44	„	(8 + 15 + 15 + 6 hours) on successive days.
„	230° F.	„	8	„	Total, 13 hours on an iron plate on successive days.
„	„	„	5	„	
„	„	„	9	„	Total, 14 hrs. on a porcelain plate on successive days.
„	„	„	5	„	
„	250° F.	„	4	„	Total, 9 hours on successive days.
„	„	„	5	„	

The following results were observed on comparing the samples with the fabrics in their original condition:—

1. Blanket—

2	hours	at 212° F.,	no change.
4	„	„	„
6	„	„	a slightly perceptible yellowish colour.
2	„	220°	slightly tinged with yellow.
4	„	„	rather more deeply.
6	„	„	
44	„	„	a strong yellow tinge.
13	„	230°	on an iron plate, a marked yellow tinge.
14	„	„	on a porcelain plate, a very strong yellow tinge.
9	„	250°	on an iron plate, a strong yellow tinge.

The order in which the shades of colour showed themselves is as follows:—

Darkest,	14	hours,	230° F.,	on a porcelain plate.
„	44	„	220°	on an iron plate.
„	9	„	250°	„ „
„	13	„	230°	„ „
„	6	„	220°	„ „
„	4	„	„	„ „
„	2	„	220°	about equal.
„	6	„	212°	
„	4	„	„	hardly any change.
„	2	„	„	no change.

2. Coverlet.—Results very similar, but less easily seen on account of the colour of the fabric. In this case also the worst was the one exposed for 14 hours to 230° F. on a porcelain plate.
3. Hospital Clothing, Blue Flannel.—In this case exposure even for 6 hours at 212° F. did not seem to have any marked effect; but 2 hours at 220° distinctly changed the colour, and all the other temperatures produced more or less effect.
4. Sheeting, Cotton.—There was no perceptible change after 6 hours at 212° F., nor after the same time at 220°; 44 hours at 220° produced a distinct colour; as did also 13 hours at 230° (iron plate), moderately; 14 hours at 230° (porcelain plate), markedly; 9 hours at 250° (iron plate), markedly.
5. Bed-slip, Canvas—

6	hours	at 212° F.,	no change.
6	„	220°	slight change.
44	„	220°	marked brownish tinge.
13	„	230°	(on iron plate) marked brownish tinge.
14	„	230°	(on porcelain plate) not tried.
9	„	250°	(on iron plate) brownish tinge.

6. Hospital Clothing, Cotton Lining—

2	hours	at 212° F.,	no change.
4	„	212°	
6	„	„	slight change.
2	„	220°	a distinct discoloration in all, in varying degrees.
4	„	„	
6	„	„	
44	„	„	marked yellow tinge.
13	„	230°	(on an iron plate) moderate tinge.
14	„	„	(on porcelain plate) marked yellow tinge.

7. Horsehair.—No particular change was observable by exposure, except perhaps slight increase of brittleness.

The conclusions to be drawn from the above experiments are the following:—

1. Woollen articles are more liable to change by exposure to high temperatures than cotton or linen.
2. Woollen articles begin to lose colour after exposure for 6 hours to a dry heat of 212° F., or after 2 hours at 220° F. Higher temperature or longer exposure produces proportionally increased change.
3. Cotton or linen fabrics can be exposed for 6 hours at 212° F., or for 4 hours at 220° F., without perceptible change; 6 hours at 220° F. shows distinct change in some cases, and longer exposure or higher temperatures in all cases.

We may therefore conclude that *woollen* articles cannot be exposed to a dry heat of 212° F. longer than six hours without suffering injury, so far as colour goes, and that two hours at a temperature of 220° F. is sufficient to produce a similar result.

Cotton or linen articles may be exposed for six hours to a dry heat of 212° F. without apparent injury, but not for more than four hours at 220° F.

I beg to append a copy of a letter from Dr. Lake, one of the surgeons of the Southampton Infirmary, relative to the experience in that institution of a drying chamber heated by gas on Ransome's principle. It will be seen that the results correspond with the effects at high temperature recorded above.

"Our disinfecting stove was at work for about seven months regularly, and irregularly for about two months before that. During that time (seven months) all the patients had a mattress and blankets which had passed through the machine; the mattresses were, as a rule, in the chamber at least eight hours each time; the blankets at least two hours. Our plan was to begin, say Monday morning. After the chamber was heated (that is 240° or 250°) it was loaded with three mattresses; the temperature would drop to a little over 200°, and in about eight hours it would be again from 240° to 250°, when the mattresses were withdrawn. Thus in twenty-four hours we baked nine mattresses. The blankets were done after the mattresses were all finished; as many pairs as the machines could hold were introduced, but in two or three hours the temperature would rise to 240°, and another charge would be baked. In this way the whole week's work was got through in about fourdays. I have to-day asked both the matron and the porter who worked the machine what effect the process has had on the articles. They both consider it has damaged the materials. The matron states that the blankets are all damaged and have become yellow in appearance, but she is not prepared to say they give less warmth, and is unable to speak positively as to whether they will not last as long, but she thinks they will not do so. The mattresses, she says, have been very tender, the tick tearing very easily. The long-continued dry heat has, I think, a decided effect in damaging the intimate structure of the materials, certainly of the linen and cotton goods. After a long time even wood is utterly destroyed, and becomes brittle and breaks at the least strain.

"I fear the dry heat does slowly char fabrics; on the other hand, it seems most efficient. The matron reports a most marked effect on vermin—lice, bugs, and fleas; they have been conspicuously absent. I cannot report that we have had no cases of erysipelas, but they were very few, and our operations and wounds appear to have done more than usually well.

"I have the strongest impression that we have been using a most unnecessary heat. A temperature of 220° in a few minutes destroys utterly bugs, fleas, cockroaches, &c., and in less than an hour at least, at that temperature, they are quite brittle, and fall to pieces.

(Signed) "G. A. K. LAKE."

Southampton, Oct. 21st, 1875.

A SHORT ACCOUNT OF

EIGHT CASES OF ACUTE TUBERCULOSIS, WITH SPECIAL REFERENCE TO THE PRESENCE OF CASEOUS CENTRES OF INFECTION.

BY H. M. TUCKWELL, M.D., F.R.C.P.,
PHYSICIAN TO THE RADCLIFFE INFIRMARY, OXFORD.

EVER since the promulgation in this country of the doctrine that acute miliary tuberculosis depends on, and follows directly from, the presence of caseous centres in some part of the body, I have examined every case that has come under my observation with special reference to this important question. I propose to narrate the following cases in as short a form as possible, omitting for the most part any account of the symptoms, and merely giving a brief description of the post-mortem examinations.

CASE 1.—January, 1867. Girl, aged nineteen. Tubercular meningitis. The lungs, spleen, liver, and kidneys contained miliary tubercles. The peritoneum was unaffected. In the middle of the upper lobe of the right lung was an old vomica of the size of a walnut, with thick walls, smooth lining membrane, and cheesy contents.

Case 2.—February, 1868. Woman, aged twenty-three. Tubercular meningitis. A few miliary tubercles were scattered through the upper lobe of the right lung. The spleen, liver, and kidneys exhibited all the appearances usually present in cases of blood-poisoning, but contained no tubercles. The right Fallopian tube was dilated into a sac filled with cheesy pus. The left tube contained a smaller quantity of the same matter. There were signs of old peritonitis, with adhesions, in the pelvis, propagated from the diseased tubes; but there was no trace of tubercle in the peritoneum.

Case 3.—March, 1869. Man, aged twenty-six, admitted with angular curvature of the spine and paraplegia, but without any acute symptoms. After having been in the infirmary for two weeks, he became rather suddenly attacked with feverish symptoms and cough. His temperature rose steadily, his breathing became more and more distressed, his face dusky, and he died at the end of a week from the beginning of the acute symptoms. After death the brain was found to be unaffected. Both lungs were crowded with minute miliary tubercles; the upper lobe of the right lung was hepatised. The spleen was large, soft, and rotten. The liver was likewise large and swollen. Six of the dorsal vertebræ had their bodies carious, and separated from their periosteum by a thick layer of cheesy matter.

Case 4.—February, 1870. Boy, aged four. Tubercular meningitis. The lower lobes of both lungs were congested and thickly strewn with very fine miliary tubercles. No other organ was affected. One bronchial gland was enlarged and caseous. One small cheesy collection, of the size of a pea, surrounded by a thin capsule of investing fibrous tissue, was found in the lower lobe of the left lung.

Case 5.—August, 1871. Boy, aged fifteen. Tubercular meningitis. Both lungs were stuffed with miliary tubercles. The liver contained many tubercles on its surface and in its substance. The spleen was swollen and thickly strewn outside and inside with the same formations. One gland, of the size of a cobnut, with soft, putty-like contents, lay beneath the right sterno-clavicular articulation. The thickened capsule of the gland had ulcerated through at one spot and suffered the soft contents to escape into the surrounding tissue.

Case 6.—May, 1873. Man, aged twenty-one. Tubercular meningitis. Both lungs were stuffed with miliary tubercles. The liver was covered on its upper surface, and strewn throughout its substance, with the same tubercles. The spleen contained many of the same, as also the peritoneum covering the diaphragm, which was thickly beset with them. At the root of the right lung, and surrounding the right bronchus, was a cluster of large caseous glands, some of them softened and of the consistence of putty. Mesenteric glands enlarged and caseous.

Case 7.—April, 1874. Girl, aged fourteen. Tubercular meningitis. Miliary tubercles were sparsely scattered through both lungs. The peritoneum was sprinkled with a few similar tubercles. One small cheesy nodule, of the size of a pea, was imbedded in the lower lobe of the left lung, and surrounded by a thin capsule, which had at one part ulcerated through. In the immediate neighbourhood of this spot the tubercles were much more thickly scattered than in any other part of the lung.

Case 8.—September, 1875. Girl, aged ten. Tubercular meningitis. The lungs were stuffed with miliary tubercles. A few of the same were scattered over the peritoneum. At the root of the lungs, surrounding the bronchi, was a mass of enlarged and cheesy bronchial glands. The mesenteric and lumbar glands were much increased in size, many of them caseous.

The evidence afforded by these cases seems to be, on the whole, corroborative of the German doctrine above mentioned. In all of them caseous stuff, in greater or less quantity, was found. In Cases 4 and 7 the apparent insignificance of the supposed centres of infection deserves notice. It may well be asked, Is it possible that a spot in the lungs no larger than a pea could bring about so deadly a train of symptoms, and, in the course of two or three weeks, sow the body with miliary tubercles? To this it may be answered, that the fact that the tubercles were thickly clustered round the spot in question, and seemed to radiate from it in all directions, is a fair reason for believing that this little degenerate mass may really have been the focus of infection; and this belief is further strengthened by a reference to the inoculation experiments of Villemin, Simon, Sanderson, and others, which will show how minute a speck of cheesy matter, introduced into the body of the animal experimented on, is sufficient to determine a widespread dissemination of miliary growths.

A second difficulty that presents itself, and seems to militate against the acceptance of this doctrine, is how to account for the fact that caseous glands, withered remains of former abscesses, and other collections of the kind, are often met with in post-mortem examinations without any accompaniment of miliary tubercle. It will be found, however, in all these degenerate remains of former inflammations, that the cheesy matter is surrounded by a capsule of greater or less thickness. The slowness of progress in the inflammation, which is presupposed by the very presence of caseous changes, gives rise to gradual thickening of the investing capsule in glands, of the surrounding fibrous tissue in old vomicæ or "residual abscesses"; and thus constructs a boundary-wall of protection which shall prevent future devastating excursions of this dangerous degenerate matter into the surrounding tissues or into the blood. It seems probable that, were it not for this mode of protective isolation by the natural encapsuling of degenerate products, many who are now walking about in apparently good health would have become long ago the victims of acute miliary tuberculosis. And here it may be allowable to turn aside for an instant to the subject of pyæmia and pyæmic centres, which, from this point of view alone, not to speak of other manifold resemblances, offer in their relations a striking likeness to tubercle and tubercular centres. It is well known to surgeons that abscesses in certain parts of the body are very likely to be followed by pyæmia. A very small and seemingly insignificant purulent centre, provided that it hold a certain relation to the surrounding tissues, may sow the body with multiple abscesses, and destroy life in a time which can be reckoned by days rather than weeks. In illustration of this reference need only be made to the acute periosteal abscesses of young persons. I have put up in the Oxford Museum a preparation of secondary abscess in the walls of the heart, from a boy who, after an illness of ten days, died of pyæmia, with secondary deposits in many of his internal organs, consequent on an abscess, not larger than a walnut, between his clavicle and its periosteum. I have also seen the same thing happen on two other occasions, where the small primary abscess lay between the tibia and its periosteum. On the other hand, large collections of pus, which may be even putrid, can form in the body under other conditions and with other surroundings, and not give rise to pyæmia. What are these conditions? This question has lately been handled by Mr. Savory in the columns of The Lancet of Nov. 13th, 1875, p. 692. He submits that the explanation of this difficulty is to be found in the fact that the abscesses which do not infect "are bounded everywhere by a layer of new structure, which is, or has the character of, granulation tissue, and that this limitary membrane, when sound and unbroken, resists the passage of fluids through its substance into the blood." He alludes also to Billroth's experiments, which show that granulation tissue, when healthy, has this power of resistance. Now, may we not see here a parallelism between the investing granulations of an abscess and the investing fibrous tissue of a caseous centre? Let but an "accidental breach" in the investing abscess-wall occur, and the body is pyæmic. Let there but be in the cheesy centre a breach through the surrounding fibrous capsule to form a way into the circulation for the degenerate matter, and the body is smitten with acute tuberculosis. In Cases 4 and 7 it will be noticed that the investing capsule had been apparently opened by ulceration, and the soft contents suffered to escape into the surrounding tissue. Dr. Hermann Weber* has recorded some striking cases of the same kind.

Lastly, it may be pointed out that only occasionally can a direct spreading by contiguity from the caseous centre to the neighbouring tissues, and from thence a gradual infection of more distant parts or organs, be demonstrated. The tubercles may often be found at a distance from the centre, as if the infection were rather by way of the blood than by direct extension through the tissues.

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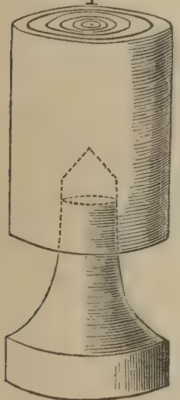
* Path. Soc. Trans., vol. xxi., p. 14.

A SIMPLE FORM OF FREEZING SECTION MACHINE.

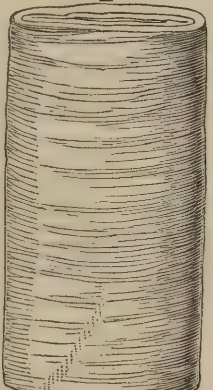
BY URBAN PRITCHARD, M.D., F.R.C.S.,
PATHOLOGICAL REGISTRAR TO KING'S COLLEGE, LONDON, AND SURGEON TO THE ROYAL EAR DISPENSARY, SOHO.

THE difficulty of cutting thin sections of soft tissues has for many years past been acknowledged by histologists, and several methods have from time to time been suggested for solving the vexatious problem. Hardening the tissue by means of certain reagents, such as alcohol, chromic acid, &c., is the plan that is usually followed, and it is one, too, that answers well under ordinary circumstances. Frequently, however, it is desirable to cut the tissue in its fresh state, especially in the case of pathological structures, and for this reason the idea of freezing the tissue was projected. In the *Journal of Anatomy and Physiology* for May, 1871, Professor Rutherford described his excellent machine for this purpose, which is a modification of Stirling's microtome, with the addition of a surrounding ice-box. This form of machine is very useful, as I have found from considerable experience; but it necessarily requires much time and care in its use, and it was with a view to render the instrument simpler and more rapid in its action that I designed the little apparatus I will now describe.

1



2



It consists of two pieces—(1) a metallic cylinder fitted with a wooden handle; (2) a cap of thick felt.

(1) The metallic cylinder, which is solid throughout, should be made of copper on account of its conductivity, but gun metal, or even brass, will answer the purpose sufficiently well. Its exact size or shape is not of very much consequence, so long as it is large enough and convenient to handle. The following dimensions I recommend: diameter of metal cylinder 1⅜ inch, length 1¾ inch; the diameter of the end of the wooden handle (*b*) should also be 1⅜ inch; the plug end should taper gradually, and the hole in the metal be a deep one, so that the plug may be pushed further in when the metal contracts on cooling. Both the wooden and metallic ends are made flat, so that the instrument can stand on either extremity; on the metal surface are a series of half a dozen concentric shallow grooves.

(2) Is simply a cap of thick felt, such as is used for boilers being preferable, made so as to fit somewhat loosely over the machine (1).

Mode of using the machine.—Plunge (1) with metallic face downwards into a mixture of finely pounded ice and salt; after remaining therein for three or four minutes, take it out and wipe with a clean cloth. The instrument has now been cooled down far below the freezing point, and on placing upon the metal plate a piece of soft tissue, this immediately freezes to the machine. The cap (2) must now be placed over the metal, but not allowed to touch the tissue, which will then freeze throughout in a very short space of time, varying according to the size of the tissue from a few seconds to one or two minutes. Now reverse the cap so as to leave the metallic top free, and, holding the whole in the left hand, cut the sections with the right by means of a sharp razor which has been kept cool in ice-and-water. Occasionally, the tissue may slip on the metal; when this is the case, remove the preparation, moisten it with gum-water, and replace it, when it will be found to adhere with much greater firmness. This slipping, however, very rarely occurs with perfectly fresh tissues, the grooves on the metallic surface tending to prevent it. The tissue will remain frozen quite long enough to make several score of sections, but should a thawing action set in, it may be covered with thin gutta-percha, and the machine again plunged into the ice-and-salt.

The advantages of this little machine are, first of all, its simplicity; and, secondly, the rapidity with which tissues may be frozen by its means. To illustrate the quickness of its action, it is only necessary to drop a little water on the cooled metal to convert it immediately into ice. Lastly, the apparatus may be made by any instrument maker or metal turner for a few shillings.

Mr. Baker, of Holborn, and Mr. Swift, of University-street, are manufacturing these machines.

To those who are specially interested in the subject, I may mention that I propose showing the little instrument in action at the next meeting of the Medical Microscopical Society (Dec. 17th).

Guildford-street, Russell-square, W.C.

CASE OF FIBROID TUMOUR OF THE MASSETER MUSCLE.

BY KELBURNE KING, F.R.C.S.,
SURGEON TO THE HULL GENERAL INFIRMARY.

JOHN S——, aged thirty-two, was admitted into the Hull Infirmary on March 2nd, 1872, under the following circumstances. For two years he had noticed a hard swelling in the region of the left temple, which extended down to the back of the left cheek. It was of slow growth, but as it grew he became unable to open his mouth, and, after the end of six months, he could separate his jaws only sufficiently to admit the thickness of a match. Latterly he had lost even this slight power of separation. His jaws were immovably fixed, and he lived entirely by suction through interstices between the teeth. He followed his employment as a labourer in a ship-building yard as long as he could, but of late he became so weak through insufficient nourishment that he was compelled to leave his work and apply for relief.

On admission, a hard lump, about the size of a damson plum, was felt in the centre of the masseter muscle, and another less distinct in the temporal, about an inch above the zygoma. The tumours had the feeling of enlarged, violently contracted muscular masses. Thinking it possible that the disease might depend on hypertrophy and permanent contraction of the muscles, I immediately administered chloroform, and, that failing to produce any relaxation, I divided the masseter subcutaneously. A certain amount of relief was afforded, and the jaws could be separated so far as to admit the patient's finger.

This mitigation was not permanent. On March 30th the closure was again complete. Chloroform was administered, and subcutaneous section of both muscles was performed. Some temporary relief followed, but the advantage gained was lost by degrees.

It was now evident that some other proceeding must be resorted to for his relief. The swelling was now most marked in the temporal region, and I resolved to remove the zygomatic process, so as to relieve the tension of the masseter, and get access to the insertion of the temporal muscle.

Accordingly on May 1st I performed the following operation:—An incision was made over the zygomatic arch, from the prominence of the cheek bone to almost half an inch in front of the ear. Another incision was made at right angles to this, extending about an inch above and below it. The flaps were dissected back, the masseter divided from the lower and the temporal from the upper margin of the zygoma. The bone forceps were then applied to the anterior and posterior extremities of the arch, which was removed. The insertion of the temporal muscles into the coronoid process was thus brought into view. The process was nipped through with bone forceps, and the muscle lifted up and dissected out. A hard dense structure was found in the centre of the muscle, which was freely removed. Four vessels required ligature.

Great improvement followed this operation, though I was myself disappointed with the results. The hard mass in the masseter continued, but the man could eat meat cut small, and was himself satisfied with his condition, and left the house on June 1st.

He again presented himself on June 24th with his jaws firmly closed, in the same condition as when he first applied for assistance. The temporal region presented a flattened appearance from the removal of the muscle, but the hard substance was still felt in the belly of the masseter.

I determined to remove the masseter, and, if necessary, to disarticulate the bone and remove the whole ascending ramus. On the 26th June, chloroform having been administered, an incision was made from the angle of the jaw to the cicatrix of the old incision over the zygoma, which was again laid open. The flaps having been dissected back, the masseter muscle was dissected away from the bone and removed. The ramus was thus laid bare, but it was found irremovably fixed by numerous strong fibrous connexions with the neighbouring bones. It seemed as if every part of the temporal muscle which had escaped excision had been converted into fibrous or tendinous structure, which held the bone firmly in its place. Under these circumstances I determined to remove the bone, which was done by dividing it from the last molar tooth to the angle by means of saw and bone forceps, then freeing it from its connexions, and disarticulating its head from the glenoid cavity. The wound healed favourably. He could open the mouth well, and left the hospital in a few weeks able to masticate freely on the right side.

I saw the man lately, and he continues quite well.

Mr. Plaxton, the pathologist to the infirmary, made several microscopic examinations of the tumour and muscular substance, and the following is his report:—"The tumour on section showed that it was not distinctly marked off from the healthy muscle, the greater part of masseter and temporal muscles being converted more or less perfectly into a hard creaking mass. The microscopic examination showed that the muscles were in process of conversion into fibrous tissue; isolated muscular fibres were to be seen between thick bundles of wavy fibrous tissue."

The muscular substance is not often the seat of disease. Though recurring fibroid is said to be frequently reproduced, it does not often originate in it. Mr. Tatum mentions a case in which he removed two recurring fibroids from the masseter and temporal muscles, but there was no train of symptoms such as I have related; neither was there anything of a recurring nature in these tumours, there having been no previously existing tumour, as in Mr. Tatum's case.*

I consider, therefore, that this is a specimen of a very rare form of disease, and in the absence of any precedent to guide us as to treatment, I believe that nothing short of the extreme measure finally taken would have afforded relief. The man masticates only with the right side of his mouth, but he can open the jaws perfectly, and is now healthy and in good condition.

SUCCESSFUL CASE OF TRACHEOTOMY IN A CHILD TWO YEARS OLD.

NEW FORM OF TRACHEOTOMY TUBE.

By W. E. Paley, M.R.C.S., &c.,

HOUSE-SURGEON TO THE EVELINA HOSPITAL FOR SICK CHILDREN.

The following case seems worthy of record, partly on account of the tender age of the patient (two years), and because a new form of tracheotomy tube was used, which appears likely to be beneficial in many cases.

Ada L—— was admitted October 5th, 1875, into the Evelina Hospital, under the care of Dr. F. Taylor. A week previously she was taken suddenly ill with sore-throat and feverishness. There had been, however, no difficulty of breathing until the day before admission.

When admitted there was evidence of considerable laryngeal obstruction. The respiration was noisy, and there was marked laryngeal cough, with sucking-in of the intercostal spaces. Air could be heard entering both lungs fairly well, and the chest was resonant throughout. No diphtheritic membrane could be seen, nor did the urine contain albumen.

The patient was at once placed in a steam tent, but towards evening the symptoms became more urgent, and it was decided to perform tracheotomy. This I accordingly did, without chloroform, introducing an ordinary silver tube. Great relief of all symptoms was immediately afforded, nor was there any recurrence of the dyspnœa.

The details of the progress of the case for the few days immediately succeeding the operation present nothing worthy of special note. Subsequently several attempts were made to dispense with the tube, but without success.

At the expiration of a fortnight the silver tube was changed for a new kind of tube suggested by Mr. Morrant Baker, the details of which were carried out under my direction by Mr. Millikin, of St. Thomas's-street. The tube is single, of ordinary tracheotomy shape, and constructed entirely of flexible india-rubber. It could be inserted easily without a pilot, and did not require to be changed more than once in every two days. As far as could be judged from a single case, it was introduced with less pain, was more comfortable to the patient, and caused far less irritation than a metal one; and with some slight modifications now being made it will, probably, prove a useful instrument.

I may add that the tube was worn for one month, during ten days of which the child was running about the ward; and we were able to discontinue its use altogether on Nov. 22nd, since which date the patient has left the hospital well.

So far the tube is not proposed by Mr. Baker as a substitute for a metal one at the time of operation, but to obviate the many well-known disadvantages the latter has when required to be worn for more than a few days. But it is not unlikely that, in many cases, the elastic tube might be used with advantage throughout, as there would probably be little or no difficulty in its introduction, at the time of operation, with the help of a proper pilot or forceps.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. THOMAS'S HOSPITAL.

ANEURISMAL VARIX OF LEFT COMMON ILIAC VEIN; COMPRESSION OF AORTA; GANGRENE OF INTESTINE.

(Under the care of Mr. Simon.)

The previous history of the following interesting case, for which we are indebted to Mr. S. Osborn, surgical registrar, was published in The Lancet of March 6th, 1875.

Thomas K——, aged thirty-eight, a driver in the Royal Engineers, was admitted into Albert ward on Feb. 16th, suffering from aneurism within the abdomen. On the 3rd of March, after the patient's bowels had been thoroughly cleared out by castor oil, compression of the abdominal aorta by tourniquet was commenced at 10 A.M., preceded by the subcutaneous injection of half a grain of morphia at 9.30, which was repeated at 10 A.M. Mr. Simon not being satisfied with the instrument, which failed to control completely the pulsation without digital assistance, it was discontinued at 11 A.M., but recommenced at 11.30, the same instrument being supplemented by a cord attached to the side of the bed, another injection of morphia being given at 11.30 A.M. After the application of the tourniquet the heart-murmur became more marked, and the pulse increased in frequency, probably partially due to excitement; profuse perspiration of body and flushing of face, the legs presenting a blue, mottled appearance.—12 P.M.: Restless, and complaining of very great pain. Temperature 95°. Subcutaneous injection of half a grain of morphia.—2.30 P.M.: Pain less severe, and patient quiet. Temperature 95.6°. Extremities warm; compression not invariably complete, blood occasionally passing, but stopped by an additional turn of the screw.—5.20 P.M.: Hiccough came on and lasted about a quarter of an hour, during which time pulsation was felt in the aneurism. This pulsation continued until the screw of the tourniquet was brought into a vertical position by means of another cord attached to the bed; pulsation then ceased in the tumour and in both femoral vessels.—6.30 P.M.: Feet cold; left leg feels less tense than before; penis rather turgid.—10.30 P.M.: Compression remains effectual; dozes a good deal; hands rather cold; pulse 104.—11.10 P.M.: Passed five ounces of very offensive, clear, brownish urine, non-albuminous.—11.25 P.M.: Complains of a good deal of pain; screw loosened half a turn without any pulsation becoming perceptible; hands feel warmer. Subcutaneous injection of half a grain of morphia.

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* For Mr. Tatum's case, see Holmes's System of Surgery, vol. iii., pp. 639, 640.

March 4th.—1.15 A.M.: Temperature 99°; pulse 102; not complaining of much uneasiness.—3 A.M.: Tourniquet removed; slight pulsation perceptible in tumour and right femoral; both legs warm; patient restless; subcutaneous injection of half a grain of morphia administered; ulcerated surface on left leg looks unhealthy, and greenish in colour; an oval, red, and tender patch above umbilicus, corresponding to where pressure of tourniquet was applied, to be relieved by warm fomentations. During the whole time of compression no nourishment was taken, with exception of a teaspoonful of milk occasionally. Measurement of left thigh, 27 inches.—9 A.M.: Sleeping, looks much worn; pulsation in tumour decidedly diminished.

5th.—Was troubled all day yesterday with hiccough, which still continues with increased frequency; patient much depressed and exhausted; was sick at intervals from 11.30 P.M. until 2.30 A.M., bringing up about a pint and a half of black fluid; bowels acted twice. Morning temperature 98.4°; evening temperature 99°; pulse 120; some tenderness of abdomen, but only at point of pressure; ulcer on leg is now black in colour; slight pulsation in right femoral.

6th.—Morning temperature 98°; pulse 106; no more vomiting; hiccough still continues; appears to be doing well, but is still much depressed. Took four ounces of brandy and some champagne in the afternoon.

7th.—Morning temperature 98.8°; evening temperature 99.8°; vomited about four pints of black offensive fluid during the night, and again three pints in the afternoon.

8th.—Wife anxious to remove him, which was with great difficulty prevented; patient feels better; no pulsation in aneurism perceptible; hiccough still continues, also vomiting of black offensive fluid. Morning temperature 98°; evening temperature 100.6°.

9th.—Much worse this morning. Morning temperature 100.8°; sickness still continues; is gradually sinking. He died at 12.55 P.M.

Post-mortem.—The abdominal walls corresponding to the point of pressure were about double their ordinary thickness, due to inflammatory infiltration. The great omentum was freely adherent to the anterior abdominal wall, but presented no sign of inflammation. The peritoneal cavity contained between three and four ounces of turbid fluid. Intestines distended, especially the upper part of the small intestine; on their external surface there was scarcely any trace of inflammation, but they were glued together, especially towards the flanks, by a very thin layer of inflammatory lymph; but here and there were seen pearly spots varying in size from that of a sixpence to that of a pea, corresponding to the parts where the necrosis had removed the whole thickness of the intestine, with the exception of the serous surface, and would eventually have perforated through into the peritoneum. Mucous membrane of stomach congested and dotted with minute punctiform injections, so also the upper part of the small intestine, the injection becoming more marked as the intestine proceeded onwards, assuming at length a deep purplish-red colour. About two feet below the pylorus, on the edge of the valvulæ conniventes, were minute yellowish flakes resembling croupous exudations, this condition gradually increasing until the greater part of the ileum presented a uniform wash-leather-like slough, the mucous membrane being of an ochrous colour, relieved by the velvety red edges of the valvulæ conniventes. Springing from the point of bifurcation of the abdominal aorta was seen an aneurismal sac about the size of a hen's egg, lined by a thin layer of fibrin. The left common iliac vein, which was greatly dilated, opened directly into the sac, and had no communication with the inferior vena cava. The superior mesenteric artery was completely obliterated for a considerable length, where, together with the mesentery, it was converted into an inseparable brawny mass.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

FIVE CASES OF LIGATURE OF THE FEMORAL ARTERY WITH ANTISEPTIC CATGUT.

(Under the care of Mr. Nankivell.)

Case 1.—C. V——, aged twenty-six, a cabman, was admitted on April 17th, 1871, suffering from an aneurism of the left popliteal artery, of the size of a small orange. Patient stated that he had noticed the swelling for about three weeks.

On admission, compression was applied, and continued daily at intervals for as long a time as the man could bear it till May 22nd, when, no result having been produced upon the aneurism, the femoral artery was tied with antiseptic catgut in the usual situation. The operation was performed strictly in accordance with the rules laid down by Mr. Lister. Lac plaster was used as the dressing. On June 12th the incision was found to be soundly healed. There had been an entire absence of suppuration throughout.

Case 2.—E. R——, aged thirty-three, having previously undergone amputation of his left leg for diffused popliteal aneurism, was admitted on November 22nd, 1871, for a right femoral aneurism situated in Hunter's canal. On November 27th the artery was ligatured in Scarpa's space, carbolised catgut being used for the ligature, and the usual antiseptic dressings applied. The wound did not unite by first intention, but the pus never became putrefactive. The wound was found to be healed on December 28th.

He subsequently died at home of an aneurism of the aorta.

Case 3.—J. S——, a mineral-water maker, aged twenty-eight years, was brought to the hospital on June 20th, 1873, suffering from an aneurism of the left femoral artery, situated at the lower part of Hunter's canal. The man stated that twelve days prior to admission he noticed a swelling in the affected part. He could not account for the tumour by any fall or blow. The affected limb measured over the aneurism an inch and a quarter more than its fellow. Carte's tourniquet was applied.

July 4th.—The sac of the aneurism had become very painful. On measuring the limb it was found to have increased two inches since admission. In the afternoon deligation of the artery was performed, carbolised catgut and gauze dressings being employed.

25th.—Since the operation there had been a trifling discharge of aseptic purulent fluid from the lower part of the wound, which, on removal of the dressing, was found to be quite healed.

He left the hospital on August 6th.

Case 4.—C. V——, the cab-driver mentioned in Case 1, reapplied for admission on April 14th, 1874, suffering from a popliteal aneurism of the right leg, which had existed for the previous eleven months, but had got much worse since Christmas.

On April 24th the artery was ligatured, carbolised catgut and gauze being the materials used. The dressings were changed daily, owing to the amount of discharge, which was, on April 28th, distinctly fetid. There was also an erythematous blush of the leg and thigh.

May 3rd.—Suppuration more profuse. The gauze was discontinued and poultices applied.

21st.—An abscess had formed in the groin, which was opened. The wound in the thigh granulated rapidly, and was quite healed on June 17th, on which day the patient left the hospital.

Case 5.—W. P——, a waterman, thirty-nine years of age, became an in-patient on November 11th, 1874, suffering from a popliteal aneurism of the right leg. Six months ago the man was admitted, but he then refused any operative procedure. Having become worse, he was readmitted on the above date, and the femoral artery was tied with carbolised catgut on Nov. 13th. Dry lint was used as the dressing till Nov. 16th, when poultices were applied.

Dec. 23rd. — Patient allowed to get up. Wound now merely a small superficial ulcer.

He left the hospital on Jan. 13th, 1875.

Remarks.—Cases 1 and 2 have already appeared in The Lancet of August 26th, 1871, and February 10th, 1872. These facts deserve mention lest some surgeon on a future occasion, in collecting statistics, should count them twice over. The above five cases illustrate fairly what the antiseptic catgut can do. They are not brought forward as instances of the success or failure of the antiseptic treatment, but simply to show the results of catgut ligature on arteries deligated in continuity. In none of these patients was there the slightest sign of secondary hæmorrhage, nor was any portion of the ligature seen in the dressings. The wound was healed in twenty-one, thirty-one, twenty-one, fifty-four, and forty days respectively. In attempting to compare the period of cure of cases treated by catgut, on the one hand, and silk or hemp, on the other, it is difficult to arrive at satisfactory conclusions, because of the melting away of the ligature in the one instance and of the separation of the thread in the other. Mr. Nankivell does not think that the presence of the catgut prevents primary adhesion of the deeper parts of the incision. At all events, he was not troubled by any sinuses, as has been stated to have occurred in some cases in the practice of other surgeons.

HÔPITAL TEMPORAIRE, PARIS.

CASE OF DIABETES.

(Under the care of Prof. Lecorché.)

The following case of diabetes, presenting some interesting points, occurred in the practice of Prof. Lecorché.

P. R——, aged twenty-four, an oil purifier, was admitted into the hospital on the 24th Aug., 1875, with diabetes. His mother and sisters are all living and enjoying good health; his father died of rheumatism. Had only been once ill himself, and that with an attack of pneumonia. No history of syphilis or of intemperance.

About a year ago the patient seems to have experienced great moral sufferings, owing to some family affairs and the death of a young person whom he was about to marry. These sufferings seem to have made a most painful impression upon him.

His health began to fail three months before his entrance into the hospital. He had a constant feeling of fatigue and a sensation of weakness in the extremities. He got visibly thinner, but remarked that his appetite had increased and that he was troubled with constant thirst and his tongue was continually dry. Shortly after he began to feel a need of frequently voiding his urine, and was also troubled with some dyspepsia, burning behind the sternum, and vomiting.

On admission the patient was greatly emaciated; weight 114 pounds; complained of sharp pains in the calves, dry burning feeling of the throat and tongue; the latter was of a dark red hue and mottled with white streaks denuded of epithelium in certain spots; appetite good, but has sour eructations after copious meals. Pulse 60, strong and regular; heart-sounds normal, as also the proportion of red globules in his blood. For the last two months he had had no penile erections. His sight became confused when he read for more than five minutes, and he sometimes saw red circles; at other times everything appeared white to him; there was paralysis of accommodation. His temperature during the first part of his stay in the hospital varied from 36° to 36·8° C.

The urine was pale-citron colour, slightly acid, and contained 40 grammes of sugar and 4 grammes of urea to the litre. For the first week the average quantity of urine was 3½ litres in the day, and 2½ at night. At this period the patient had a slight attack of bronchitis, which was not followed by any bad consequences. The appetite, which had diminished under the influence of certain gastric disorders, was now again good, the patient eating eight portions a day, and 500 grammes of meat. He drank about 6 litres of liquid a day.

September 25th.—The patient had diarrhœa, and from this date the urine averaged 4 litres a day—sugar 35 grammes, urea 2·5 grammes per litre. He was put under treatment, consisting of opium pills, gluten bread, Vichy, and an azotised diet. He showed some signs of an amelioration in his condition.

28th.—Passed 8 litres of urine. Proportion of red globules diminished.

October 2nd.—Passed 10 litres of urine. Was ordered 4 grammes of jaborandi. Sweated profusely, and expectorated 3·50 grammes of alkaline saliva.

5th, 6th, and 7th.—Passed 10 litres of urine. Profuse sweating. Salivation.

8th.—Patient left the hospital at his own request.

November 7th.—Patient entered the hospital again. He had tried to work again, but was obliged to cease on account of his strength failing. He perceived a swelling situated on the lower part of the outer side of the leg. This swelling had come on without any traumatism or pain. Little by little the temperature rose, the tumour increased in size, and the skin became distended.

8th.—Fluctuation was easily felt in the tumour. Temperature 37·2° Cent. Average of urine 8 litres in 24 hours; specific gravity 1031; sugar 76 grammes, urea 5·6 grammes per litre; red globules 3,500,000 per cubic millimetre. Evening temperature 38° Cent.

10th.—Abscess opened, gave vent to 300 grammes of laudable pus. Chloral dressing.

11th to 16th.—Average of urine was 9·3 litres per diem, and the temperature lowered down to 36·6°. Abscess presenting a favourable appearance.

17th.—Urine 12 litres; sugar 100 grammes, urea 7 grammes per litre.

This increase in the proportion of sugar was due to the weakness consequent on the inflammation.

Remarks.—Prof. Lecorché indicated the following points of interest in the case:—1. The etiology of this case would tend to confirm the opinion entertained by MM. Claude Bernard, Seegen, Bouchardat, and Pavy, as to the influence of nervous causes in determining the disease. (Experiments of Claude Bernard on Spinal Cord, 4th vent.) 2. The enormous quantity of sugar, 1200 grammes a day, and the fact of the urea being always in proportion to the quantity of sugar, as stated by MM. Pettenkofer, Vogt, and Lecorché, who admit an augmentation in the quantity of urea in cases of diabetes; polyuria being in proportion with quantity of sugar. 3. The formation of an abscess, which was opened without the supervention of any gangrene, which is stated to be the general result in cases of this kind by certain authors. This complication verified the statement that the temperature rises in diabetes under the influence of an intercurrent inflammation. Under the influence of this inflammation the quantity of sugar was reduced to 300 grammes, which augmented to 1200 grammes as soon as the appetite returned, notwithstanding the treatment he was put under. Prof. Lecorché terminated his remarks by saying that he regarded all treatment in advanced stages of the disease as almost useless, and considered that in these stages the proportion of sugar in the night urine might equal, and even exceed, that of the day.

Bequests, &c., to Medical Charities.—Mr. Wynn Ellis bequeathed £15,000 to the Hospital for Sick Children, Great Ormond-street (£10,000 to the general fund and £5000 to the building fund), and £2000 each to the Royal Westminster Ophthalmic Hospital, the Royal Infirmary for Women and Children (Waterloo Bridge-road), the Royal London Ophthalmic Hospital, and the Seaside Convalescent Home, Seaford. Mrs. Elizabeth Balls, of Streatham, bequeathed £2000 Consols to the Cancer Hospital, and £500 Consols each to the Earlswood Asylum for Idiots, St. Thomas's Hospital, and Guy's Hospital.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

The ordinary meeting of this Society was held on the 7th inst., Mr. Geo. Pollock, President, in the chair. Many cases of great interest and importance in a clinical as well as a pathological point of view were brought forward. Among them may be indicated an example of obliteration of the superior vena cava (probably congenital), shown by Dr. Habershon; a specimen of pulmonary and tricuspid disease, by Dr. Morison; and one of cirrhosis of the liver in a child, by Dr. Griffiths, of Swansea. The latter case led to some interesting facts as to alcoholism in children.

During the evening the following gentlemen were elected members of the Society:—A. E. J. Barker, H. W. Page, M.B., G. J. Malcolm Smith, M.B.

Mr. **Jonathan Hutchinson** made some remarks upon three cases of Molluscum Contagiosum, which were peculiar in the widespread distribution of the eruption. He exhibited drawings of the eruption from a man aged fifty, in whom, at first sight, the affection might have been mistaken for lichen, so small were the spots, which were distributed all over the trunk and limbs. They were largest and most characteristic on the back, where their origin in sebaceous glands could be well seen, and the contents readily extruded by pressure. In the two other cases the eruption was similarly diffused, but the spots were more characteristic. Mr. Hutchinson remarked upon the somewhat rare occurrence of the affection in the adult, and on the copious eruption in these cases, which also had a clinical value, in that in one of them it had been for some time treated as a syphilide. In reply to the President, he stated that there was no history of contagion to be obtained in the case.—Mr. **Waren Tay** said that some three years ago a man aged about forty presented himself at the Hospital for Diseases of the Skin covered by molluscous spots, except on the face and scalp. No history of contagion could be obtained. Examined microscopically they showed the usual features of the affection.—The **President** thought it would be of interest if Mr. Hutchinson would state what treatment he pursued. — Mr. **Hutchinson** said that in the first case the spots were too numerous to be treated in the ordinary way — viz., slitting up each nodule with the scissors. In one case, however, he had so cut out nearly two hundred of the spots. — Dr. **Coupland** referred to the recent researches of C. Boeck and Lukomsky, who appeared to have arrived independently at the same conclusion as to the histological nature of the molluscous tumour, which they regard as having but little to do with the sebaceous glands, but to depend rather upon a peculiar modification of the upper layers of the rete Malpighii. The change consists in the formation of the so-called "molluscous bodies" within the epidermic cells, which some authors have mistaken for spores, and others for fat or altered sebaceous products. — Mr. **Hutchinson** said that the sebaceous origin of the molluscous nodule was undoubted and most easy of demonstration, the inspissated secretion of the gland being readily squeezed out of each nodule.

Mr. **Morgan** exhibited a specimen of Stricture of the Hepatic Duct with Cystic Dilatation of its Terminal Radicles. It was obtained from a patient fifty-two years of age, who was admitted into St. George's Hospital with jaundice, pain in hypochondrium, and headache. His symptoms dated back four months, when he was attacked with diarrhœa. The liver enlarged under observation, and two tumours could be felt on its surface. There was found to be extreme fatty degeneration of the heart; the liver was much enlarged, smooth, and presented several cysts projecting on the surface, which proved to be formed by dilatation of the bile-ducts. The gall-bladder was distended, and a stricture of the common bile-duct just below its origin was found. The duct was adherent at the point of stricture to a perforating ulcer of the duodenum.

Dr. **Legg** showed a specimen of Congenital Stricture of the Hepatic Duct, with consequent cirrhosis, obtained from an infant who had lived to the age of five months, having been jaundiced from birth. There was no bleeding from the navel when the funis separated. The liver and spleen enlarged under observation. After death the hepatic and portal vessels were found to be natural. The cystic and hepatic ducts opened into a cyst the size of a marble, between which and the duodenum passed a membranous band. Followed towards the liver, the right hepatic duct was first much dilated and then greatly thickened, so that its branches within the liver could not be pursued. The left duct was thickened throughout, and almost impervious. The liver was granular and markedly cirrhotic. The spleen was very large. Dr. Legg stated that there were only eleven such cases on record, two being recorded in the Path. Trans., one by Dr. Wilks and the other by Dr. Nunneley. In Dr. Nunneley's case the infant lived seven months. He thought that the cirrhosis of the liver was secondary to the dilatation of the bile-ducts, because of the rarity of cirrhosis in infants, the limitation of the thickening to the walls of the ducts, and the fact that ligature of the duct in animals led to similar interstitial increase of connective tissue. There was no evidence of syphilis in the present case. It appeared probable that in many cases of umbilical hæmorrhage there was a similar congenital obliteration of the duct, but post-mortem records of such cases are rare. Dr. Legg thought the occurrence of umbilical hæmorrhage could be explained by connective tissue growth in the hilus of the liver constricting the portal vein, and thus tending to keep the umbilical vein open, the blood flowing in the direction of least resistance. In many cases of umbilical hæmorrhage there was bleeding from other parts of the portal tract.

Dr. **Fred. Robinson** showed a specimen of Aneurism of the Ascending Aorta. The aneurism was of the size of a walnut, and was seated just above the central aortic cusp, pressing on the pulmonary vein. The pericardium contained sanguinolent fluid, but there was no communication between it and the aneurism. The specimen was obtained from a soldier, forty-three years of age, who had contracted syphilis thirteen years previously, but who at the time of the onset of the aortic symptoms showed no evidence of the syphilitic taint. He suffered from precordial pain, and on examination a soft systolic bruit was heard over the aortic valves. The existence of aneurism was not suspected during life. Death took place suddenly. Dr. Robinson remarked upon the question of aneurism in relation to syphilis, and stated that, in his opinion, syphilis, intemperance, and pressure on the chest were the three main causes of aneurism, but he did not think that syphilis played so great a part as had been recently propounded. He thought also that the effect of pressure was mainly to produce disease of the heart.

Dr. **Habershon** exhibited a remarkable specimen of Occlusion of the Superior Vena Cava in a man thirty-seven years of age. He had been a coalheaver, and had remained well till seven years before his death, when swelling of the face and great congestion of the face and upper extremities came on, with great distension of the superficial abdominal veins. A diagnosis of intra-thoracic tumour was made, and the patient left the hospital partially relieved, having taken iodide of potassium. He returned, however, at the end of a year, and finally sank from dropsical effusion into the abdomen. Fomentations only afforded partial relief. After death it was found that the superior vena cava was obliterated; its position in the right auricle was marked by white puckering of the endocardium; the innominate veins ended in a cul-de-sac, and large communicating veins passed in front of the pericardium into the mammary veins, also into the smaller and greater azygos veins, by which the blood was carried downwards into the inferior cava, and thus reached the heart. There was much fibroid thickening around the aorta and in the position of the superior cava; the pulmonary valves were imperfect, there being two valves and the rudiments of a third placed on a somewhat lower level; there was some chronic peritonitis, but no disease of the abdominal viscera. Dr. Habershon thought the occlusion to be congenital, in support of which he adduced the malformation of the pulmonary valve and the absence of syphilitic disease or tumour. If the obliteration of the cava had been from without, there would have been more evidence of an opening into the auricle.—Dr. D. Powell asked if there was any history of cyanosis in early life. The cicatricial-like appearance of the part where the vena cava should enter seemed to favour the view as to its congenital origin.—Dr. Habershon said that the man appeared in good health up to thirty years of age, and followed his arduous occupation without any shortness of breath or other symptoms of venous obstruction.—Dr. Curnow asked how the blood found its way from the left side of the body into the auricle.—Dr. Habershon replied, chiefly by the left innominate, the intercostals, and the small azygos vein, as well as by a large vein passing over the pericardium to join the mammary vein. The upper part of the azygos major was obliterated.

Dr. Habershon also exhibited a case of fatal Hæmatemesis, in which the hæmorrhage came from a chronic ulcer in the first part of the duodenum. The vena porta was perforated; a sloughing cavity extended to the fissure of the liver. There was inflammatory change along the portal vein, and several abscesses in the liver. The gall-duct was partially destroyed.—In answer to Dr. Legg, who inquired in what way the bile escaped, and why there was no jaundice, Dr. Habershon said that the duct was not obliterated, although partially destroyed. The bile passed into the duodenum through the sloughing cavity.

Dr. Alex. Morison showed a specimen of Disease of the Tricuspid and Pulmonary Valves obtained from a youth twenty years of age. He had had scarlet fever when five or six years old, and was known to have heart disease when eight years of age. There was a strong family history of rheumatism, cardiac disease, and phthisis. The patient had never had rheumatism, and had enjoyed fair health till about eighteen years of age. There was a systolic bruit close to the left edge of the sternum, near the xiphoid, not traceable round the left chest; while over the third left rib and second space, close to the sternum, there was a hard, grating, double murmur, not propagated into the larger systemic arteries, but towards the left shoulder. There was evidence of great enlargement of the heart, regurgitation into the jugulars, epigastric pulsation, &c. There was engorgement of the lung and albuminuria. A few days before death some œdema of the face and scalp appeared. The necropsy revealed obstruction and regurgitation through the pulmonary valves, which were much altered and distorted by warty growths. The tricuspid valves were similarly diseased. The right cavities were hypertrophied and dilated. From the physical signs, the pulmonary lesion was easily detected, but it was thought that the apex systolic murmur might be mitral, though the failure to trace it round the left chest seemed to negative this view. During life the patient had some attacks of purpura, probably due to the venous engorgement and resulting capillary stasis.—Dr. Greenfield thought it possible that the lesion was not one of ordinary endocarditis, and on his suggestion the specimen was referred to the Committee on Morbid Growths.

Dr. Griffiths exhibited a specimen of Cirrhosis of the Liver obtained from a female child ten years of age. The parents were healthy; there had been seven children, of whom three had died in infancy, but there was not the slightest evidence of syphilis. The present child had scarlet fever at the age of three, and had suffered from infantile paralysis. Early in 1870 she had an attack of vomiting, followed later by jaundice, with enlargement of the liver; no ascites, no anasarca. The cause of this enlargement was obscure, there being no lymphatic affection, no tubercular or pleuritic history. The jaundice lasted about two years, and the child improved in health, but last year ascites supervened. The liver was now small, the spleen very large. Some jaundice again occurred, and the ascites increased. Paracentesis was twice performed, but the child sank. The liver weighed fifteen ounces; it was hard and tough, and partly adhered to diaphragm. It presented all the characters of cirrhosis.—Dr. Murchison said the case was of great interest as bearing upon diagnosis. He confessed to have been somewhat sceptical as to the occurrence of cirrhosis of the liver in children, but only quite lately he had met with a case of cirrhosis of the liver in a child nine years of age; and here, as probably in other cases that have been recorded, there was undoubted evidence of spirit-drinking. The child's father was a publican, and the child used to crave for drink, and had every opportunity of satisfying its craving. It certainly was highly probable that cirrhosis might be so caused in early life, considering the functions of the liver at that time. Dr. Griffiths's patient seems to have been delicate, and might possibly have taken wine medicinally, but in sufficient quantity to induce cirrhosis.—Dr. Griffiths said that he made very careful inquiry upon this head with negative result.—Mr. T. Smith suggested that the child might have taken steel wine when suffering from infantile paralysis.—Dr. Griffiths replied in the negative.—Mr. Parker referred to a case of a boy nine years of age which had been in the Hospital for Sick Children, under the care of Dr. Dickinson. In this case the boy had been in the habit of carrying his father's dinner to a cab-stand, and the father had constantly induced the boy to take spirits. There was marked ascites, with retraction of the liver.

Dr. Greenfield brought forward some fresh specimens of Visceral Syphilis, obtained from a female twenty-five years of age, who had suffered from syphilitic disease of the palate for four years. Death occurred somewhat suddenly after an attack of left hemiplegia with spasm of the affected muscles. Examination showed extensive syphilitic disease of the cerebral arteries, and the specimens brought forward included the spleen, kidney, and liver, which were the seat of numerous gummata. One of the kidneys was completely infiltrated. Dr. Greenfield proposed to bring forward the results of his microscopical examination of these organs, and of the arteries, on another occasion.

The Society then adjourned.

Reviews and Notices of Books.

On Addison's Disease. Being the Croonian Lectures for 1875. Revised and Illustrated. By Edward Headlam Greenhow, M.D., F.R.S., F.R.C.P., Lecturer on the Principles and Practice of Medicine at the Middlesex Hospital. London: Longmans and Co.

This work, as the title indicates, consists of the Croonian Lectures at the College of Physicians on the subject of Addison's Disease, delivered in the spring of the present year. The book contains, however, much more than the original lectures, which were published in full in our columns at the time of their delivery, and will therefore be fresh in the memory of many of our readers. To these, which constitute, in fact, only the first half of the work, we have two valuable appendices, the first containing the detached reports of thirty-seven selected cases given as evidence of the facts on which the conclusions are based, and the second a reference to the 333 cases of disease of the suprarenal capsules of which the author has been able to discover a record. The work is also enriched with excellent coloured plates representing the naked-eye appearances of the tongue and of the diseased capsules, and also of the microscopical appearances of the skin and mucous membrane and of the diseased capsules, the former chiefly by Mr. Henry Arnott, and the latter from the pencil of Dr. Sidney Coupland. The appendices and plates alone, therefore, give a great additional value to the book.

There is scarcely any disease in the whole range of medicine in which a greater variety of problems is involved, the elucidation of which requires wide study both of the special disease and of other morbid conditions; and, whilst the fascination of the subject has led many to frame hypotheses as to the connexion of the several parts of the disease with each other, many of these have been grounded only on individual cases. And there is scarcely any other disease the history of which shows so clearly the fallacies which may arise from imperfect observation and hasty generalisation from individual cases, and the necessity of a strictly logical inquiry. In the opinion of some, the evidence seemed to prove that Addison's disease had no essential connexion with disease of the suprarenal bodies, and still less with any specific affection of these organs. Dr. Greenhow has, therefore, done great service in collecting and comparing all the available evidence, and sifting it in such a way as to show how far our knowledge at present goes and on what points we are yet in default, and in thus clearing the ground for future investigation.

In his first lecture, after a slight outline of Addison's life and of the history of his discovery, Dr. Greenhow gives a description of the clinical features of the disease with the varieties in its symptoms and progress, and of the morbid anatomy in well-marked cases. These, especially the latter, are for the most part remarkably clear and good, but on the subject of temperature, with the exception of the statement that it sometimes falls considerably below normal in the last stage of the disease, we find no information, possibly from want of recorded observations. In the second lecture the question of the association of a special morbid condition of the capsules with the bronzing of the skin and the general symptoms is discussed; the several classes of cases which have led to erroneous views are also in turn considered, and the various fallacies involved exhibited, the conclusion being that there is an essential connexion of the special disease of the capsules with the general symptoms and the melasma, but that of the latter either may precede the other. It is this lecture which we would especially commend as of value, from the thoroughness of the investigation and the clear light in which the facts are placed, and we believe that Dr. Greenhow's conclusions may be accepted as correct. In the third lecture the author takes up the difficult problem of the intimate pathology of the disease, and of the relation of the capsular disease to the melasma and the general symptoms. After showing that they cannot be due solely to the destruction of the tissue of the capsules, as these may be destroyed by other morbid growths without symptoms, and in Addison's disease itself the symptoms bear no direct proportion to the extent of the morbid process, he accepts the view which is now usually adopted, that they are due to nervous lesions, either by the affection of nervous filaments in the capsules themselves, or more probably by the secondary implication of the nerve trunks and ganglia of the solar plexus and its neighbourhood, and particularly of peripheral branches of the pneumogastric nerve to the plexus and the capsules. The bronzing of the skin he also believes to be due to reflex irritation through the cerebrospinal nervous system, and not to a morbid condition of the blood. In coming to these conclusions, the facts deduced from the morbid anatomy, the clinical features, and physiological facts are all carefully considered. The difficult subject of etiology is next discussed, and Dr. Greenhow shows that in a certain number of cases the disease has apparently originated by extension of inflammation from disease of adjacent parts, especially psoas abscess and disease of the lumbar vertebræ; whilst in others it has been traced to a blow or strain. And he points out the important fact that it is of far more frequent occurrence in those classes whose occupations subject them to the risk of such injuries. These facts are suggestive, and may ultimately lead to a more definite knowledge of the causes of the disease. On the question of the nature of the morbid growth Dr. Greenhow is wisely reticent, and does not give his adhesion to the view that it is tubercle, whilst laying due stress on the large percentage of cases in which phthisis has coexisted with the disease. In the present state of knowledge this seems the wisest course, especially remembering the large percentage of phthisis in diabetes. Diagnosis, prognosis, and treatment are summarily dismissed in two pages, and we observe with regret the absence of an index; but these are only small and remediable defects in a work of great value, which will long be the standing work of reference on the subject, and will possess a permanent interest for all future workers.

Transactions of the Clinical Society of London. Vol. VIII. 1875.

THE present volume of Transactions of this young and flourishing Society is but little inferior in interest to any of its predecessors. It contains, in addition to the Address of the President, forty-six papers, for the most part consisting of brief records of cases, many of which possess a permanent value. It is true that the volume is of far more modest character than those of the Pathological and Medico-Chirurgical Societies; but it must be remembered that whilst the latter Societies exist rather for the permanent record of ascertained facts, the Clinical Society has from the first devoted itself more to the discussion and elucidation of clinical cases of interesting or doubtful nature. Thus it not infrequently happens that the case related forms only the text of a valuable discussion, in which other cases of even greater value are narrated, and the result of the debate is often to place the original case in a very different light from that in which it had been viewed by the author. Of all this there is no record in this volume of Transactions, which, therefore, does not really represent the great value of the Society.

It is unnecessary for us to enter into the merits of the various cases individually, all of which have been recorded, and many commented upon, in our columns. Some of them will be long remembered on account of their pre-eminent rarity, recording isolated cases which would seem to upset all our former clinical experience; such as the case of high temperature, related by Mr. J. W. Teale, which, although enshrined in this volume, will yet, we imagine, be the subject of rational scepticism until confirmed by further cases of a similar nature, carefully investigated. Of other cases of great interest from their novelty, we may note one of creeping eruption, shown by Dr. R. J. Lee, on which we have also a valuable report by Drs. Dickinson, Tilbury Fox, and Dyce Duckworth. Some of the cases are noteworthy rather from their inordinate length as contrasted with their value; indeed, some of the most valuable cases are those which are most briefly and concisely narrated. It would perhaps seem invidious to select examples of this kind. It should be remembered that, as the cases are usually read in full, the discussion is commonly of far more value when the cases have been clearly and briefly put, in such a manner that the main features are fully apprehended, and the attention is unwearied by needless detail. That "brevity is the soul of wit" might well be adopted as a motto by the Society.

With regard to the general arrangement of the volume, it would, we think, be an advantage if the papers were classified under their subjects instead of being placed in chronological order; this would increase their scientific value.

Finally, we have a word to say about the way in which the work has been edited, if, indeed, there has been any editing at all, of which we have no sufficient evidence, external or internal. But whoever may have been responsible has been guilty of serious negligence. First of all we have a list of contents, in which certain errors strike the eye at a glance, and make us afraid to examine more fully. Thus we have a heading of "Severe Epilepsy, *caused* by excision of Neuroma," which, as may be supposed, turns out to have been *cured* instead of caused. Then a case of poisoning by "Hydral Chlorate," a name with which we are not familar, but which turns out to be a synonym of chloral hydrate. And not only is this name repeated in the heading of the case, but we find the case carefully indexed under both titles, lest there should be any confusion from the use of the new term. The index itself is a curious compilation which will well repay a careful and critical study, having apparently been constructed by the "printer's devil" with the aid of a kaleidoscope, and a table of permutations and combinations. The system, if system it be, which has been followed, appears to have been to enter every case as a case of every separate symptom to be found in the title, as well as in full, and under the author's name—a system which of course increases the number of cases, and introduces some novelties. Then we have such errors as "larnyx," "pharnyx," &c., which greatly increases our suspicion as to the origin of the index. Unless an index is to be of some value, it would be better to omit it altogether in future volumes, at any rate until a responsible editor is found for the work.

A Manual of Physiology. Being a Course of Lectures delivered by Prof. Küss at the Medical School of Strasbourg. Edited by MATTHIAS DUVAL, and translated from the Second and Revised Edition by ROBERT AMORY, M.D., formerly Professor of Physiology at the Medical School of Maine. London: Baillière, Tindall, and Cox.

A SOMEWHAT hasty glance at the contents of this new Manual of Physiology has led us to form a favourable opinion of it. Less bulky than Kirkes and Paget's treatise, or than Dr. Carpenter's smaller work on Physiology, it represents the French rather than the German side of this subject. It is, at the same time, clearly written and fairly readable for a translation. Too much stress appears to be laid upon the importance of the epithelia. The corpuscles of the blood, of nervous-tissue epithelium, &c., are constantly and erroneously termed globules, and statements are sometimes made which, however probable they may be on *a priori* grounds, should not be dogmatically asserted in a work intended for students. As, for instance, when (p. 121) it is stated that "the principal object of the functions performed by the blood-globules is to excite or support the nervous system, as the nerves can exist only where the blood-globules are properly constituted, and contain the necessary quantity of oxygen gas." We imagine many facts in comparative anatomy militate against this much too positive statement. So, again, the curious views of Rouget on muscular fibre, to the effect that it is a true spiral spring which, actively distended during the repose of the muscle, returns upon itself at the moment of contraction, and hence that muscular contractility is a purely physical property of elasticity; and much more in the same strain is given as though it were proven, instead of being, as it really is, purely hypothetical. If some objectionable features of this kind, which might easily be expurgated by an able editor, were removed, Dr. Amory's translation of MM. Küss and Duval's work would prove very serviceable. It contains much that is not contained in any other treatise in the hands of the English reader. The theory and laws of the reflex actions are well given, and, on the whole, a due proportion is maintained between the several subjects. The numerous woodcuts, which are for the most part of a diagrammatic character, are exceedingly good, and materially elucidate the text. Though we do not believe the work, which we understand is having an unprecedented sale in America, will supersede our own text-books, we do think it may be advantageously read with them.

A System of Midwifery. By WILLIAM LEISHMAN, M.D. Second Edition. Glasgow: Maclehose. London: Macmillan.

IN about two years after the first issue of this excellent treatise a second edition has been called for. The work has undergone general revision and correction, but alterations have been chiefly made in the chapters on Physiology and Puerperal Fever. It will be remembered that in the first edition the view that puerperal fever was "a disease belonging to the so-called zymotic class, the proximate cause of which is some peculiar poison to which lying-in women are liable by contagion, or which is under certain circumstances developed in the puerperal state," was adopted. At a meeting of the Obstetrical Society, held last session, at which puerperal fever was the subject of debate, Dr. Leishman stated that he had found reason to renounce the above view. How complete this change of opinion has been will be seen from the following passage from the present edition:—"The first question to be determined then is, does such specific poison exist? or, in cognate terms, does any such disease occur as specific puerperal fever? To this question we do not hesitate to give a negative reply," &c. The view espoused now by Dr. Leishman is that the majority of cases of puerperal fever are of septic origin, and that the septic poison is communicated to the patient by attendants, or generated in the patient's own body by decomposition of the discharges occurring after labour; other cases are due to the poison of acute specific diseases, typhus, typhoid, &c. In the latter case the disease may run the course of that with the poison of which the patient has come in contact, but more frequently it runs the course of puerperal fever. To this view we subscribe our entire adherence. These chapters give a full and complete account of the symptoms and treatment of puerperal fever, but we cannot help remarking that they want more vividness of description.

We regard the treatise as thoroughly sound and practical, and one which may with confidence be consulted in any emergency.

Medicinal Plants. Parts I. and II. By ROBERT BENTLEY, F.L.S., and HENRY TRIMEN, M.B., F.L.S. London: J. and A. Churchill.

ALTHOUGH the day of the medical herbalist has passed away, and treatises upon so-called "medical botany" have been replaced by works on the general science itself, without respect to the materia medica, yet we gladly welcome this present publication as a valuable addition to medical literature. It has started upon the most catholic principles, it being the intention of the authors—than whom none are more fitted to undertake it—to make their work a kind of illustrated companion to the pharmacopœias of the world. It will, when completed, thus comprise a collection of drawings of medicinal plants unrivalled in extent and character. These first instalments promise well for the work, which of course will be better judged when it shall be published in full. They comprise no fewer than fifteen faithfully coloured plates of various plants, some of which have never been figured before, and the letterpress accompanying each plate is a concise and clear account of the botanical features of the plant, its medicinal properties and preparations. The English reader will be greatly enlightened by the appearance of this publication, in that he will hear for the first time probably of many plants whose virtues have found expression in the Pharmacopœias of India and the United States.

The plates strike us as being executed with a faithfulness and clearness of outline which leave nothing to be desired, and we trust the enterprise of the publishing firm in issuing them at so cheap a rate will be fully repaid.

Diaries.—At this season of the year we usually receive copies of diaries of various sorts for inspection. We give the first place among those we have already received to "The Physicians' and Surgeons' Visiting List," published by Messrs. John Smith and Co., of Long-acre, upon a plan furnished to them by Mr. Seymour Haden. In addition to being a diary, it contains a good deal of useful information, likely to be of service to the practitioner, concisely arranged. "The Chemist and Druggist's Diary" for 1876 fully maintains its reputation; it is published at the office of the *Chemist and Druggist Journal*. Messrs. Partridge and Cooper have sent "The Folio Scribbling Diary" for 1876, price 1*s.*; "The Diary and Call-book," price 2*s.*; and "The Octavo Scribbling Diary," price 2*s.*,—all interleaved with blotting-paper.

POST-MORTEM EXAMINATION OF THE REMAINS OF HARRIET LANE.

A Clinical Lecture, delivered at Westminster Hospital,

By THOMAS BOND, F.R.C.S., B.S. Lond.,
ASSISTANT-SURGEON TO THE HOSPITAL AND LECTURER ON FORENSIC MEDICINE.

Gentlemen,—As you probably are aware, I was employed by the Treasury to make the post-mortem examination upon the human remains found in the possession of Henry Wainwright. I was at once fully impressed with the grave nature of the task committed to me, and approached it with a mind absolutely free from any preconceived ideas as to the guilt or innocence of the prisoner. This condition of mind it was of course necessary to maintain during the whole of the inquiry, as it was my business to interpret facts only, quite regardless of the result to the prisoner.

On the 16th of September I met Mr. Larkin, who had already made a preliminary examination, and had given certain evidence before the magistrate. He had removed the abdominal and pelvic viscera, and very properly had placed them in jars which had previously been cleansed with distilled water. He had very carefully taken off the skull-cap without injuring the dura mater or brain; he also discovered a cut in the throat, to which he attributed death. But I proceeded to the investigation methodically and carefully, without troubling my mind with any theory or preconceived opinion.

There were, of course, two main questions to determine:—1st, the cause of death; 2nd, the identity of the remains.

I found the body in a sealed coffin, the lid of which was partially of glass. This was a very convenient method for exposing the body to the jury, and also to the relatives. I had the remains removed from the vault into the yard, and on opening the lid the horrible and peculiar smell at once indicated an advanced stage of decomposition. Availing myself of Mr. Larkin's valuable assistance, I proceeded to the examination. The remains were laid on a table in an open yard, with a good light, and carefully placed in position. They consisted of ten pieces. (1) The head and neck, which was separated from the trunk between the sixth and seventh cervical vertebræ; (2) the trunk, including thorax, abdomen, and pelvis; (3 and 4) the two thighs, divided from the pelvis through the neck of each femur; (5 and 6) the two legs with the feet attached, separated from the thighs at the knee-joints; (7 and 8) the two arms, which were cut off at the shoulder-joints; (9 and 10) the two hands, one being separated at the wrist and the other about two inches above. There was also found adhering to the body a quantity of white greasy material mixed with earth, which I subsequently found by chemical examination to be chloride of lime. This, I have no doubt, in a great degree contributed to the preservation of the superficial parts of the body, by the formation of a coating of adipocere, which is the result of a chemical combination of a fatty acid with a mineral base, generally supposed to be ammonia, when the tissues become changed into adipocere; but in this case the base was probably lime. Where this covering of adipocere was deficient the flesh had eroded in patches. At other parts it had dried, appearing white, silvery, and smooth, as if stretched over the subjacent tissue. It certainly gave me the idea at first of numerous scars, similar to those produced by slight scalds. This appearance played an important part at the trial, as Mr. Aubin, the surgeon for the defence, cut out one of the patches and called it a scar.

From the nature of the hair, the shape and contents of the pelvis, and the slender limbs, it was evident at once that I had before me the complete body of an adult female, and that it had been hacked apart by a rough and unskilled hand. The woman had evidently been dead many months, for the face, the front of the thorax, and part of the abdomen were quite decayed. No trace of features could be distinguished, although Mr. Larkin made the discovery that the ears were pierced for earrings. The limbs, however, and the lower part of the abdominal walls were covered with the dark-brown greasy substance which I have described as adipocere, and on scraping away which, the skin underneath was found well preserved, but in a dry and shrivelled condition. The thoracic, abdominal, and pelvic viscera, with the exception of the uterus, were so much decomposed that no examination was made of them, but the condition of the uterus was accurately noticed. It was very small, not above an inch long, and not a quarter of an inch in thickness. The colour was very dark brown, and to the touch it felt like soap. It was carefully put aside and soaked in water for subsequent examination. The division of the body was undoubtedly of recent date, as proved by the freshly cut bone and muscle, the former hanging about the cut parts in chips, and the latter flaccid and not retracted from the cuts. The cutting seemed to have been done by a blunt adze or chopper, and the appearances were consistent with its having been done with a hatchet shown me by the police. The scalp was partially separated from the skull, and more particularly so on the right side, and attached to it was a quantity of curly auburn hair, which was fixed at the back of the head to a pad by a number of hair-pins. On the left side of the head the hair was clotted with a dark substance resembling dried blood. The sutures of the skull were well marked and distinct, with the exception of the frontal, which was quite obliterated. On the right side of the skull, just above the articulation of the posterior inferior edge of the parietal bone with the squamous portion of the temporal, there was a depressed fracture, the size of a sixpence, and at the back part of the depressed bone there was complete penetration of the skull by a hole large enough to admit a small bean. The fracture must have been caused by a hard, blunt substance, striking in a direction obliquely backwards and inwards. The fracture was not of recent date, the broken surfaces being of dark colour, and similar in appearance to the exposed portion of the skull. The depression was not easily seen at first sight, as it was filled up with a dark substance similar to that found about the body—viz., chloride of lime and earth, which was probably here mixed with blood. The fracture was somewhat stellated, but it did not extend into the lateral sinus.

The scalp was detached over the fracture and around it for a distance approximately of two inches, exposing the bone. There was a penetrating wound of the scalp, and when drawn forward the hole corresponded to a point on a level with, but an inch posterior to, the fracture. The under surface of the scalp around the hole was dark-coloured, and its substance infiltrated with blood to a depth of one-sixteenth of an inch. The under surface of the uninjured portion of the scalp was of a pale-brown colour. The dura mater was detached from the skull-cap and entire, except opposite the fracture, where it was perforated. Its surface was of a light-grey colour, but exactly opposite the fracture it was very dark brown, and appeared thicker. On cutting through the membrane at the point of puncture, the dark colour was found to extend through to the under surface, and the brain in contact with it was dark-brown for a distance of half an inch around the hole. This was caused, I had no doubt, by infiltrated blood, and I therefore formed the opinion that the injury was inflicted during life. On passing my finger through the hole in the dura mater into the substance of the brain, I found two spiculæ of bone. I enlarged the opening in the dura mater, and carefully removed the decomposed brain, which was in a semifluid condition, and of a light-brown colour; then carrying the exploration on in the direction of the hole through the skull, I found a much flattened bullet lying in the left hemisphere of the cerebellum. It must have entered the skull obliquely, from before backward, and had struck the occipital bone just behind and on the left side of the foramen magnum, causing a slight stellate fracture of the inner table. This bullet undoubtedly caused the injuries I have described. On removing the dura mater and the soft pulpy brain I discovered a second bullet lying on the posterior clinoid processes of the sphenoid bone, which were both broken off. This bullet was slightly flattened on the top only, and appeared to have entered the skull by direct impact. On further examination, I found a hole in the skull exactly above the base of the zygomatic process of the right temporal bone, and, passing my finger directly inwards along the base of the skull, and in a line with the petrous portion of the temporal bone, I found a large spicula of bone half-way between the hole and the position of the bullet. I found no appearance of effused blood in the track of this bullet inside the skull, but found a quantity of dried blood around the external opening just in front of the ear. I formed the opinion that this wound was probably inflicted directly after death, as I should have expected to find evidences of blood in the track of the bullet had it been fired during life. The injury was of old date, and probably inflicted when life was ebbing, or directly after death.

A cut two inches long extended from the right side of the thyroid cartilage upwards to the left angle of the lower jaw, dividing all the tissues down to the vertebræ. The larynx was partly divided, and the cut, shallow and superficial at first, enlarged towards the left, and went deeply upwards under the angle of the jaw. It nearly divided the body of the third cervical vertebra, and extended through the transverse process on the left side. The surface of the wound was retracted and dried, quite the reverse of the flaccid and soft appearance of the cuts separating the limbs and trunk. It appeared to have been inflicted from the front, upwards and backwards; it was a clean cut, and must have been done with a sharp instrument. The incision in the vertebra was dark and dry at the edge, but the deeper portion was clean and very fresh-looking. I saw no appearance of blood in the wound, but there was a quantity of clotted blood around the left ear, and the hair on that side was matted together with blood. I could form no opinion as to whether the cut was inflicted during life or after death, but it certainly did not appear a recent cut. About the cut in the vertebra I was much puzzled. The fresh-looking and moist surface of the deeper part of the cut seemed to indicate recent infliction. I decided to give no positive opinion with regard to the wound in the throat. I believed it to be of old date, but I could not swear that it was not done in cutting up the body, especially as the tissue of the face and neck was much drier than the other portions of the body, and the parts had necessarily been somewhat more exposed during the careful examination of Mr. Larkin in the preliminary examination.

There were four teeth absent from the mouth—one upper incisor, one canine, and two lower incisors. They had evidently fallen out during decomposition. The canine and one of the lower incisors were afterwards found and replaced. The first bicuspid of the upper jaw was decayed to the root; all the other teeth were sound. The wisdom-tooth of the left upper jaw was still uncut, and the mucous membrane had to be removed to expose it. The upper incisor was slightly prominent. The cartilages of the ribs were not at all ossified. The bones of the skeleton were light and small, the cancellous tissue abundant, and the articular surfaces were cartilaginous and soft. The epiphyses had united at the parts I examined—viz., the neck of the femur, the head of the humerus, and the articular surfaces of the tibia. From the above appearances I inferred that the age of the deceased was from twenty to twenty-five years.

The above is the substance of my report to the Treasury after my first examination. The subsequent examinations were made in the interest of the prisoner and in the presence of Mr. Aubin, a surgeon appointed to watch the case for the defence. My acknowledgments are due to Mr. Aubin for the courteous behaviour and proper spirit with which he approached the investigation. During the course of it three more important observations were made. First, the discovery of the scar, which I was induced to look for through having heard Mr. Lane say before the magistrate that his daughter had a scar on one of her legs, but he did not know which. I first scraped the adipocere from the left leg, and failed to find one, but on carrying out the same process on the right leg, found most unmistakably a raised fibrous scar situated exactly over the fibula, about two inches below the head. It was about the size of a shilling, rather elongated from above downwards and backwards. The skin in front was healthy, but much puckered and drawn, and at the back there was the usual white discolouration found after a burn or scald. The fibrous portion was brown and raised, almost keloid in its character, being at least an eighth of an inch thick.

We next turned our attention to the hands and feet, which were exceedingly slender and much dried; the nails were long, and there was no mark of a furrow on the ring finger. The feet measured eight and a half inches, and on comparing them with a boot of Harriet Lane's it was evident it would fit. Finally, we adjusted the parts as accurately as possible, which was not easy, owing to one or two vertebræ in the neck having got loose, and from the chopping up of the neck of the femur, which rendered it very difficult to fix the thighs in the exact anatomical position; however, we did our best, and after several trials found the exact measurement of the height was 4 ft. 11½ in.

I took possession of the third cervical vertebra and of the scar. I also cut off some of the hair, which I afterwards compared microscopically with some hair taken out of the grave at Whitechapel by Inspector Fox, and likewise with some hairs found on a hatchet and spade. Mr. Larkin took charge of the uterus, and of the pad and hair-pins found at the back of the head, in which he found subsequently a bullet flattened against the hair-pins.

(To be concluded.)

THE WATER-SUPPLY OF THE METROPOLIS.

NEARLY a hundred pages of the last Report of the Rivers' Pollution Commission are devoted exclusively to the past and present history of the water-supply of the metropolis. The quality of the London water has been the subject of many investigations, and as long ago as 1828 a Royal Commission was appointed to inquire and report upon the subject, and a more complete system of filtration was recommended. It was found, however, as had been predicted, that mere filtering could not, and does not, remove organic matters in solution, and that when the Thames, during heavy rains, received the flushings of the sewers, streets, and cesspools, the drinking-water supplied was often execrably bad in quality. No changes as to the intake were, however, made until 1848, when the Lambeth Company obtained an Act authorising them to remove their intake from Lambeth to Thames Ditton, above Teddington-lock, and consequently beyond the reach of the London sewage. In that and the following year the metropolis was severely visited by epidemic cholera, and in 1850 the General Board of Health (consisting of Lords Carlisle and Ashley, Mr. Chadwick, and Dr. Southwood Smith) reported decisively that in consequence of its hardness and its various modes of pollution, the Thames water ought to be abandoned for domestic purposes. In the following year another Commission was appointed to examine into the proposed new sources of supply, and the unfitness of the water procured both from the Thames and the Lea having been further demonstrated, an Act was passed in 1852, providing, among other things, that no water shall be taken by any company supplying the metropolis below Teddington, or from any tributary of the river within the range of the tide; that all storage reservoirs within five miles from St. Paul's shall be covered, and all water supplied for domestic purposes filtered. The immediate results of this Act were to remove the intakes of all the companies above Teddington-lock. The East London Company also moved its intake beyond the reach of the tide in the Lea, and the Kent Company, having abandoned the polluted Ravensbourne, obtained its supply henceforth from deep wells sunk into the chalk. These alterations effected a very material improvement in the quality of the water supplied to London, and the result was a great saving in human life during the subsequent cholera epidemics of 1854, and especially of 1866. Official inquiries were again made in 1856 and 1857, with no very special results, and in 1865 the first Rivers' Pollution Commission was appointed. The report appeared in the following year, and the evidence shows most indubitably that, as regards both the Thames and the Lea, the water is polluted above the intakes of the various Companies by the sewage of the towns through which the streams flow, as well as from drainage of the land and other sources. Some very unsavoury details are given in the report before us relative to the Lea, from which the East London Company still take their water, and since 1866 no amelioration has taken place in the condition of the river. The next Commission, which was presided over by the Duke of Richmond and consisting of Sir John Thwaites, Colonel Harness, Sir Benjamin Phillips, Mr. T. E. Harrison, and Mr. Prestwich, reported in effect "that there is no evidence to lead us to believe that the water now supplied by the Companies is not generally good and wholesome," and that "when efficient measures are adopted for excluding the sewage and other pollutions from the Thames and the Lea and their tributaries, and for ensuring perfect filtration, water taken from the present sources will be perfectly wholesome." Experience, however, teaches that these last conditions are wholly impracticable. A large amount of evidence as to the transmissibility of certain diseases by the agency of water and other kindred subjects is quoted by Mr. Simon, Drs. W. Farr, Parkes, Odling, Playfair, and Angus Smith, and elaborate analytical tables are appended, showing the comparative quality of the various waters supplied. London is at the present time supplied by eight private companies, six of which take their water exclusively from the Thames and Lea. The New River Company takes the water it distributes chiefly from the Lea, but partly from springs and deep wells, and the Kent Company supplies deep-well water only. This last, the only really good supply (and the only one which the Commissioners recommend should be retained) is obtained from wells situated at Deptford, Charlton, Plumstead, Crayford, Shortlands, and Belvedere. Upwards of 42,000 houses are thus supplied with about 9,000,000 gallons of water daily. The shafts of these wells are lined with cast-iron cylinders from 70 to 100 ft. in depth, and are thus properly protected against surface infiltration, and from the bottom of the shafts bores are taken to the full depth of the wells. The Commissioners remark that the sole defect of this water is its hardness, and record an opinion that "the supply of such water, either softened or unsoftened, to the metropolis generally, would be a priceless boon, and would at once confer upon it absolute immunity from epidemics of cholera." There are, however, besides the sources of supply abovementioned, a large number of public pumps drawing their supplies from shallow wells. In 1872 a return of these wells was moved for by Mr. Kay Shuttleworth, and analyses of waters taken from them proved them to be, with few exceptions, highly infected with all kinds of contamination. The water of only three of these wells is, as we recorded last week, fit for drinking purposes. The chapter closes with a detailed description of a scheme, by Mr. J. F. Bateman, for bringing to London some of the hard waters of the Severn, and one by Mr. G. W. Hemans and Mr. Hassard for a supply from certain lakes in Cumberland. The estimated cost of the former would be about eleven and of the latter more than twelve millions. But the Commissioners give strong reasons for their opinion, "that the whole of the metropolis and its suburbs should be supplied exclusively with the spring and deep-well water of the Thames basin," because it is excellent in quality, abundant, and within a moderate distance of the metropolis.

TRICHINOSIS.

EPIDEMICS of trichinosis are not frequent, but those which occur and are recognised are so wide spread as to render it increasingly evident that the disease has obtained and maintains no limited foothold. From the east and the west news of its occurrence reaches us. In Germany, indeed, its existence seems to be well looked for, and a corresponding decrease in the disease may be expected. It is evident that its ravages have been already checked by careful scrutiny of pork. In the district of Brunswick, according to the report of Dr. Uhde, only twenty affected pigs were found out of a total examined of more than 100,000. Eighteen of these were, however, found in the city of Brunswick. But from America the account is less reassuring. We have received from Dr. Sutton, of Aurora, Indiana, an instructive account of a carefully investigated outbreak of the disease which occurred in that town in 1874, in which nine persons were attacked, three of whom died. The disease in each could be traced to the same cause; all had eaten of some uncooked smoked sausages made from the meat of a pig which was subsequently shown to be full of trichinæ. The symptoms were mainly those of gastro-enteritis; muscular pains were conspicuous in only a few instances. In one of the fatal cases, however, the muscular tenderness was so great that the patient could scarcely be moved, and persistent general œdema was very marked. In this case examination of the patient's muscle after death showed it to be so crammed with trichinæ that their numbers were estimated at 100,000 in every cubic inch. In the other two fatal cases, although the circumstances of outbreak and symptoms were the same, scarcely any trichinæ were found in the muscles, the post-mortem appearances being those of gastro-enteritis. One or two trichinæ were found in the intestinal wall. In the first case the general œdema and muscular tenderness occurred in ten days from the onset of the gastric symptoms, and as a week is considered necessary for the development of the young trichinæ in the alimentary canal, their diffusion into the system must have been effected with great rapidity.

The resemblance of the symptoms in two of the fatal cases, and in those which were not fatal, to a simple inflammation of the alimentary tract, is a fact of much importance, which was further confirmed by experiments on dogs. Its importance lies in the fact that while trichinosis had no place in the Registrar-General's returns in America a few years ago, dysenteric and enteritic affections produce a great number of deaths, and Dr. Sutton brings forward facts to show that a considerable proportion of the pigs killed in the Western States are affected with the disease. Microscopic examination of the flesh of several thousand pigs killed in South-eastern Indiana showed that from 3 to 16 per cent. were affected with the disease. The Western States are the chief pork-producing districts. It is estimated that in them five million pigs are killed and sent away each winter, their flesh being the chief animal food of a large portion of the population of the United States. If only 4 per cent. of these pigs are diseased the number of affected animals annually sent to the American market is upwards of two hundred thousand! If it be true that in 90 per cent. of the cases of trichinosis the chief symptoms are intestinal, trichinosis may have been effecting serious unsuspected ravages for many years.

With reference to the alleged identity of "hog cholera" and trichinosis, careful examination of the flesh of six animals dead of the former disease failed to show the slightest evidence of trichinæ, and the two diseases are therefore regarded by Dr. Sutton as distinct. Three out of four cats fed on diseased meat were found to be swarming with trichinæ; in none of forty-two rats and of eight moles examined could any trichinæ be found.

THE LANCET.

LONDON: SATURDAY, DECEMBER 11, 1875.

The representatives of the English Examining Bodies interested in the formation of a Conjoint Board held a meeting on Friday, the 3rd instant. The meeting was private and deliberative. Nevertheless, we presume that we shall not do any harm by announcing that the general feeling of the representatives was decidedly favourable to the scheme. It was resolved to invite the Society of Apothecaries to send two representatives to the conference. Hitherto this Society has been incapable of joining in the negotiations. It has lately been empowered to do so, as our readers know, by a special Act of Parliament; and, as the will is not wanting, we may expect its representatives to be present at the next meeting of the Conference, to be held on Thursday, the 23rd inst. It was further resolved, at the late meeting, to request the College of Surgeons to state what changes it desires in the scheme agreed to by the Committee of Reference. The College will probably make a statement of such changes, which will be considered at the meeting on the 23rd.

It seems to be felt on all hands that the present opportunity of effecting a practicable Conjoint Scheme may be a final one, and ought therefore to be seriously used. There is an impression abroad that any difficulty which now remains rests with the Royal College of Surgeons, who are supposed to be tenacious of their influence in the nomination of Examiners in Surgery. The Conference has taken a respectful course in asking for a formal statement of the views of the College. We must remember, too, that the present Conference takes place on the invitation of the President of the College of Surgeons. Taking all these things into consideration, we are hopeful that we may soon have to announce that differences have been removed and rival feelings and claims adjusted. Whatever may be thought of the probable working of a Conjoint Scheme in England, there can be no doubt that the English bodies will gain much credit by agreeing to such a scheme. They will set an example which Ireland and Scotland will not find it easy to ignore. The College of Surgeons has most to lose by a Conjoint Scheme; but it has also much to gain. If it shows an obstinate resistance, it may retain its great privileges a little longer; but it will fare worse when inevitable changes do come. We hope it will show, at this supreme crisis, that it knows when to yield.

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The employment of the cold bath as a routine treatment in cases of fever has only of late years come into vogue in this country; and even yet it has been carried out but indifferently, and has not received the full amount of attention that it deserves. It is too often restricted solely to cases of hyperpyrexia, and its full value as a great and powerful antipyretic agent has yet to be appreciated. One of the greatest obstacles in the way of its employment lies in the trouble and disturbance involved in the procedure; but even these are but minor difficulties in the path which cannot prevent its general adoption if it be really of such value as its supporters make out. Professor Liebermeister has long been known as one of the highest authorities upon febrile diseases; and his article on Typhoid Fever in the new "Cyclopædia of Medicine" is one of the most valuable contributions to medical literature that have appeared in our day. We propose to review here the arguments which he adduces in this article in favour of the employment of the cold bath, taking occasion to point out in what direction his method departs from that usually followed in this country. The material he has had to work upon has, indeed, been vast; for, as he tells us, in six years—viz., from 1865 to 1871—no fewer than 1900 cases of typhoid fever passed under his care at the hospital of Basle! For the purposes of comparison, however, between the cases treated prior to the general adoption of the cold-water plan and those subsequently so treated, Liebermeister takes but 1743 of those cases; of which, 861 were treated under the old *régime*, and 882—the total of the last three years—upon the new system.

Starting with the axiom that by "far the greater number of those who succumb to typhoid fever die from the effect, directly or indirectly, of the fever heat," Liebermeister points out that antipyretic therapeutics must form the basis of the rational treatment of this (as of any other) fever. And chief among all antipyretics is to be ranked cold water, of which the history of its introduction as a therapeutic agent by Currie in the eighteenth century, its subsequent neglect, and its revival on the Continent in comparatively recent times, is now too well known to bear repetition. Brand and Jürgensen, however, deserve to be remembered for the active part they took in the advocacy of this method, and to them Liebermeister accords all due honour. He then proceeds to give brief but clear directions as to the best means by which such treatment can be carried out, premising that, although the main object is the abstraction of heat from the body, the manner of performance should be such as produces the desired result with the least inconvenience to the patient. We know no work, except that of Brand, wherein such rules are so precisely laid down as they are here. Authorities—in this country at least—differ as to the degree to which the water in the bath should be heated when the patient is first put in it—whether it should be, say, 90°, and then gradually cooled to 70° or lower; they also differ as to the duration of the bath—whether this should be prolonged until the temperature of the body falls to normal, or whether it should be comparatively short and reliance be placed on the subsequent fall (which invariably occurs) in the temperature of the body. We have known cases where, in spite of the cooling of the water, the time taken in the fall of the body temperature has been so slow that the patient has been kept in the water for an hour and a half, supported by stimulants, taken out almost in a condition of collapse, and requiring the application of external warmth to neutralise the depressing effects of the long immersion! Such treatment Liebermeister sternly discountenances, and, however much it may have produced the desired effect of reducing the temperature, it is surely at the expense of the patient. Moreover, in such cases, the reaction is often disagreeably sudden and severe, so that within an hour or two the whole process has to be repeated. The plan followed by LIEBERMEISTER is, in brief, this: The patient is wholly immersed in water at a temperature of 68° F. The duration of the bath does not exceed ten minutes, and in the cases of feeble persons the duration should even be reduced to seven or five minutes. A short cold bath, he avers, has much better effect than a prolonged tepid one; except, again, in the case of very prostrate patients, for whom a bath of 95° gradually cooled to 72°, as recommended by ZIEMSSEN, is to be preferred. The indication for the bath is the safe and sure one obtained by the thermometer, a temperature of 103° in the rectum or 102·2° in the axilla being the usual limit to be allowed before having recourse to the bath. The frequency with which the bath should be repeated is entirely governed by the same standard; and, other things being equal, the number of baths required will be in exact proportion to the severity of the fever, the severest cases requiring a repetition of the treatment every two hours; while in some instances, Prof. LIEBERMEISTER tells us, the total number of baths required by one patient during his stay in hospital exceeded two hundred. As a rule, however, four or eight baths per diem suffice.

We have dwelt thus fully on the directions of Professor LIEBERMEISTER because it seems to us of the highest importance that, if this treatment is to be introduced into this country with any measure of success, it can only be by the adoption of a uniform scientific method, and not by the restriction of the treatment to cases on the verge of death from hyperpyrexia, nor by a too blind adhesion to the belief that a mere reduction of the temperature of the body to the normal is all that is requisite. Before, however, urging the general adoption of these measures, which would have to be applied in almost every case of fever, it is but right that the evidence adduced in its favour by LIEBERMEISTER be considered. This we may now proceed to do.

First of all comes the question of the effect of the bath on the course of typhoid fever itself. Does it in any way hasten the process of recovery, and help in the elimination of the poison? To this question a negative answer must, we think, be given. And at first sight even facts seem to point the other way; not that the duration of a first attack is retarded, but that it renders the patient more liable to relapse. Thus LIEBERMEISTER gives a percentage of relapses of 7·4 before the introduction of this treatment at Basle, as against 9·4 after the innovation; while the mortality in the relapse was five times as great. But he at the same time points out a fallacy in taking these statistics, which are based on the whole number of cases under treatment; for he says that formerly the mortality in the first attack was higher than now. Taking, then, only those cases in which a first attack has been passed through, the relative proportions of the two percentages are diminished, being on this basis as 9 : 10·3, instead of as 7·4 : 9·4. It must be borne in mind that relapses may occur more frequently now simply because those patients would have died earlier had not the cold bath been employed. However, he believes the question to be an open one, the evidence being in favour of a progressive increase in the frequency of relapses *pari passu* with the more extended application of this method. The same fact has been noticed by BIERMER.

One other question of great practical import in the use of cold water in typhoid is that which relates to pulmonary complications, so frequent and so baneful in their effects. Here the balance of statistical evidence adduced by LIEBERMEISTER is strongly in favour of the treatment. Thus, using the same number of cases already mentioned, he has noticed that, whereas before the treatment the frequency of pneumonia was 7 per cent., with a mortality among those so attacked of 50 per cent., since the cold-water treatment the average frequency of this complication has fallen to 6·4 per cent., and its mortality to 30 per cent. This diminution in the fatal cases of pneumonia is one of the strongest arguments in favour of the general adoption of this method. A like satisfactory and well-marked diminution in the frequency and mortality of hypostatic congestion and other pulmonary complications has also been noted, so that he says with truth that "affections of the respiratory apparatus occur rather more rarely and run their course with less severity under the cold-water treatment than under any treatment which is not antipyretic."

There is no need to point out further the value of the bath as a sedative—its marvellous effects in calming delirium and all the series of nervous symptoms attributable to high temperature,—for these are well known and have been fully insisted on by all those who have recorded cases of hyperpyrexia so treated. Nor is there any need to point out how it acts in steadying and controlling the action of the heart, changing in a brief space a feeble thready pulse into a moderately full, regular, and soft one. The simple fact that remains from the study of such advocacy as is here presented to us by LIEBERMEISTER is: that, of all antipyretic agents, the cold bath stands pre-eminent (over even other modes of cooling—as by affusion, the wet pack, &c.) both as to its certain action and as to its ready application. We can do no more than urge our readers to the perusal of this valuable and suggestive monograph, which will do much to establish the "Cyclopædia of Medicine" in the high rank it promises to take. If every article in the fifteen (or more?) volumes contain as much original thought and clear statement as this one, the work will indeed be of enduring value.

THE publication of the Report on Sanitary Measures in India, 1873–74, enables us to illustrate from another point of view the observations we made three weeks ago suggested by the serious interruption of the Prince of WALES's tour in India on account of prevalence of cholera. Dr. JOHN SUTHERLAND, in the letters with which he has favoured us, taking exception to our observations so far as they related to the Army Sanitary Commission, has failed to note their precise significance. Dr. SUTHERLAND writes under the impression that our observations were prompted by a desire to support a particular theory of cholera diffusion. They had a much wider scope, and referred to the discussion by the Army Sanitary Commission of complicated questions of etiology, and the expression of opinions thereupon, from data which the Commission itself had shown to be, or which it should have been obvious were, worthless. This is no question of water theory or any other theory, of one disease or of another, but a question which lies at the root of sound investigation of every disease and condition of disease whatever. To take, however, Dr. SUTHERLAND's suggestion, the "water theory" in relation to cholera is readiest to hand to illustrate our meaning beyond the possibility of mistake. In the India Office Report referred to, the Army Sanitary Commission undertake to answer, among other questions put to it by Dr. CUNINGHAM, the Sanitary Commissioner with the Government of India, the following:—"Is there anything in the evidence given in my Report [referring to his Report of the Cholera Epidemic of 1872 in Northern India] to support the idea that cholera was spread by specific poison drunk in water?" To this the Commission replies: "Without prejudging the results of more extended inquiry, and supposing that every obtainable information on the subject during the epidemic of 1872 has been recorded, the Committee has been unable to discover any evidence in support of the conveyance of cholera infection in drinking-water." Now, the kind of information upon which this conclusion is founded is thus described by the Commission in its special memorandum on that Report (the italics are our own): "One section of the notes [of local inquiries attached to Dr. CUNINGHAM's Report] refers to local sanitary conditions accompanying the great mortality among British troops in 1872. These notes *purport* to have been drawn up at affected stations by local sanitary advisers, and yet we can find little to help us to reply to the main practical question raised by this Report—namely, what removable local conditions can be grappled with so as to diminish the susceptibility to cholera among troops in future. *In regard to some outbreaks no allusion is made to the subject. In most cases the information is limited to casual remarks about the drainage or about the wells.* As no reference is made to the condition of the water-supply, as shown in the reports on water analyses at the stations, there are no means of estimating the relations between the quality of water and the amount of cholera. *There is no evidence to sustain a current theory that cholera poison conveyed in water is the cause* [!] *of cholera.* So far as any real sanitary information is concerned, *these local reports contain little of any value.*" In other words, information of a nature which would have discredited an ordinary inspector of nuisances in this country, and which would be insufficient to meet the simple practical sanitary requirements that should result from the performance of his functions, is held by the Commission sufficient to enable it to pronounce an adverse opinion regarding a mode of diffusion of cholera which has the assent of the men most competent to judge in this country. The information, it should have been obvious, was worthless for any purpose whatever; how unutterably worthless is especially shown by Dr. H. BLANC in his account of cholera in Yerrowda Central Gaol this year, published in THE LANCET of the 21st August. Here, as in every other instance that we have yet seen where exhaustive inquiry has been made in India, the results have been the same as obtained in this country.

On evidence similar in character to that referred to above, the Commission has not hesitated to express the opinion that Dr. CUNINGHAM's Report "has brought certain important questions regarding cholera to an issue"; adding, that "the appeal now made sets aside all opinions and theories, and requires to be answered solely on facts." On like evidence the Commission itself discusses questions of immunity of districts from cholera, of the dormancy of the disease, of the significance of solitary cases, &c., and in each instance to set aside as doubtful or worthless European experience. So also it deals with questions of the distribution of small-pox &c., amusingly unconscious that opinions commonly taught in European medical schools, respecting which it affects to see doubts, have been formed with full regard to all the supposed difficulties which puzzle it. But in the recent India Office Report chief interest attaches to a memorandum of the Commission on enteric fever. Here, as in the case of cholera, the Commission proceeds to discuss the etiology of the disease, and to raise doubts as to the soundness of European teaching, upon information just as worthless as that which it used regarding cholera. For anything that appears to the contrary in the memorandum, MURCHISON might never have written. It first describes generally, and inaccurately, the common conditions of filth under which enteric fever is usually observed to prevail in England. Then it proceeds to inquire to what extent these conditions are observed at military stations in India, and, finding that they are not present in any gross amount, it infers that English opinion on the subject will not apply to Indian experience. The fallaciousness of this argument is apparent. It ignores wholly the experience of palaces, of barracks, of schools and other public buildings, and of fairly ordered English towns, such as Croydon and Eastbourne, which might have most fittingly been compared with presumably controllable and controlled military stations. The Commission quotes the Surgeon-General's opinion, that the evidence collected from medical officers' reports leads to the conclusion that the disease "could not be satisfactorily traced to any special local insanitary condition, beyond perhaps some defects of surface drainage." In illustration of this the Commission gives a summary of the reports on the sanitary state of stations in which enteric fever had prevailed, and this is the staple matter: Water—"quality *generally* good." "Drainage imperfect; present drains choked with grass." "Water ought to be filtered." Tank water—"several grave sources of defilement running into the tanks." "No *observed* sanitary defects." "Sanitary arrangements *generally* good." "Soakage into floors and defective drainage; *no special causes of enteric fever dwelt on*"—and so forth, in every instance. Upon these notes the Commission observes that they "*contain all that is at present known* as to the local causes of enteric fever"; but yet it considers itself justified in expressing doubts as to the well-ascertained results of European knowledge on the subject! Nay, more. Although the existence of enteric fever among the native population became first known only in 1873, the Commission writes as if this important fact had no bearing upon the question of the causation of the disease among the troops! Equally astonishing is the fact that it does not appear to have observed that the figures of the mortality from enteric fever among the troops quoted by the Surgeon-General is very high as compared with that of the male population at the same ages in agricultural districts of England.

The Army Sanitary Commission appointed to deal with sanitary works has done excellent service in this direction at home, in the colonies, and in India; but in undertaking to deal with questions of etiology it has taken upon itself a task for which, by its constitution, it is eminently unfitted. Nothing but mischief can arise from the factitious importance which it has given to certain opinions which have been recently broached in India on the etiology of cholera and enteric fever—not on account of the opinions, but on account of the encouragement thus offered to perfunctory inquiry and perfunctory sanitary supervision. The crude comments of the Commission act, as we have good reason to know, like a dead-weight upon Indian sanitary inquiry and work, discouraging the efforts of capable men; they, in fact and of necessity, from the important relations of the Commission to the India Office, largely neutralise the teaching of Netley. The gravity of sanitary questions in our great dependency requires very different treatment at the India Office. Under present arrangements sanitary questions and work in India are drifting towards hopeless confusion. To meet the exigency of the occasion, the India Office would do well to call Professor Parkes to its aid. His transference to the India Office as the head of a medical sanitary department, would best meet the present requirements of the India Office in medico-sanitary matters, and would best satisfy the profession and the public that due justice was being done to them. Professor Parkes might well be spared now from Nétley for this great work, and his presence in the India Office would infuse at once a healthier life into Indian sanitary administration.

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Mr. Secretary Cross has expressed an opinion that nearly all which can be done in the way of Sanitary Reform is to remove legal obstacles and help the masses to help themselves. Nevertheless, the passing of Acts of Parliament to facilitate the wise ordering of public or social affairs is not *legislation*. This should be borne in mind, because, while it is quite true that the best way to get a reform thoroughly carried out is to induce those who are responsible for the *status quo* to undertake its accomplishment, if the change needed is not entirely local and capable of being achieved by local action, trusting to local effort is sure to result in a want of harmony when the general effect comes to be realised. This is precisely the evil which is likely to ensue from permissive-law making in relation to matters medical. The concerns of public health are not of a class to be left to spasmodic local enthusiasm. The population is—like the old Hebrew symbol for people, water—subject to all the laws of transfusion and intermingling. Diseases spread; conditions of health or unhealthiness insensibly extend and become common to the whole community. The attempt to stamp out a malady in one locality, without applying the same or equally effectual measures for its extinction in other localities, is like the super-sagacious policy of Bumbledom, which, by the adoption of particularly severe labour-tests or imprisoning all the tramps and vagrants, in a single parish, drives the troublesome forms of pauperism into the next parish, and then claims credit for having performed a national service. No real good can be done, or a single satisfactory step taken in the interest of general public health, unless such measures are adopted as will reduce the sum of disease in the country at large, and this is not to be achieved by simply stimulating local zeal and enterprise. We do not mean to imply that local reforms are not useful in themselves, and in a very distinct degree tributary to the general advantage. No doubt, if every department did its duty, the national organisation, as a whole, would be largely benefited. But this is not the light in which State responsibility justifies a Government in treating the obligation to rule for the national good. Looking at the matter from the local standpoint, it is clear that every locality is bound by the code of honour, no less than by self-interest, to do the utmost within its means to advance the general welfare and prosperity. But looking at the matter from the central government point of view, it is necessary to treat the general need as calling for general measures to satisfy its requirements. An appeal to the males of the population to arm themselves, coupled with the grant of a small sum of money, by way of loan, to purchase arms, would not obviate the necessity of organising and maintaining a national army, even though it were required that a drawing of every firearm should be sent up to London to somebody to be inspected, confirmed, and signed. It may be desirable to encourage the formation of local corps of yeomanry and volunteer battalions, but nothing short of an imperial measure of defence would suffice to protect the empire against a formidable enemy. Precisely the same principle applies to the protection of the community against disease and the host of morbid influences which are rapidly tending to a deterioration of the stock and lowering the vitality of the nation.

We think it desirable to call attention to these very obvious considerations at this crisis, because there is already grave reason to fear that much of the local enthusiasm which fired up so rapidly under the first influences of the Artisans' Dwellings Act and the newly codified Public Health Acts will end with a mere flash in the pan. There are signs of exhaustion, which may issue in collapse. It seems as if the unaccustomed outburst of energy had used up all the strength. We hear of grand schemes of improvements being frittered away, of zealous officialism growing faint-hearted, of second thoughts being preferred to the good resolutions born of sudden convictions. It would be a great pity, and altogether a most deplorable and humiliating eventuality, if, after the generous warmth stirred by recent measures, there came a period of cold and selfish parsimony. There would not be so much danger of such a calamity if the Government of the day had not trusted wholly to the *vis a fronte*. As the case now stands, there is really nothing in the shape of *vis a tergo* except the medical officers' "representations"; and while we have great confidence in the wisdom and independence of medical officers of health, it is impossible not to recognise the extreme difficulty of their position, and the multitude of formidable obstacles which beset and embarrass a resolute and adequate discharge of their duties. It is not necessary to urge, more earnestly than we have already pleaded, the needs of the situation, or to incite these gentlemen to remember and perform the full extent of their task. That high sense of rectitude and fearless self-respect which have happily animated and inspired our profession in all public emergencies may be safely trusted to produce their proper fruit at this season. It is, nevertheless, impossible not to feel that too much has been devolved on men who, however self-sacrificing and energetic, are after all only human, and for the most part more dependent in fact than they may seem in theory. How very different would be the position of affairs at this moment if, instead of being wholly permissive, the Acts recently put in force had been compulsory. Besides the improved security for action to which we have already alluded, there would have been uniformity in the measures adopted. Something, possibly, may be gained by emulation; but this is a broken reed to lean upon. It would have been incomparably better if a visitation of localities, under central authority, had been made the basis of local action; thus relieving the local medical officer from the onus of initiating a costly scheme, which must often entail a loss of personal popularity, and supplying him with an incentive to exertion. As it is, everything in the shape of responsibility devolves upon the medical officer of the district, and with it goes the penalty of striving to reform where a tacit countenance of evil would, in nineteen cases out of twenty, be infinitely more agreeable to local authorities and district ratepayers. Then, again, why has the important question of payments to medical officers been left to those against whose financial interests these gentlemen may be required to act? Not only is there a conspicuous want of uniformity in the pecuniary value attached to the services of a medical officer of health in different districts, but the want of any guiding principle leaves each local authority to suit its own convenience, both as to the class of officer it selects and the manner in which his services are remunerated. It is important that these anomalies in the working of the Acts, bearing as they do upon the general result should be brought under the notice of the public, the profession, and the Legislature. We cannot but feel that the aspect of affairs is less encouraging than it was only a few weeks ago. Something very like a dead-lock has occurred in some localities, and in others there are tokens of wavering purpose and flagging zeal. It would be well if medical officers of health generally could be induced to speak out promptly and candidly in the professional press as to their difficulties. We shall be glad to hear their complaints, and strive to help forward the redress of their grievances.

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THROUGH the indiscretion of a contemporary the private, but imperfect, official list of the names of some of the gentlemen who are candidates for the new Board of Examiners in Anatomy and Physiology at the Royal College of Surgeons of England, was made public last week. It is scarcely necessary to say that, although that list was well known to us, we did not, for one moment, think of publishing it, partly in consideration of the feelings of those gentlemen who had applied for the office of Examiner, and partly because the document itself was of a confidential nature. We, nevertheless, feel at liberty to make some general comments on the nature and character of the applications, and to discuss the general merits of the applicants. It must, however, be premised that some important names have now to be added to the first list which may very materially affect the ultimate issues of the election. On looking over the names we are forcibly reminded of the difficulty that we foresaw and pointed out in a recent number. The list contains a large number of anatomists, some of whom have obtained a high reputation, and the selection must necessarily be difficult where the claims of many are so nearly equal. A due but not exclusive regard to the principle of seniority, and to the necessity of choosing the examiners from different schools, so that the two larger ones shall not be over-represented to the prejudice of the smaller ones and of the provincial schools as at present, will be the main guides to a fair and judicious choice, and, so far as the anatomical portion of the Board is concerned, everyone will probably be satisfied. But with regard to the Examiners in Physiology the position is quite different. Most of those who will probably be selected for their anatomical knowledge have no special acquaintance with modern physiology, and in this respect their election will not make the new Board any stronger than the old one. There are only five candidates out of the twenty-one who profess to have taught, or who are teaching physiology, and among these there is no name of any teacher of eminence in that science, or of anyone who has qualified himself for such a post by any experience as an examiner elsewhere. In fact, the present Court of Examiners comprises two excellent physiologists in Messrs. MARSHALL and SAVORY, and it will be quite impossible to make the new Board as strong in this respect by any selection whatever from the present list of candidates. The reason is not far to seek. Most of the physiological teaching in the Medical Schools, not only of the metropolis, but throughout Great Britain, has been and is being done by physicians. The restriction of the new Board to Fellows of the College, although in accord with the conservatism of Lincoln's Inn, is evidently fatal to the scheme, which is otherwise a most satisfactory one. The only Fellows of the College who have been appointed examiners in physiology at the London University in recent years are Messrs. SAVORY and POWER, and the new Board will apparently not secure the services of either of these gentlemen. If the selection be made from the published list of candidates only, as much dissatisfaction as at present, or even greater, is sure to prevail among those who present themselves for examination, especially at the Primary Fellowship, where a full and accurate knowledge of the present state of physiological science should be a *sine quâ non* on the part of anyone who is placed in so responsible a position as that of examiner therein.

As we have already suggested, it is highly desirable that at least two gentlemen should be appointed to examine in Physiology only; and unless this be done it is certain that the new regulations will have the effect of making the necessity for a Conjoint Board of Examiners the more apparent.

DR. FRANKLAND reports that, owing to the heavy floods, the river water during November was polluted with "large quantities of suspended impurities and of soluble organic matter of brown colour." The five water companies drawing their supplies from the Thames delivered throughout the month water which was quite unfit for domestic use even after efficient filtration. The Grand Junction water gave a deposit consisting mainly of matted fungoid fibres. The Kent Company's water was, as usual, good and palatable.

Annotations.

"Ne quid nimis."

OVERWORK AT SCHOOLS.

Since competitive examinations have been regarded as affording the surest test of individual capacity, they have multiplied in all directions, and increased in severity. And as, in England at least, a reputation once made is rarely lost except through grave delinquency or manifest failure of power, we cannot be surprised that every endeavour should be made to attain, at as early a period as possible, the success by which future position is to be secured. Formerly, when competition was limited to the struggle for a college scholarship or a place in the university class-list, and the army, navy, civil service, and East India Company's appointments were only to be obtained by interest, schools were selected on different principles than are now recognised: we are speaking rather of private than public schools. Then more regard was paid to the plan and method of education, and almost every school possessed in this respect an individuality of its own. At the present time the object of education appears less a matter of steady training and the patient laying of solid foundations, than a system of successful cramming, and a school seeks for reputation more in the number of public prizes annually won by its scholars than for the soundness of its scholarship. We do not intend, however, on the present occasion to enter into a discussion of the general merits or demerits of the competitive system, but simply confine our remarks to its effect on school work.

For a considerable period after the first introduction of the competitive system the great public schools made no effort to extend their system of education. Consequently large proprietary colleges, such as Marlborough and Cheltenham, were founded in order to meet the new requirements. These establishments differed only from the public schools in affording facilities for the study of the extended range of subjects required for the public competitive examinations, the traditions and method of the older schools being, however, still closely adhered to. The success and popularity attending these proprietary colleges led to the establishment of others, though not on such a sound basis, and the multiplication of so many institutions, all struggling for fame and existence, has led, we fear, to the introduction of a very unsound system of teaching. The smaller and later founded establishments, not possessing the *prestige* or reputation of the older schools, have sought to compensate for these deficiencies in increased efforts to secure success at examinations by putting increased pressure on the boys under their charge; and in order to get lads of special promise into these establishments, inducements are offered in the shape of scholarships or reduced terms—baits too eagerly swallowed by parents of straitened means. We have examined the prospectuses of many of these schools, and we have generally found the hours of work to be excessive, ranging from forty-five to forty-eight hours a week, which give a daily average on four whole school days of eight to nine hours, and six hours and a half on two half-holidays; this calculation does not include the Sunday school-work, which may be fairly reckoned as three additional hours. Eight hours a day of mental work is a considerable strain even for an adult; how much more for mere children, who have also to expend so much force to meet the vital requirements of the growing frame. Moreover, in adult life, the work, being more mechanical, is accomplished with less intellectual excitement than is the case where fresh facts and new ideas are constantly being acquired. If the pressure came at the later period of school life, and was permitted only for a few months immediately previous to an examination, we should perhaps have little cause to complain; but, unfortunately, the whole school career is one prolonged struggle. We cannot but regard the establishment of entrance scholarships at schools as a great evil, and as a most injurious extension of the competitive system. So long as the examination and the class-list closed the school career little mischief might be done, and time afforded for deliberate and sound study; but how can that be possible when before the boy is well out of the nursery he is put in harness, and driven along certain grooves in order to snatch a premature success which if attained only commits him more firmly to the grinding system. The world is acquainted only with the brilliant and successful side of the present system. It sees duly advertised in the public press that at Mr. So-and-So's school so many candidates have passed into the Civil Service or the Army, or have gained cadetships at Woolwich, and it does not stop to inquire at what expense these triumphs have been won. How many have broken down in the training, and how many have been hopelessly discouraged? Much of the responsibility rests with the parents who countenance this practice, and who do not see that this untimely forcing can only in the end yield a sickly and feeble fruit. Parents who do not wish their sons to be sacrificed to the Moloch of "early success" should jealously scrutinise the prospectuses of the schools to which they send their boys, and if the working hours are found to be excessive, the school should be avoided. As a general rule it may be stated that thirty-five hours of school work a week for boys under fourteen, and forty-two hours for boys above that age, is as much as the health and strength can fairly stand; whilst the success that still attends the old public schools, who rarely exceed these hours, shows that they are amply sufficient for educational purposes.

MILITARY MIDWIVES.

A correspondent has lately called attention to a subject which, on the ground of humanity if on no other, deserves consideration—namely, the provision of properly qualified midwives for attendance on the wives of soldiers as a substitute for those women who, without the rudiments of the art they profess, are permitted to call themselves midwives, and practise in barracks. Our correspondent's communication has special reference apparently to the case of the Royal Marine Artillery, which is, we are informed, under the Admiralty, and not the War Office; but it is unquestionably the duty of the authorities, whether naval or military, to ensure that the lives and safety of soldiers' wives be not jeopardised in their confinements. A number of properly trained midwives should always be available to meet the requirements of a garrison or regiment as the case may be. Since Lord Herbert's time considerable efforts have been made to secure something like decency and comfort for unfortunate women under such circumstances by the erection of a number of small lying-in hospitals at military stations, and these have been to a certain extent utilised for educating women to become nurses. But the great and prominent worker in this direction has been Dr. E. B. Sinclair, King's Professor of Midwifery in the School of Physic in Ireland, Trinity College, Dublin. Dr. Sinclair, having once served as a medical officer of the Royal Scots, no doubt had his attention forcibly directed to this great want, and it falls to the lot of very few men to have achieved a larger amount of practical good than he has done. He may claim to be considered a public benefactor as far as the army is concerned, for from 1869, when a school for training army midwives was formed in connexion with Sir P. Dun's Hospital, to the present time, he has sent no less than 271 well-trained midwives and ladies' nursetenders for service in the army. From the prospectus of this institution we gather that the course of instruction is ample, practical, and excellent of its kind, and that it is open to the wives of soldiers and non-commissioned officers to obtain their education free of expense. We notice that it is under the direct patronage of Her Majesty, and with the sanction of His Royal Highness at the head of the army, and we are led to wonder whether any other recognition of Dr. Sinclair's services has been vouchsafed him than the privilege of using the names of Royal personages as patrons of his good work.

THE LOCAL GOVERNMENT BOARD: COMPULSORY LOCAL HEALTH SELF-GOVERNMENT.

THE capacity of the Local Government Board in muddling the most straightforward matters amounts almost to genius. We have now some more definite details of the course it is taking in bringing into force the 286th section of the Public Health Act, 1875. This section gives the Board powers to combine districts for appointing a medical officer of health. When this section first appeared in the Bill, we pointed out that it was an unmistakable confession of failure of Mr. Stansfeld's so-called "policy" in one of its most important details; and when it passed through the House of Commons with the approval of Mr. Stansfeld—at least with no expressed dissent from him—we commented upon its irreconcileability with that "local health self-government" which he had vaunted, and which Mr. Sclater-Booth accepted as his aim and end. Mr. A. Doyle, one of the general inspectors of the Board, who had the privilege of first illustrating the muddle of the Board's administration of the Public Health Act of 1872, has apparently been conceded a like privilege with regard to the Act of 1875. He was at Wrexham the other day, bent upon a project of combining the counties of Denbigh and Flint into a single district for a medical officer of health, and this was his process of inducing the several sanitary authorities to assent to this combination. First, he told them that when, in 1873, he had submitted a like project to them, which had been rejected, he foresaw that the choice would be taken from them. This had been accomplished by the Act of 1875, and they were now in this position that their assent to combination was quite immaterial, for the Local Government Board were quite prepared to carry out such projects of combination as it might think fit to adopt on the recommendation of its general inspectors. When it was not unnaturally asked why he then consulted the sanitary authorities on the subject, and gave them the trouble of meeting to confer upon a question they had no control over, he curtly replied that if he hadn't done so he would have been held discourteous, and that the Local Government Board would prefer having their assent to its action, although it was determined to act without it (the politeness of the headsman before decapitating his victim). If they thought fit to kick they might do so, but he warned them that it would be a useless and expensive process, involving much legal trouble, and would benefit nobody but the lawyers engaged. Speaking to a Committee of the Wrexham Town Council, Mr. Doyle is reported to have said: "'Must' was the last word he liked to use in the presence of gentlemen connected with local administration, but 'must' was the only word that would suit this case." This is "local health self-government" with a vengeance.

But this is, after all, the least, although locally the most aggravating, part of the business. Mr. Doyle told the Wrexham Town Council that the Local Government Board would in due time issue an order defining the duties of medical officers of health for large combined districts; also the duties of such assistant medical officers who might be appointed within these districts. We have more than once pointed out that the existing regulations of the Local Government Board as to the duties of medical officers of health were treated as a dead letter by the general inspectors of the Board. But here we have the Board urging the formation of districts for the appointment of officers, and requiring the assent of local authorities to them, the duties to be performed in these districts not having yet been made known or determined upon! The Board itself affects to judge of, and requires the approval of local authorities to, an organisation the fitness of which can only be determined by a knowledge of the duties for which it is made, but of which the duties are not yet known. This the general inspectors of the Board designate a policy of common sense. A course like this, which must postpone a sound local health sanitary administration indefinitely, can only be expected to be successful by its audacity.

The Wrexham Town Council has refused to be brow-beaten by the Local Government Board, and has determined to oppose the combination of the two counties. It is absurd to suppose, Mr. Doyle notwithstanding, that a court of law or Parliament would ratify a compulsory order of the Board for an organisation, the purposes of which the Board itself has not defined by setting forth the duties of the medical officers of health, which would be preposterous in view of the existing regulations as to such duties, and which, until these duties be defined, cannot be rationally discussed.

SEASONABLE WEATHER.

THERE are some people who hail the appearance of what is termed seasonable weather as a source of congratulation, and pride themselves on taking brisk exercise in all weathers, and never coddling. And, no doubt, to a man who can take his cold bath every morning with a relish (he has, perhaps, a fire in his dressing-room), who can eat a hearty breakfast (and has a good breakfast to eat), and start off in his Ulster, the present weather is not so disagreeable. It rouses him to take active exercise, sharpens his appetite, and, as he says, "pulls him together." But there is another way of looking at the weather, and it is the way, unfortunately, that most people have to regard it. An old officer, after dining at his club and sitting by his club-room fire, turns out into the street and meets a keen north-east wind; if his pulmonary and circulatory organs are not in fine working order, he contracts a bronchitis, and a rapid congestion of the lungs soon gives rise to that promotion which his juniors had almost despaired of from his having so long blocked the way. Or an individual who has long lived "regularly but well, Sir,"—that is, he has lived a trifle too well—finds that the same wind suddenly checks the action of his skin, and his liver or kidneys, which had already been working at high pressure, do not accommodate themselves to the extra amount of duty suddenly thrown upon them, and an attack of gout or sciatica is the result. The snow-sodden boots of children and the keen frosty air speedily develop chilblains; and the biting wind is a terrible test to everyone's weak places. The physician endeavours with infinite pains, and by the aid of his various appliances, to elicit information as to the nature and seat of his patient's disorder, but this weather soon makes manifest the weak and vulnerable places in a patient's system. The hitherto latent affection of a lung is suddenly developed into activity, and the north-east wind finds out the stopping in a tooth, or searches out the ends of all the nerves at all disposed to neuralgia, and it causes the benumbed and chilblained fingers of the pianist to lose their cunning. Your dark olive-complexioned man, regular at his desk in the city, but irregular as to exercise outside his office, finds himself suffering from a violent bilious attack attended with shivering, nausea, headache, and loss of appetite, and has to wrench himself from that desk to which habit has so long chained him, and about which he has boasted that he was "always to be found there at his work, Sir." If such be the evils to which the rich and well-to-do are exposed, what must be the sufferings and privations of the poor! If anyone will only attempt to realise what it is never to feel warm—and there are many poor women, and very old and young persons especially, who never know what it is to be warm,—he will have some idea of what the poorer classes undergo during the seasonable weather of which we have been tasting a specimen. When they become ill the hospital or the workhouse is open to them, and they look forward perchance to death as to a prospect of relief from physical suffering at any rate. Seasonable weather is a melancholy practical application of the Darwinian dogma; the fittest only survive in that terrible struggle for existence through which so many have to pass during the rigours of an English winter.

A COUNTY COURT JUDGE ON MEDICAL CHARGES TO WORKING MEN.

Judge Smith, of the Hereford County Court, has the merit of decided views on the subject of medical charges to working men. A case came before him the other day in which Mr. Thomas Mason, surgeon, of Wellington, Hereford, preferred a claim against William Woodhouse, of the same village, for professional attendance on Woodhouse's family, affected with fever, living two miles away. His charge was 3*s.* 6*d.* a visit. The whole sum claimed was £12 15*s.*, which included a charge of 7*s.* interest. The defendant admitted owing the sum of £11, but disputed the balance. Three and sixpence a visit, his Honour said, was too large, especially in the case of an ordinary labouring man, and he could not allow more than half-a-crown. He had one rule for medical men which he always laid down. It was this. A doctor was entitled to a minimum charge per visit of half-a-crown. If the visit had to be made to a distance the charge would be 1*s.* per mile inclusive. For instance, if a medical man had to go ten miles he would be entitled to 10*s.*; if he went five miles he would be entitled to 5*s.*, and so on. The minimum would, however, always be half-a-crown. Mr. W. Boycott, who appeared on behalf of the plaintiff, pointed out that at each visit where he had charged 3*s.* 6*d.* Mr. Mason had been obliged to drive two miles. Was he entitled to half-a-crown only for such service? His Honour replied that had he not fixed a minimum of 2*s* 6*d.*, Mr. Mason would only be entitled to 2*s.* The plaintiff said it would be impossible to work for such a sum. The prices of everything had risen so much that a medical man could not possibly support himself with such charges. His Honour replied that he could not allow more, and that the present bill must be taxed by the registrar and reduced by the scale he had named. When this had been done judgment would be given for the amount.

The Judge's view of a minimum charge is not to be complained of; but it is strange that, with so just a basis of reasoning, he should come to such a lame conclusion. In his judgment he makes no allowance for the three elements of *distance, more than one patient, grave and infectious character of cases.* We will not say that 2*s.* 6*d.* per visit might not be a sufficient allowance for the judge to sanction, but we are bound to say that it could be no adequate remuneration to the medical man, and that nothing could justify such a low allowance in the circumstances but the inability of the defendant to pay more, which was not proved or even alleged.

THE CASE OF SURGEON SPURWAY, LATE OF H.M. ARMY.

We have received a copy of the correspondence that took place between the head of the Army Medical Department and Mr. Spurway whilst in that branch of the service, in reference to the latter officer having been gazetted on half pay without half pay for a period of six months. Indignant at this proceeding on the part of the War Office, Surgeon Spurway very naturally took the further step of declining to hold her Majesty's commission under such circumstances, and accordingly sent in his resignation, which was accepted. The facts of the case, as contained in the document before us, have already received a good deal of attention and discussion, and may therefore be assumed as pretty well known. It is not disputed that Surgeon Spurway had served as a medical officer for ten years, during all of which time he had maintained an unblemished reputation; that he returned from India in consequence of an affection which, if not induced by that climate, was nevertheless aggravated by it, and that he was at the end of six months' sick leave officially informed that, there being no regulation under which he could be granted half pay, because his disability was not contracted *in* and *by* his service, it had been determined to place him on the half pay list for six months, but *without half pay.* It is, moreover, not denied that officers who have left the service on account of misconduct have been granted a reduced or temporary rate of half pay under the clause of a Warrant which is declared to be inapplicable to Surgeon Spurway's case, although it would certainly appear to anyone reading it to have been expressly drawn up to cover all those cases not provided for by a previous clause in the same Warrant. If the copy of the communications before us embody all the facts that are really relevant to the case, and if Mr. Spurway can substantiate the position he has taken up in his communications—for we need scarcely add that all turns on this,—he has a strong case against "the authorities," be they who they may; and as this matter of half pay without half pay must affect other officers besides Mr. Spurway, we would advise him to get the subject taken up in the House, in order that we may know who is answerable for the course that has been taken, and, in fact, all about this matter; and it might be well to be informed at the same time how it is that regulations are drawn up so as to express what is not intended, and conceal what is.

THE HARVEIAN LECTURES.

The first Harveian lecture at this Society was delivered by Dr. Sibson on the 2nd inst., when, in spite of the inclement weather, a large audience assembled. Taking for his subject "Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood-contamination," the lecturer in the first place dwelt at considerable length upon the results obtained by the post-mortem examination of 277 cases of Bright's disease, with special reference to the size of the heart. From this analysis he drew the following broad conclusions. That in the large majority of cases of renal disease, whether acute or chronic, there is enlargement of the heart, chiefly hypertrophy of the left ventricle. That the degree of enlargement varies according as the disease is associated with other wasting affections, in which case the organ is found to be of natural size, or even small. Thus, in 9 cases of acute Bright's disease (non-scarlatinal) the heart was small in no case, of natural size in 2, both of which were associated with wasting disease; rather large in 3, and very large in 4. In 5 scarlatinal cases 2 presented hearts of the normal size, and in 3 the heart was rather large; but of 54 examples of the large white kidney in 15 the heart was small, 13 of the cases being associated with wasting disease; in 17 the organ was of natural size, 12 being associated with wasting disease; in 8 the organ was rather large, and in 14 much enlarged. Of 106 examples of the contracted kidney, the heart was small in 4, all being associated with wasting diseases; of natural size in 25, 18 being combined with wasting disease; in 20 it was large, and in 60, or 56 per cent., greatly enlarged, and this although in 21 of the cases there was wasting disease or emaciation. He adduced other facts on the same head, into which we cannot enter now, and pointed out the effect of arterial degeneration in modifying these results. Turning to the clinical evidences of arterial tension, Dr. Sibson enumerated the characters of the pulse, the evidences of enlargement of the aorta, and the presence of reduplication of the second or of the first cardiac sounds; the former heard over the conus arteriosus, and the latter over the ventricular septum; and he related some striking examples of these signs, most of which are present even in acute cases. In fact, in the acute cases the signs of arterial tension are better marked and of more certain value than in chronic cases where other influences come into play. Dr. Sibson proposed to leave the consideration of the sphygmographic tracings of the pulse, and the bearing which these facts had on the treatment of the disease, to the second lecture, which was announced to take place on the 9th inst.

SANITARY MEMORIALS OF MILLBANK.

As the vast prison that adorns the northern bank of the Thames, near Vauxhall Bridge, is shortly to be demolished, we may fitly recall to the notice of our readers the sanitary experiences that have been gleaned within its walls. The building was erected in 1812–16, and the site is described as about the worst that could have been selected, the neighbourhood being marshy and the soil a quagmire. The foundations were consequently so insecure that, shortly after the establishment was opened, three of the angle towers sank and sealed up the passages, so that the warders could not open the doors. Six years after it was found that the general health of the prisoners began to decline, and in 1823 what is known in prison statistics as the great epidemic made its appearance. This epidemic consisted of a severe and widespread outbreak of scurvy, followed by a most obstinate form of dysenteric diarrhœa. Spongy gums, ecchymosed and blotched legs appeared, and before long half the prisoners were affected, the women being more severely attacked than the men. Some few, however, were entirely exempt, and notably those employed in the kitchens, while it was found that among the staff of officers, who with their families numbered 106 persons, not one was affected. Soon after the commencement of the outbreak Dr. Roget and Dr. Latham were consulted respecting the nature of the disease. It was speedily found that, owing to some severe Parliamentary criticisms as to the extravagant and "fattening" scale of diet in vogue, a crucial and, as it proved, a most unhappy reform was effected. Solid animal food was entirely excluded from the scale, the bread was reduced, and no potatoes were given. This evident exciting cause of the outbreak was probably aggravated by cold, for those who occupied the coldest cells suffered most. The diet was changed, meat, vegetables, and oranges were given, and the patients lost their scorbutic and also the diarrhœa. But in the summer of 1823 dysenteric diarrhœa again appeared, and affected officers, servants, and all alike. It was found, by reference to the apothecary's books, that chalk-mixture and laudanum had been frequently prescribed for some time previously. The ordinary astringents, however, in this outbreak were unsuccessful, and, after a partial success with mercury and some other remedies, it was decided to empty the prison. In May, June, and July of the year above quoted, the number of cases on the sick-list rose to 454 out of a prison population of 800 persons, and 30 deaths occurred. The prisoners were removed to the Royal Ophthalmic Hospital, then in Regent's-park, and to the hulks off Woolwich, and all quickly regained their health, though it appeared that the Woolwich detachment convalesced more rapidly than the others, whereas the few left at Millbank for some short time showed no improvement. It was therefore resolved to confer a free pardon on the female prisoners, and transfer all the men to the Woolwich hulks. This was done, the disease quickly disappeared, and after a few months the prison was re-occupied. Some years ago a slight outbreak of scurvy again occurred, but, with this exception, the prisoners have been maintained in a fair average state of health. Many other particulars of the great epidemic may be found in a Blue Book on the subject, published in 1823, in Latham on the "Diseases of the Penitentiary," and in "Memorials of Millbank," a very interesting book that has recently appeared from the pen of Captain Arthur Griffiths, deputy-governor of the prison.

WESTMINSTER HOSPITAL.

The long-talked-of improvements in the sanitary condition of this hospital have at length assumed a definite form. On the 16th of March last, a sub-committee, consisting of Sir Rutherford Alcock (as chairman), Dr. Basham, Mr. Brooke, Mr. Cowell, Mr. Richard Davy, Dr. Dupré, Dean Stanley, Mr. Charles Hood, Mr. Helmore, and Mr. W. Gilbert, was appointed to consider the whole question. This committee has, with the valuable assistance of Mr. Hunt, C.B., and of Mr. Stephen Salter, as architect, recently presented a full and exhaustive report, which was accepted on Tuesday last by the House Committee, and referred to a general board of the governors in January next for final consideration.

The recommendations of the sub-committee are briefly as follows:—The addition of octagon towers in front and angle buildings behind, by which the whole of the sculleries and waterclosets will be placed outside the building, with a connecting lobby entered from the several wards and cross ventilated; the addition of consultation and retiring rooms to the operation theatre; the erection externally, so as to be entered from each ward corridor, of bath and lavatory rooms; the addition of a new floor to part of the building, to provide wards for the accommodation of infectious and delirious patients; a complete system of ventilation by perpendicular tubes in each ward; besides many other improvements, such as alterations in the out-patient department, painting and colouring the hospital throughout, improving the mortuary, &c. These important alterations are estimated to cost nearly £8000, and will, it is hoped, be carried out next summer. The towers and buildings outside can be constructed first, so that the hospital will not require to be closed for more than six or eight weeks.

THE PRINCE'S TOUR IN INDIA.

The detailed accounts of the doings of His Royal Highness at Bombay, of which the telegraph had already briefly apprised us, have since reached this country. While it belongs to other journals to describe the splendour and variety of the scene which the city of Bombay presented, and to chronicle the vast political influence which the Prince's visit may exercise over the future history of India, we have to congratulate the nation on having so little to say in our pages from a medical standpoint. Monotony is not ordinarily the source of gratification that it is in the present instance. Our written intelligence, transmitted by the mail which left Bombay soon after the arrival of the Prince of Wales there, carries our previous information of the voyage of the *Serapis* onwards from Aden to Bombay, and it is to the effect that the Prince and all on board were well; indeed, to employ nautical phraseology, there was a clean bill of health, no one belonging to the Prince's suite being on the sick list. The *Serapis* made an excellent passage from Aden. It became cooler out of the Gulf of Aden, the thermometer falling to 78°, 80° F., with a pleasant N.E. breeze, which continued all the way; but the heat became greater at Bombay, being 82° and 83° F. on the 8th ult. The Prince was in remarkably good health and spirits, and, according to the then existing programme, His Royal Highness was to remain in Bombay until the 17th, when it was intended to proceed to the south to Beypore. The shooting expedition to the Annamully hills had not been finally settled, but depended upon the receipt of positive assurances as to the freedom of those parts from disease. Apparently nothing could have been more prosperous than the Prince's tour so far. His Royal Highness's public reception at Bombay was a most magnificent spectacle, and as far as human foresight and medical experience are concerned, the nation may confidently expect the Prince to be protected from all avoidable risks to health until the time of his return, when we anticipate seeing His Royal Highness all the better for his Eastern tour.

THE REGISTRAR-GENERAL'S HOSPITAL STATISTICS OF SCARLET FEVER.

STATISTICS are valuable in proportion as they are correct. To be able to decide upon the value of statistics requires a knowledge of facts, and of how to use them. Therefore, it is a favourite device of those who do not possess these qualifications to lose no opportunity for disparaging the value of statistics. The Registrar-General recently published some statistics upon the mortality of scarlet fever cases in the Metropolitan Asylums Board hospitals, which were full of interest, as the treatment of this disease on a large scale in hospital is more or less an experiment, the result of which has an important bearing upon the influence of hospitals for controlling infectious diseases. At a recent meeting of the managers of the Asylum District, Mr. Shaw Stewart unfortunately remarked that "he had no knowledge of where the Registrar-General might have got his figures, but he was prepared to say they were not correct." *Apropos* of this remark, our contemporary the *Pall Mall Gazette*, in a sham panegyric on the value of statistics, remarked that "they have the immense advantage over common sense and experience that they are capable of adjustment to almost any extent." It undoubtedly requires a large share of common sense to estimate the value of statistics, which are, after all, little more than tabulated experience; but it is difficult to see how mere common sense is to decide on such points as the value of hospital treatment for stamping-out scarlet fever. As to the point in dispute between Mr. Shaw Stewart and the Registrar-General, it appears somewhat remarkable that Mr. Shaw Stewart should have had any doubt as to the source of the Registrar-General's figures, since that official has from the beginning of the year been regularly supplied by the managers of the Asylum District Hospitals with copies of the weekly returns furnished by the medical officers of the institutions. Uninformed as to the source of the Registrar-General's figures, it is only reasonable to suppose that Mr. Shaw Stewart is mistaken in supposing that they are incorrect. Indeed, returns since published by the managers relate to the mortality of all patients in the Asylum District Hospitals in the six months ending September, whereas the Registrar-General's figures related to scarlet fever alone during the first nine months of this year. This is probably the explanation of Mr. Shaw Stewart's blunder.

THE LAST APPOINTMENT TO A CORONERSHIP.

DIFFERENT people entertain different opinions as to the qualifications requisite for a coroner. A legal training is held by some, just as a medical training is held by others, including ourselves, to be the best qualification for that office; but the electors in Suffolk have taken their own view of this matter, and a very original one it is, we must say. They have elected an auctioneer as their county coroner! And it was not that the electors were restricted in their choice by the limited number of candidates for the office; for at least one member of the medical and two or three of the legal profession, one of the latter being the deputy coroner, were among the candidates. The election seems to have been of a purely political character, and Mr. Chaston (the auctioneer) at a very early stage of his canvass is stated to have secured the support of several persons of influence among the county Conservatives. The use of an auctioneer's rostrum and hammer, and familiarity with the best methods of inducing people to bid for lots in an auction-room, would not appear to most people the best training for a judicial office; but the electors of Suffolk thought otherwise. The result of this election would be ludicrous were it not lamentable; and we are reluctantly compelled to inquire whether the time has not come for remodeling the system by which coroners are elected. It would be infinitely preferable to make the Lord Chancellor responsible for nominating coroners than to have their election sink into an affair of party politics, with all the concomitants of canvassing, cabs, committee-rooms, and placards.

THE DRAINAGE OF LINCOLN.

THE Corporation of Lincoln have received a notice from their engineer, Mr. Mansergh, demanding a settlement of his account for work done in preparing schemes of drainage for the town. "If," says Mr. Mansergh, "the Council intends to set the Local Government Board at defiance, and the carrying out the works is to be indefinitely postponed, I shall request to have a payment made on account of what has already been done; or if they prefer to employ some other engineer they are quite at liberty to do so on *the settlement of my account*." Mr. Mansergh writes thus plainly because he thinks "after nine years' delay, it is time some decision should be arrived at, and that he should be assured, so far as he is concerned, that the matter is either to proceed or be dropped." Mr. Mansergh's letter seems to have caused some consternation and surprise amongst the members of the corporation, but after discussion it was decided "that Mr. Mansergh be requested to send plans, sections, detailed drawings, specifications and estimates, and draft contracts for the proposed works of sewers and sewage disposal, in order that they may be investigated by the Council prior to tenders being invited; the Council being of opinion that they would not be justified in committing their constituents to so large an expenditure as that involved in carrying out the proposed works without the fullest previous investigation." In this resolution we have an instance of the craft which has enabled this "ancient municipality" to set at defiance, for so long, the mandates of Gwydyr House. The corporation have already spent nine years in making "previous investigations" with respect to drainage schemes; and in asking more time for a consideration of Mr. Mansergh's estimate, which has been before them since Oct. 2nd, 1873! they are only repeating the tactics which have been so successful with the Local Government Board. We prophesy, unless

Mr. Mansergh presses his point with firmness, that the settlement of his account, and the plans for the town drainage, will both be "indefinitely postponed."

MICRO-PHOTOGRAPHY.

There can be no doubt that histological advances are considerably hampered by the necessity of having the microscopical characters drawn by the observer himself. He can only convey upon paper the impression that he has formed of the object, and however faithful may be his representation, it must necessarily lack completeness. The application of photography to the microscope obviates this difficulty, but only to raise others equally objectionable. The photograph is too faithful a representation, and too often results in a blurred and confused picture. Dr. Luys, who has for some time devoted himself to the subject, in the current number of Brown-Séquard's *Archives*, advocates the use of this method, and illustrates his paper by a photograph prepared by a new process of a section of the cortical matter of the cerebrum. But we are bound to say that the specimen thus given does not appear to us to aid the histologist. At the last meeting of the Medical Microscopical Society (which, by the way, is by no means so well attended as it should be), Mr. G. Giles gave a clear and interesting description of the means he has adopted to ensure good results in micro-photography. We need not here enter into a full description of his apparatus, except to mention that it is so arranged that the camera is directly connected with the microscope, the light being thrown on the object by means of a three-inch condensor, with ten inches focal length. Mr. Giles showed a large number of photographs of histological (normal and morbid) specimens, some of which were certainly most excellent representations. As Mr. Giles stated, the great difficulty lies in the fact that in the photograph only those parts of the field that are precisely in focus come out clearly, so that in every picture parts of the object are less distinct than others. But it is possible that this difficulty may be overcome, and we hope that Mr. Giles will continue his efforts in this direction. Simplicity and rapidity are, of course, very essential points, and if these be attained much labour will be saved, and great accuracy in histological research ensured.

FEVER IN ROME.

The health of Rome during the winter is a subject not entirely without interest in this country, especially to the migratory English who are able and glad to select for winter residence a more congenial climate than it is possible to enjoy in this island. According to official returns published by the Registrar-General, it appears that the annual death-rate in Rome during the six weeks ending 14th November, was equal to 37 per 1000, against 23 in London. The Roman death-rate, it is true, is reduced to 32 per 1000, by the omission of 183 deaths in the returns from that city during the six weeks, which are described as of strangers or non-residents; no such correction, however, is made in the London returns, which undoubtedly include many deaths of non-residents, as it is estimated by the Registrar-General that these deaths are more than balanced by the deaths of London residents occurring outside its boundaries. The principal feature of the recent Roman returns has been a marked increase in the fatal cases of fever, which, during the six weeks under notice, have numbered no less than 220, equal to an annual death-rate of 7·5 per 1000; whereas the fever-rate in London in the same period (exclusive of scarlet fever) did not exceed 0·4 per 1000; in other words, fever was nineteen times as fatal in Rome as in London. During the last of these six weeks the deaths referred to fever in Rome were 52, a considerably higher number than in any previous week this year, and included 29 described as "eruptive," 10 as "febbre d'assorbimento," 7 as intermittent, and 6 as typhoid. The term "eruptive fever," which includes the largest proportion of the total fever deaths, is far too indefinite to afford a satisfactory clue to the type of this fatal form of fever; neither is "febbre d'assorbimento" much more instructive. The death-rate from fever is, however, undoubtedly high, and, combined with the excessive rate from all causes, affords further conclusive evidence, were it necessary, of the unsatisfactory sanitary condition of Rome.

THE IMPERIAL BOARD OF HEALTH IN GERMANY.

A sum of £800 has been put aside in the German Chancellor's budget for the establishment of a Supreme Board of Health for the empire. Judging from this small sum, the organisation cannot become a very extensive one. Its principal object will be to collect reliable statistics in sanitary matters, though there are hints that the new board will be a sort of sanitary court of appeal to which the district administrative boards or provincial governments will have to refer for sanitary advice and decision, so that immediate action would have to be taken after its judgment. In semi-official correspondence, the name of Dr. Struck, Prince Bismark's body physician, has been put forward as the future president of this new board, which is to be placed under the immediate control of the Chancellor, without an intermediate State Ministry. Dr. Struck was a private physician at Frankfort during Prince Bismark's stay in that city as envoy for the old German Confederation. He entered the army in 1866, was transferred to a regiment at Berlin, and is at present the regimental Oberstabsarzt of the first Grenadiers of the Guards.

THE LATE RIGHT HON. T. E. HEADLAM.

We regret to announce the death of the late Mr. Headlam, the ex-member for Newcastle-on-Tyne, very honourably associated with the last successful medical legislation—that of 1858. We are indebted for the Medical Act to him and to Mr. Walpole, more than to any other two public men. It is neither unreasonable nor detracts from Mr. Headlam to suppose that for some of his ability to cope with this subject he was indebted to his uncle, the late well-known Dr. Headlam, of Newcastle-on-Tyne. Mr. Headlam continued until lately to feel an interest in the Medical Acts and their amendment, though his paternal feelings towards the Act of 1858 made him view with some jealousy other and more thorough measures of reform. This is little more than we should expect. A finality feeling takes possession of the best reformers. But this should not hinder us from doing justice to their contributions of help to a good cause, though we may not regard them as conclusive ones.

THE MARRIED SOLDIER IN INDIA.

The married soldier is, as a rule, much better off in India than at home, and were it not for the loss of health which residence in a tropical climate entails on women and children, Indian service would for them also be far preferable. Of late years efforts have been made, no doubt, to improve the condition of the soldier in every way, but the soldier's family very often fares badly on home service. The Government of India laid down a scale of accommodation for married soldiers in 1864, by which each of them was provided with two rooms, one measuring 16 by 14 ft., the other 14 by 10 ft. This scale was fixed mainly with reference to quarters in the plains. According to the late Report of

Sanitary Measures in India, the accommodation for hill-stations has since been considered, and provision has moreover been made to some extent to adapt the size of the rooms to the requirements of large and small families. Each set of quarters is to have a bath-room attached, and the floor of the buildings is always to be raised one foot at least from the ground. We learn from the same Report that the statistics of sickness and mortality among soldiers' wives throughout India in 1873 presented a very favourable contrast to those of the previous year; and the children of European soldiers also suffered much less than usual during 1873. These favourable results do not seem, however, to be attributable to any general or special sanitary improvements, but to the fact that the year under report was an exceptionally healthy one in India.

DEATH FROM CHLOROFORM.

A RECENT death from chloroform in the practice of Mr. Chesshire, one of the surgeons of the Birmingham Eye Hospital, presents some peculiar features. The patient was a gardener, forty-two years of age, who had received a gun-shot wound in his right eye while beating for game on the 16th ultimo. The safety of the other eye being endangered, Mr. Chesshire recommended extirpation of the affected eyeball. Forty or fifty drops of chloroform were administered on a towel, and the patient "immediately became semi-unconscious." The operation was commenced, but the patient not appearing to be sufficiently under the influence of chloroform, forty or fifty drops more were given. Mr. W. M. Jackson, of Smethwick, noticing a failure in the patient's pulse, at once seized him by the feet and lowered his head. He afterwards practised artificial respiration, but the man died in about half an hour from the time of the first administration of the chloroform. The patient had no disease of the heart, and was free from excitement prior to the operation. It is remarkable how small a quantity of chloroform proved fatal in this case; probably not more than two drachms were used altogether, and every precaution was taken in the administration of the drug, and yet death resulted.

THE CAUSE OF THE FEVER EPIDEMIC AT CROYDON.

WE hear that an important discovery has been made with reference to the causation of the remarkable epidemic of fever in Croydon, which, if not affording the true solution of the mystery, at any rate offers a most reasonable suggestion for its explanation. A huge waste-pipe from the water tower of the Croydon Waterworks has been found to have had direct communication with the sewer. It is needless to say that this connexion, which afforded the utmost facility for aerating the water supply with sewer gas previous to delivery, has been effectually secured. The recent weekly returns of the Registrar-General show a decrease in the deaths from fever in Croydon, and we hear locally that the number of cases has considerably decreased.

RESECTION OF THE KNEE.

AMONG the young French doctors who visit the hospitals of London, some endeavour to acquaint their countrymen with English modes of practice which have not penetrated fairly into France. M. Picard has just been very successful in that way, and has published a pamphlet which offers a faithful sketch of the rise and progress of resection of the knee. The paper is almost exhaustive, and full of details and statistics of the utmost value. M. Picard has attended the large hospitals, and witnessed the operations and practice of some of our leading surgeons. He renders full justice to the perseverance with which this form of resection is being applied, and shows that careful dressing is of importance in these cases. The author is a great admirer of Lister's plan of treating wounds, and his glowing description will certainly tend to a more general adoption of Prof. Lister's views amongst French surgeons. M. Picard was assisted in his labours by Mr. Howse, of Guy's Hospital, who seems to have been particularly successful in resection of the knee.

A HINT TO THE HARVEIAN SOCIETY.

AT a meeting of the Accademia Medica di Roma on the 7th November, the president, Professor Maggiorani, in acknowledging the gift of the work in which Dr. Ceradini, of Genoa, claims for Andrea Cesalpino the priority in discovering the circulation of the blood, suggested that a monument should be erected in the University, to commemorate the discovery and its author. Professor Baccelli seconded Professor Maggiorani, and contended that Cesalpino anticipated Harvey in conceiving and demonstrating the fact of the circulation. To an Italian, therefore, and a professor in the University of Rome, the greatest physiological discovery of modern times was due. We hope that the Harveian Society will not allow this "revendication" to pass without challenge, and that our great English physician will find an effective "apologist." Italy has substantiated her right to priority in the transfusion of blood; it is too much when she claims to have been the first to demonstrate its circulation!

ZYMOTIC DISEASE IN KEIGHLEY.

THE small-pox epidemic in Keighley has only died out to be replaced by a still more fatal epidemic of scarlet fever. During the four weeks ending 18th November the medical officer of health reported that 23 deaths resulted from scarlet fever, being equal to an annual rate of 11·5 per 1000 of the estimated population of the local board district. Scarlet fever caused 10 deaths in the district in the first quarter of this year, 36 in the second, 18 in the third, and 36 in the first half of the current quarter, making 100 since the beginning of the year. This exceptional fatality from scarlet fever is attributed by the medical officer of health to the defective sanitary condition of the town, two-thirds of the streets being practically undrained, and, according to a recent report, 71 of the streets were unpaved. The members of the Local Board seem to be more intent upon disputing the reports of their medical officer than upon redressing the undoubted evils with which the town abounds. The medical officer of health has made a claim for extra remuneration for his indefatigable and thankless services during the late severe small-pox epidemic, and the claim has been met by a paltry offer of £30 from the Local Board, which has not been accepted.

THE LAST THING IN THE WAY OF FORAGE ALLOWANCE.

AMONG the Army Circulars issued for the present month is one—clause 163—prescribing the conditions under which forage allowance is to be drawn for the future. These conditions are to come into force on the first day of the new year, and apply to combatant and non-combatant officers alike. In the first place, the horses of all officers whose duties require them to be permanently mounted must be *bonâ fide* their own property, to entitle them to forage allowance. One is tempted to pity the unfortunate officer whose duties require him to be permanently mounted in this weather. Still, it is tolerably clear what is intended by the term "permanently mounted," as contra-distinguished from the position of those officers whose duties require that they shall be temporarily or occasionally mounted. These latter can draw forage allowance—at least so we read the regulation—so long as they actually possess a horse or horses of their own, and their duties entitle or require them to be mounted; or they can "hire a hack" and charge the cost thereof to the public, supporting their claims by vouchers; but the expense so incurred must not exceed that to which they would be entitled as forage allowance for specified periods of time. Now, it strikes us that in these days, when horses are very dear, an officer might not care to purchase a horse to provide for the performance of duties which might only last so long as he held a particular post, when he would have to maintain his horse at his own expense, or sell it to purchase a new one when required. And if he has recourse to the hiring process, he had better assure his life before crossing the back of some livery-stable animal, and riding it for the first time in the immediate vicinity of artillery practice.

THE Local Government Board, which recently held an inquiry as to a proposed new source of water-supply in Richmond, have granted powers to the Select Vestry to construct works. In pursuance of their powers, the Vestry have purchased the Old Brewery, with its deep wells in the chalk, and have accepted contracts to the amount of £25,000 for the erection of the works. It appears that the Local Government Board, when the matter was under discussion, declined to express any opinion on the legal points of the case, and, in consequence, the Southwark and Vauxhall Company have given notice to the Vestry that they are applying for an injunction to restrain their proceeding further in their attempt to provide Richmond with a pure water-supply. The London water company will probably succeed in putting the Richmond Vestry to a considerable expense; we trust, however, that their effort to maintain their monopoly will fail.

AT a recent meeting of the executive committee of the British Pharmaceutical Conference, a suggestion was made that the Conference should nominate, in connexion with the Cambridge University Extension Scheme, a Travelling Professor of Pharmacy, with a stipend of £150 a year, whose duties would be to lecture in the provinces at different centres. After discussing the proposal the committee appeared unanimously of opinion that at present it would be unwise to include the subject of education among the objects of the Conference. For the thirteen years of the existence of the Conference these objects have been the prosecution of original research in connexion with pharmacy, by means of publications and money grants, and the holding of annual meetings of members for the reading and discussion of original papers and for friendly intercourse.

IN London last week 1628 deaths were registered, including 59 from measles, 104 from scarlet fever, 16 from diphtheria, 54 from whooping-cough, 29 from different forms of fever, and 13 from diarrhœa. No death from small-pox was recorded. The mortality from diseases of the respiratory organs, notwithstanding the inclement weather experienced, was below the corrected weekly average number. The death of a woman aged forty-four years was referred to "morphinism." On Saturday the London Fever Hospital contained 109 patients.

WE have received a copy of the "Smallest Bible in the World" from the Oxford University Press Warehouse, Paternoster-row. It is printed in very small, clear type, on unbleached India paper, measures barely half an inch in thickness, and weighs when bound in morocco less than three ounces and a half.

THE recent meeting of the American Public Health Association at Washington seems to have been a decided success. The inaugural address was delivered by Dr. Toner, who strongly urged a close imitation of the manner in which sanitary reform is worked out in England, which he politely termed "the most enlightened country in Europe." The meeting extended over four days, and drew together a large number of the more prominent members of the medical profession in the States. There were in all thirty-two papers read—rather a plethora of communications perhaps for an association in the third year of its existence. Among other matters it was decided to memorialise Congress to introduce a better system of registering births, marriages, and deaths. The Association has the good wishes of all sanitarians in this country.

A LINCOLNSHIRE paper announces that enteric fever of a most virulent character has broken out in the village of Appleby. In one house where the disease has raged there is only one sleeping room for a man and his wife and seven children; in another cottage, one room divided by a wooden partition contains a family of eleven. The state of the wells and the privies would appear to be disgusting. Yet the village is within a short distance of the residence of one of the members for North Lincolnshire. We hope the sad state of his poorer neighbours has been brought under the notice of this gentleman. Self-interest alone would dictate the eradication of a pest spot in such immediate contiguity to his dwelling.

IT is with regret that we have to announce the death of Mr. William Acton. On Monday last, Mr. Acton was in his usual health, and in the evening of that day entertained some friends at Harley-street. He retired about one o'clock, and at half-past eight on Tuesday morning had, as usual, a cup of chocolate in his bedroom and was then apparently quite well. As he did not appear at breakfast, about half-past nine o'clock someone was sent to call him, but found Mr. Acton lying across the bath dead. Dr. Garrod was called in, but life was extinct.

A PAPER was read before the Society of Arts last week by Dr. Richardson "On Industrial Pathology, or the Influence of certain Injurious Occupations on Health and Life." From researches which had been made, Dr. Richardson was enabled to state that the rate of mortality is greatest among the class of persons who traffic in intoxicating liquors, and the principal cause of degeneration of working men was alleged to be intemperance. The lecture, one of a series to be delivered during the winter, was distinguished by Dr. Richardson's usual ability and effective delivery.

AT the last monthly meeting of the Halifax Town Council, by the adoption of the minutes of the Sanitary Committee, it was resolved that the plant, live stock, carriages, tools, and implements of every description, belonging to the Goux Manure Company in Halifax, should be purchased for the sum of £3500. This sum, it was stated, included a licence to use the system for the future as well as existing closets in the borough. It is evident that the Halifax Town Council has not yet lost faith in the Goux system of sewage-disposal, which is said to have hitherto worked well.

THE Leigh (Lancashire) Rural Sanitary Authority have found it necessary, from the alarming prevalence of scarlet fever in their district, to issue printed papers containing instructions as to the use of precautious against the spread of the disease. It appears to be particularly rife among the residents of Lowton Common, and to have assumed there a more than usually fatal character.

MR. JOHN LIDDLE, medical officer of health for Whitechapel, in a quarterly report on the state of his district, again invites attention to the subject of slaughter-houses. It is generally felt that something should be speedily done to remove the nuisances inseparable from the present loose system of slaughtering cattle. The existence of so many slaughter-houses as there are now in London, with the utterly inadequate supervision of the same, affords facilities for killing diseased animals and for the disposal of unsound meat. These evils would only be overcome by the erection of public abattoirs.

DR. BURDON-SANDERSON announces that the first of his annual course of lectures will this year be delivered at the University of London on Dec. 15th, at 5 o'clock P.M. The subject will be "The Pathology of Inflammation." The lectures will be given on alternate days at the same hour.

THE sanitary authority of the port of Sunderland are following the example of the City Corporation in organising a health department afloat. They have just appointed a sanitary inspector to visit and inspect vessels arriving in the Wear.

THE rate of mortality among officers of the British army throughout India was 12·55 per 1000 in 1873.

Correspondence.

"Audi alteram partem."

SANITARY WORK IN INDIA.

To the Editor of THE LANCET.

SIR,—With reference to your article on the "Prince of Wales and Cholera" and Dr. Sutherland's reply of the 27th ult. and 4th inst., the matter seems to me to resolve itself into the question, as to whether the action taken by the Royal Sanitary Commission has really led to the diminished death-rate of our European troops now serving in India. Dr. Sutherland remarks, that "at the time when the Royal Commission on the Sanitary State of the Army in India began its inquiry in 1859-60, the average death-rate among British troops in India was 69 per 1000 per annum. Last year it was a shade above 13½ per 1000"; and he argues that this change "is the most striking illustration of the effects of these improvements" (sanitary) on the condition of the Indian army. It seems to me, however, that before we can accept this conclusion we must take the following circumstances into consideration. Prior to the year 1859-60, the British forces in Bengal—and I would restrict my observations to this presidency—were almost constantly engaged in active service; and the Army Sanitary Commissioners are well aware of the fact that the casualties of a campaign in India arise in a much greater degree from the seeds of disease sown during the hardships of active service than from the bullets of the enemy. Since 1859-60 our army has led a life of ease and comfort in their barracks; and, in consequence of the extension of our system of railroads throughout India, the troops have been saved from the fatigue of long marches, formerly made during the cold season of the year, in the ordinary course of the annual relief.

From causes which it is unnecessary for me to describe, the Queen's regiments in India, prior to 1859-60, were frequently detained in the country for some years beyond the time allotted to them by the regulations of the service; and three European regiments and the whole of the Artillery were enlisted for local service, and these troops never left Bengal.

Then, again, there having since 1859-60 been no urgent necessity for filling up the ranks, the greater number of men enlisted for the service have been carefully selected before entering the army, so that a remarkably healthy set of young fellows have been sent out to India; and their period of service in the country has been curtailed of late years.

It is necessary also to take into consideration the conditions under which our troops are now invalided, as compared with the practice formerly followed in this matter. For instance, in 1861 the death-rate of British troops in India was some 37·74 per 1000, and the invaliding 31·68 per 1000; but in 1868 the figures were respectively 21·71 and 67·7 per 1000. Changes of this kind in the practice of invaliding sick men from India must evidently exercise a considerable influence on the death-rate of the men remaining in the country. Soldiers who would otherwise have died there are sent home.

Lastly, in estimating the difference between the present and former mortality among our troops, we must take into consideration the fact that the medical treatment of the sick has improved of late years; for the medical school at Netley raised the standard of education among young army surgeons; and it is only during the past fifteen years that large doses of ipecacuanha have been administered with such marked advantage in cases of dysentery, and quinine given in curative doses for the relief of malarial fevers.

Before we can, therefore, determine the amount of credit due to the Army Sanitary Commission for the diminished mortality among our troops, we must decide how far these favourable results are attributable to the fact of our soldiers not having been engaged in active service for some years past, to the alterations that have taken place in the system of invaliding our troops, to the greater care employed in selecting them for the service, and the improved methods of treating them when on the sick list.

The Army Sanitary Commissioners have doubtless exerted themselves in preventive measures against our troops being exposed to the contagion of syphilis, and they must receive all the credit due to them for their successful efforts in this direction.

It seems to me that we may form some notion of the influence exercised by the above-mentioned causes on the health of our soldiers in India by examining into the health conditions of their wives and children. These latter have never been affected by the perils of war; they are not usually invalided when sick, nor are they selected lives to start with on joining their regiments, but they are sanitarily cared for in precisely the same way as their husbands; and, on turning to the last report of the Sanitary Commissioner with the Government of India at my disposal (1872), I find that in the Bengal army the death-rate among the European women in India amounted to 46·12 per 1000, and that of their children to 112·95 per 1000.

I will not enter on a discussion as to the communicability of cholera through means of drinking-water; but I cannot help thinking it would have been well if the Royal Sanitary Commission, acting on the authorities in Bengal, had followed the lead of Mr. Simon and Dr. Parkes regarding the supply of drinking-water consumed by our troops. That such has hardly been the case, at any rate so late as the year 1871, we learn from the following order issued by Lord Napier. He remarked that, "so long as the existing procedure of conveyance in mussucks from different sources, and the storage in numerous receptacles, at all times more or less open to pollution of dust or dirty vessels, exists, so long is it fruitless to expect anything but comparatively foiled results." This remark by the Commander-in-Chief was made ten years after the Royal Sanitary Commissioners had commenced their work in India.

I can only add, that I do not know of a single cantonment in Bengal (excluding the Presidency) in which an efficient system of drainage or water-supply has been introduced. The sanitary state of the civil population has not improved, and in certain districts it has degenerated during the last fifteen or twenty years; and it is remarkable that although a deadly fever raged from 1861 to 1871 throughout a province of Bengal as large as Ireland, and within sixty miles of Calcutta, even the type of this fever had not been accurately defined, or its conditions systematically examined, up to within the last eighteen months. The gaols of Bengal were vastly improved under the auspices of Dr. F. Mouat, but his plans were completed before 1859–60, and the health of the prisoners has not improved since he left India. Cholera is as deadly at present among the civil population (and, I believe, among the military also) as it has ever been, and no persistent efforts have as yet been made to mitigate the frightful ravages of this disease among the natives of Bengal.

Yours faithfully,
Grosvenor-street, December 6th, 1875. C. Macnamara.

MILITARY MIDWIVES.

To the Editor of The Lancet.

Sir,—In your impression of the 27th inst. I observe a letter from Staff Surgeon Nelson, R.M.A., upon the propriety of providing well-educated midwives for the army, in order to secure the comfort and well-being of our soldiers' wives and infants during labour, and to render them independent of the ignorant "Gamps" who are always to be found infesting garrison towns.

So far back as 1869 I formed a school for army midwives, in connexion with the training department for civilian midwives, at Sir P. Dun's Hospital, Dublin, to which is attached a large and flourishing midwifery department, I was encouraged and aided in this work by H.R.H. the Field Marshal Commanding in Chief; the then head of the Army Medical Department; my esteemed friend Doctor Dane, the then P.M.O. of Ireland; and also by my Board of Governors.

The school has been for the last five years in a most prosperous condition, and has recently been placed upon a firm basis by the patronage of Her Most Gracious Majesty the Queen. It is in active operation throughout the year. Since its foundation in 1869 up to the present date, I have educated 271 well-informed midwives and ladies' nurse-tenders, and these are now scattered over the empire with their respective corps.

An Army Midwives' Class is now under training.

I have the honour to be, Sir,
Your obedient servant,
Edward B. Sinclair, A.M., M.D.,
King's Professor of Midwifery, Univ. Dub. Medical School,
once Assistant Surgeon to the Royal Scots.
Dublin, Nov. 1875.

ON DILATATION OF THE FEMALE URETHRA.

To the Editor of The Lancet.

Sir,—Mr. Teale's recent paper on the Treatment of Vesical Irritability in the Female by Dilatation of the Urethra, shows that he and I have unconsciously been working in parallel grooves for some time. I was not aware of Mr. Teale's practice when, in 1871, I adopted a very similar proceeding at the Hospital for Women, Soho-square, to which institution I was then surgeon. Failing to cure cases of painful micturition by other measures, I adopted the plan of rapid dilatation of the urethra with the finger guided by a director, in some cases using a pair of ordinary polypus forceps to commence the dilatation. My idea was that, in some cases, there was a fissure of the mucous membrane analogous to fissure of the anus, but this I was never able to prove, though the rapid dilatation almost invariably produced a tear in the subpubic portion of the mucous membrane, which might, in some cases, be the continuation of a fissure. In a course of lectures on Diseases of the Female Urinary Organs, which I delivered at Soho-square in February, 1873, I narrated many cases illustrating this practice, and from the number of American surgeons who at that time visited the hospital and saw my practice, I imagine that the introduction of the practice into America is due to my example. I can fully confirm Mr. Teale as to the benefit conferred on many cases by the treatment and its failure in others, and I have never seen permanent incontinence result, though my patients have often been unable to retain the urine for twenty-four hours. I have, however, never pushed the dilatation quite to the extent practised by Mr. Teale, having been content to take one finger as my limit.

In another direction, however, I have pushed on somewhat beyond Mr. Teale, and that is in the application of topical treatment to the female bladder. In cases of chronic cystitis, with purulent urine, I have detected, as I believe, an ulcerated condition of the mucous membrane (for with the left forefinger introduced into the bladder it is easy with the other hand to bring the whole of the mucous membrane into contact with it), and I have then applied a strong solution of nitrate of silver by means of a mop, securely fastened on a wire, and passed through a small vulcanite speculum introduced into the urethra. The effect of this has been, in many cases, to render the urine acid and clear in twenty-four hours, and the tolerance of the remedy by the bladder is remarkable. The solution I have employed has been as strong as three drachms to the ounce, and I have never seen any harm follow even where little permanent good was done.

Yours obediently,
Christopher Heath, F.R.C.S.
Cavendish-square, December, 1875.

THORACIC ANEURISM IN ITS RELATION TO SYPHILIS IN THE ARMY.

To the Editor of The Lancet.

Sir,—I regret having been absent when the interesting subject of Thoracic Aneurism in its relation to Syphilis in the Army was discussed at the Medico-Chirurgical Society. Permit me now to say a few words on a subject in which I feel much interest.

Notwithstanding a somewhat lengthened period of military service, I confess that I should hesitate to attribute the occurrence of aneurism of the aorta to one particular morbific influence. Granting that degeneration of arterial tissue, consequent on syphilis, may tend to induce aneurism, I would, nevertheless, consider that long-continued habits of intemperance—not necessarily periodical, or great excess in drink—is a more frequent origin of the disease.

Space does not here permit me to enter into the question which of these two exciting causes exercises the most pernicious influence on the circulatory system in civil, as well as military life. I feel, however, disposed to think that in cases of disease of the heart and its vessels, both among soldiers and civilians, syphilis does not bear so important a part as alcohol. Very frequently, indeed, the connexion between drink and such diseases has come under my observation, and the same remark applies, in a lesser degree, to acute rheumatism; but, speaking from memory, I cannot recal one autopsy for aneurism in which a marked impairment of constitution, traceable to syphilis, was evidenced. Then, how are we to distinguish between the morbid influences of syphilis and intemperance when, as so very often is the case in the army, they go hand in hand? Difficult, if not impossible.

A third and important exciting cause of this class of disease —pressure from military clothing and appointments—is a well known and acknowledged fact, which needs no comment.

It must borne in mind, that patients affected by aneurism not unfrequently attribute the origin of their complaints to some sudden strain. This circumstance points rather to pre-existing arterial degeneration from one or other of the two first-named causes. The last one—the soldier's dress—I should say, shows its evil consequences more in the generation of hypertrophy and valve disease.

It has, for some time past, been my impression that both aneurism and heart disease are much more frequently met with in the army of late years—that such diseases are on the increase.

Looking back for a period of nearly thirty years, death from aneurism was, in my own experience, infrequent. During an interval of five years which I passed in a line regiment not one occurred, and a considerable interval elapsed after I joined the Guards before the contigency arose. And yet formerly, when long service was the rule a soldier remained much longer under the observation of the medical officer.

If my theory be correct, to what cause may the circumstance be attributed? Was the old coatee and its deplorable adjunct of a military stock less injurious than the tunic? Certainly not. Or were the habits of the men better?

I would rather rest my inference on the ground that ever since the Crimean war the physique and morale of the recruit have deteriorated; that, consequently—and to a marked extent of late years—the men are incapable of resisting in the same measure the various prejudicial influences to which they are subjected either by military duty or by evil propensities.

I am, Sir, your obedient servant,
Fred. Robinson, M.D.,
Scots Fusilier Guards.
Claverton-terrace, St. George's-road, S.W.

THE UTERUS OF HARRIET LANE.

To the Editor of The Lancet.

Sir,—Will you kindly allow me to correct one mistake in your report of the "Note on the Post-mortem Diagnosis of a Nulliparous Uterus" which I read at the last meeting of the Obstetrical Society. The measurement of this uterus at the fundus was not one inch and three-quarters in width, but one inch and a third.

Again: It was not from the special character of this particular uterus that I thought it impossible to form a positive opinion with regard to the existence of a previous pregnancy, but because I hold that to be a general rule. My contention at the late trial was that there was no *proof* of a previous pregnancy; but that, on the contrary, so far as appearances went, the uterus indicated rather the opposite. I am generally credited by the newspapers with having given a positive opinion that this uterus had not borne a child; whereas, the only positive opinion I gave was that no one could tell whether it had or not; but I inclined to the opinion that this had not, and I gave reasons which, in the present state of our knowledge on the subject, I believe are fairly warranted, especially in a doubtful case where issues of life and death are involved.

I am, Sir, your obedient servant,
George-st., Hanover-sq., Dec. 1875. Alfred Meadows.

SANITARY CONDITION OF UPPINGHAM.

To the Editor of The Lancet.

Sir,—I am desired by the Sanitary Authority of the Uppingham district to forward you the subjoined report of their medical officer and engineer for publication.

Yours faithfully,
William H. Brown,
Uppingham, 8th December, 1875. Clerk to the said Authority.

Report

"*To the Chairman and Members of the Rural Sanitary Authority of Uppingham.*

"Gentlemen,—Hearing that the masters of the Uppingham School will probably meet on Friday next, when we presume they will take into consideration the re-opening of the school, we deem it our duty, as the reports we are preparing are not finished, to present an interim statement.

"We find that the condition of several of the school-houses is such as to necessitate material alterations in their sanitary arrangements. With a view to facilitate such alterations Mr. Rogers Field, your engineer, has, in accordance with your resolution, placed himself in communication with Mr. Tarbotton, engineer to the schoolmasters, and he has every reason to believe that means are being taken by the school authorities to expedite the necessary works. Until, however, these are completely carried out, so as to enable us to report to you that each individual house in connexion with the school is in a perfect sanitary condition, we think it desirable that you should not in any way countenance a premature return of the scholars.

"We are, gentlemen, your obedient servants,
"Alfred Haviland,
"Medical Officer of Health to the Rural Sanitary
"Authority of Uppingham;
"Rogers Field,
"Civil Engineer.
"4th December, 1875."

THE WHITECHAPEL MURDER.

To the Editor of The Lancet.

Sir,—I see by your leading article in reference to the above case that you say "the witnesses relied entirely upon the evidence afforded by the wisdom teeth" to determine the age. In justice to myself I think it right to say that I specially examined the ossification of the several parts of the sternum, as well as the *dentes sapientiæ*, in order to assist me in arriving at the probable age, which I gave as *about* twenty-five years.

Again you say—"It is certainly surprising that neither side made any attempt to demonstrate the presence or absence of *lineæ albicantes* upon the abdomen." This, too, is a mistake; and I am quite sure you will be amused by the observation from the Lord Chief Justice in reference to my evidence on this point, that he did "not see what that had to do with it!" It is not my fault that other very important evidence was not given, which would go very far to establish, beyond any reasonable doubt, the fact of pregnancy. I tried to confine my observations closely to the exact questions put to me. Suffice it to say, that I had taken care to give my reasons fully in my reports to the prosecution, and in reply to my observation thereon, Sir John Holker said, "there was ample evidence," or something to that effect—as proved by the result of the trial. I have been requested by several persons to report my evidence as to pregnancy *in extenso*, which I will do. I believe my colleague in this case, Mr. Bond, has promised to send you a report.

Yours truly,
F. G. Larkin.
Trinity-square, Southwark, S.E., December, 4th, 1875.

BIRMINGHAM.

(*From our own Correspondent.*)

The scheme propounded for the sanitary improvement of the town by the adoption of the Labourers and Artisans' Dwellings Act, to which attention was called in a previous article, is about to be increased in magnitude and importance. At their last meeting, the Town Council decided, on the recommendation of Dr. Hill, the medical officer of health, to deal with a large district contiguous to that already scheduled, and comprising not less than fifty acres of land. Narrow streets, close courts, houses built back to back, insufficient space, dilapidation, and bad drainage, combine to make this part of the town very unhealthy. While the average death-rate of the borough last year was 26·78, the death-rate in some of the streets in the proscribed area was 54, and in one street reached the frightfully high ratio of 73 per 1000. The proposal to extend the scheme originally suggested will involve a great outlay, but I believe that in the long run it will prove, as at Glasgow, to be a financial success, while the benefits it will confer on the town as a sanitary reform are simply incalculable. Dirt, drunkenness, disease, and death are costly companions, and they will not be banished from the town until the working classes have healthy homes, better education, and more rational sources of enjoyment and pleasure than the public-house and the liquor vault now afford them. Schools established under the Education Act are already raising the intellectual standard of the rising generation, but these will fail in their aim if the children are brought up in dirty houses and in squalid streets and alleys, and have not their physical condition also considered in the establishment of more numerous and extensive play and recreation grounds, at which the sports and pastimes that encourage the growth of healthy muscle and bone can be indulged in.

The Committee of the Midland Medical Institute have arranged with the authorities of Queen's College to occupy some of their rooms at a rental of £200 a year. It is far better that the medical reference library should be located here than at any place at a distance from the medical school. Students as well as teachers will alike benefit by the proposed arrangement.

The periodical collections for the Queen's Hospital in the various churches and chapels of Birmingham have this year realised over £5700, a larger sum than has ever before been collected on Hospital Sunday, and a sufficient answer to those who urged that the adoption of the "free system" would diminish the number of friends and supporters of the charity.

The late Mr. George Allarton, whose obituary you gave last week, was much respected in this town by many of the older members of the profession who knew him during the time he practised at West Bromwich, and who adopted and still perform his modification of the median operation of lithotomy.

Francis Warner, M.D. Lond., having been recently elected assistant-physician to the Children's Hospital, after a contest with another graduate of the University of London, a gentleman congratulated the governors of the hospital on the fact of their having two such excellent candidates, and remarked that theirs was the only hospital in the kingdom whose medical staff were graduates of London, a distinction which he hoped would be maintained.

You have already called attention to the success which attended Dr. Richardson's inaugural address at the Midland Medical Society, and to the presentation of a testimonial to the worthy treasurer, Mr. James Harmar. In future that Society will exist only for "the promotion of scientific and practical medicine and surgery by the delivery of addresses, the reading and discussion of papers, and by pathological and other demonstrations." The books and periodicals are handed over to the Midland Medical Library, and the reading-room will be transferred to Queen's College.

Nov. 15th, 1875.

GLASGOW.

(*From our own Correspondent.*)

THE first annual meeting of the Western Infirmary of Glasgow was held on the 25th ult., and the report presented by the secretary was, on the whole, satisfactory. The ordinary income had fallen short of the ordinary expenditure by £1399, but the deficit was covered by the result of a special appeal to the public in May last, when a reserve fund was obtained of £3736. With regard to the financial future some of the speakers took a rather doleful tone, and indicated that unless there was increased liberality it might be expedient to curtail rather than augment the accommodation. Others, and with justice, looked forward hopefully, and trusted that as the needs and benefits of the institution became more widely known, there would be no necessity for any special subscription fund. In the interest of medical education we trust the hospital will be still further extended. There are now, we understand, upwards of 200 medical students attached to the University, and when the session commenced there were only 141 patients in the hospital. It is obvious that this is far too small a number for the purposes of clinical teaching.

The annual dinner of the Faculty of Physicians and Surgeons was held on the 26th ult. in the Faculty Hall, under the genial presidency of Dr. Fergus. "Floreat res medica," the toast of the evening, which a well-known judicial authority has translated, "Let disease continue and doctors flourish," was given from the chair, and responded to with hearty enthusiasm. In replying to the toast of the "House of Commons," Dr. Cameron, the Liberal, and Mr. Whitelaw, the Conservative member for Glasgow, both referred to the importance of having more medical men sitting in the legislative assemblies, and Dr. Cameron observed that while other professions were honoured by a seat in the House of Peers, it was an anomalous fact that there was no medical representative there. A justly esteemed medical man shook his head and negatived the idea. Dr. Cameron, observing this, humorously stated that perhaps the objector would be contented with a Baronetcy, but that he still maintained that a medical peer was a necessity, and might yet become a Radical grievance. Perhaps the most important statement of the evening was made by Dr. Geo. Buchanan, who, in replying for the University of Glasgow, declared that, consistent with the ordinances, every extra-mural lecturer would be recognised by the University Court. This announcement, which was doubtless made on authority, was hailed with satisfaction. There can be little fear of a hospital languishing for public support, connected as it now is with a university which has cast off ancient traditions and, in inaugurating such a liberal programme, has become in unison with the spirit of the age. The faculty is in a very flourishing condition; the number of junior fellows who have entered during the last two years evinces a considerable increase as compared with the past. The scale of fees as sanctioned by the faculty ought to be altered. Glasgow boasts of being the second city of the empire, but its merchants have no hesitation in paying medical men at half-a-crown a visit. Such a sum might have been sufficient when the Clyde could be crossed on stepping-stones where the Atlantic liners now anchor, but it is absurdly small for the wealth and present position of Glasgow. It is certain that a strong and united effort on the part of the faculty would place things on a better footing, and make this town a field for professional success second to none in Great Britain.

A few days ago an article appeared in one of our daily papers, inspired either by a candid friend or secret foe, and revealing a sad state of matters in the class of Physiology in the University. It appears evident, from the correspondence which has ensued on the subject, that years are telling on, and voice is failing, the present occupant of the chair, Dr. Andrew Buchanan, for it is stated that only the students on the first or second bench can detect the subject of the veteran lecturer's discourse. While this fact has been broadly mooted, and not contradicted, yet all the students, both past and present, who have taken part in the correspondence, speak with the greatest respect of one who has undoubtedly done much good work in his day. It is evident that a crisis has occurred, and that a change is imminent in the teaching of physiology; and, looking at the matter impartially, it is to be hoped that Dr. Buchanan will imitate his friend and former colleague, Dr. Rainy, and retire from a field in which he has worthily won his spurs. The discussion shows very clearly and pertinently the necessity for the recognition of extra-mural lecturers and for free trade in teaching.

Glasgow, Dec. 6th, 1875.

P.S.—Professor Andrew Buchanan has intimated to the University Court his resignation of the Chair held by him.

IRELAND.

(*From our own Correspondent.*)

THE first meeting of the Medical Society of the College of Physicians, Ireland, took place on Wednesday, Nov. 10th. The President, Dr. Samuel Gordon, in his inaugural address, mentioned with approval the epidemiological reports which of late have formed a part of the proceedings of each session. He instanced the success of the efforts which have been often adopted of late, in arresting the spread of so serious and infectious a malady as scarlatina, and paid a just tribute to the value of preventive medicine in this as well as in so many other diseases. The death of three members of the medical profession at Dublin lately, formed the theme of much of the President's address. Mr. Lestrange was better known in the surgical world by his invention of some important surgical instruments. Professor Law's valuable communications and his carefully recorded cases were of great importance, and led to subsequent valuable discoveries, more especially in reference to cirrhosis of the liver and gangrene of the lungs. Mr. John Hamilton, although not a member of the Society, took an interest in every society for the promotion of medical progress. His illness originated in an attack of dysentery some five years ago; although he appeared quite to have recovered from this attack, a subsequent relapse entailed much suffering, and from this time he was never quite free from obstinate constipation for any length of time; more recently he had an attack of choleraic diarrhœa. Evidence of mischief was afforded by the occurrence of a fissure, tumours, and abscesses, and lastly a communication was formed between the rectum and bladder. The terrible suffering that now arose rendered an operation desirable. Colotomy rendered life more endurable during the few remaining days of Mr. Hamilton's life; and he died, to use the words of Dr. Gordon, a model of faith, resignation, and patience.

Sir Dominic Corrigan, Bart., read his observations on Aix-les-Bains. He commended their efficacy, and while he pointed out some minor matters which he thought might be improved, he spoke generally in very high terms of the arrangements for the benefit of invalids. Dr. A. W. Foot also read an interesting paper on a remarkable case of obesity treated with liquor potassæ and extract of fucus vesiculosus.

The Obstetrical Society held its first meeting for the session on 20th November. The President, Dr. Atthill, spoke at length on some of the theories that have been brought under notice in connexion with the monthly uterine flow.

The very important question, "What is Dublin to do with the Liffey?" is now under the earnest consideration of many who wish well to Ireland's chief town.

An injunction has been obtained by the Citizens' Committee against the expenditure of any more money by the Dublin Corporation on the protracted action by that body in reference to the main drainage question.

Sir John Glover continues to improve daily. He is now able to be up, and we have every reason to trust that his recovery may now steadily progress. He is still under the able care of Mr. Butcher.

A skating rink on the most improved plan is approaching completion near the Exhibition Palace Grounds, Earlsfort-terrace, Dublin.

The extraordinary damp and cold of the present season is tending to spread different forms of zymotic disease now prevalent in Dublin. Of these we may mention—fever (typhus and typhoid), measles, scarlatina, and erysipelas.

Pulmonary affections, and cases of severe attacks of diarrhœa with a tendency to dysentery, demand real activity on the part of the sanitary authorities and the people themselves, especially as the condition of the lodgings of the working and poor classes at Dublin are in so bad a condition in many parts of the old city.

The custom of "waking," even those dead of contagious diseases, continues unchecked by the authorities.

The Dublin barracks have lately had a somewhat unhealthy reputation; it is but justice that this matter should be more fully inquired into. Dublin itself has need of improvement in the same direction, and steps have already been commenced with that intention. Indeed, from a combination of causes, notably, as it would appear, from the severe and wet character of the last few months, many of the old houses in the more ancient parts of Dublin have given evidence of great danger to their inmates from indications of actual falling; and to tell the truth, at least five or six houses quite lately have thus come to grief, happily with but little loss of life. Enough of mischief has, however, happened in this way to stir the civic authorities to active measures, so far as their powers extend. Several streets and lanes in the older parts of Dublin now present numerous hoardings and many buildings in progress of demolition. Such measures, provided sufficient new buildings be provided for those who may be deprived of homes by the removal of the old houses, cannot but exert a highly beneficial influence on the health of the Irish metropolis, including the troops quartered therein.

The necessity for improved huts on the Curragh is finding expression in the daily journals at Dublin. The *Irish Times* forcibly draws attention to the matter, pointing out that the good of the public service loudly demands attention to that question.

A monument to Grattan has just been erected at College Green; it awaits unveiling.

I have just availed myself of an opportunity of visiting the Richmond barracks, which stand on a somewhat elevated plateau, some three miles south-west of the General Post Office. On the south the barrack grounds are bounded by the grand canal, on the west by a valley of some depth through which flows a stream providing natural drainage on that side, and at some distance also on the north of the barracks, as it flows eastwards on that side. The ground slopes by a gradual descent from the site of the barracks towards the east. The buildings are apparently about fifty years old, and surrounded by a large parade ground, enclosed by strong walls. The accommodation is considered good, and provides for a force of about 1000 men. During the present season, as well as in the last summer and autumn, but two cases of enteric fever have occurred in this barrack, and in both cases recovery took place. An outcry has been raised against the water supply, which is derived from the canal, and some have called for a supply of the Vartry water, with which Dublin is supplied. There is no doubt that a certain amount of organic impurity is to be found in the canal water, especially in the summer and autumn months. On the other hand, however, there are those who argue that the lime salts which are present in the canal water under consideration are eminently useful and even necessary for the proper nourishment and growth of the human race, as well as for other animals. In this respect the Vartry water is almost absolutely pure. There are many sanitarians who incline to the belief that a certain amount of hardness is beneficial in water as an article of diet, although it may be admitted that it is a quality which is objectionable in other ways, as in cooking, washing, &c. Whether the source of water supply be taken from the canal as at present, or from the Vartry, it is advisable, in the interests of civilians and the military alike, that very strict attention be paid to the prevention of access of organic matter to each source of supply.

At the meeting of the Dublin Pathological Society (Dec. 4th), the President of the College of Surgeons exhibited a case of chronic rheumatic arthritis. Mr. Hamilton also exhibited a case of extra-capsular fracture of the femur, with impaction and transverse fracture immediately below. Dr. Grimshaw brought forward a case of colloid cancer of the great omentum. Mr. Wilson exhibited an eyeball removed from a man 77 years of age. It was a dark black mass, without any organisation whatever. On microscopic examination, it was seen to be an instance of ordinary pigmented spindle-celled sarcoma. Dr. Atthill exhibited an example of imperfect development of the rectum in a fœtus. Dr. Robert McDonnell made a communication on securing bloodvessels by torsion.

The extreme severity of the weather has produced a considerable increase of sickness in Dublin as elsewhere. Pulmonary affections—a form of catarrhal febrile attack, accompanied with a good deal of prostration—has become common; whilst the existence of some cases of severe typhus, some of typhoid fever, as well as of cases of scarlatina and measles, warns us to be up and doing in sanitary improvements.

The Sanitary Association here is again drawing public attention to the noxious influence exerted by the depôts of fetid organic matter which exist so numerously in Dublin. The Dublin Main Drainage Question still hangs fire, and it is to be hoped that the most approved system will be carried out, and that all persons concerned will use their best endeavours to bring about a system which, while it must be suited to the already heavily-taxed resources of the citizens, may fulfil the requirements of the population.

PARIS.

(*From our own Correspondent.*)

OPENING OF THE SCHOOL OF MEDICINE AND THE PARIS CLINIQUES.

IN my last letter I spoke of the forthcoming opening of the winter session of the Faculty, and gave you a programme of the lectures which the professors and the various hospital physicians and surgeons were preparing to give. On the 3rd inst. the School of Medicine threw open its doors, and the same day Professor Gavarret lectured on Heat, M. Duguet on the Diseases of the Urino-genital Organs (opening lecture), Professor Sappey on Anatomy, and Professor Chauffard on the Comparative Character of Acute and Chronic Disease.

The clinical teachers in the hospital have likewise been busy at work the whole of last week. The three professors at La Charité inaugurated their teaching, and in doing so they all seemed impressed with the necessity of giving an additional impetus to the clinical teaching of the Faculty in view of the rival schools, and especially the Catholic ones, which are about to be established on the strength of the new laws on freedom of teaching. All three of them expressed themselves very energetically on the subject. Professor Sée declared that the necessity of studying seriously was greater now than ever. The rival Faculties were still in a state of embryo, but it was necessary to begin work at once. The standard of clinical teaching should be raised higher than ever. "On this ground," exclaimed the Professor, "we can bid defiance to our adversaries; and, as to myself, I feel the younger for the conditions which the laws on freedom of teaching have imposed."

M. Trélat expressed the same views on the question, and especially insisted on the following train of thought: "In view of the rival schools which are about to be established, the time is come when all of us, masters and pupils, must rally around a common flag—that which we owe respect to, and faith in, scientific truth. What man has gained by science it is our duty to maintain, and this appropriation of knowledge constitutes a patrimony which we must respect and defend. To have faith in the progress of science, to adhere to the truths which it teaches, is our honour and our dignity. By tightening, through our labour, the bond which unites us we shall follow the way traced out by illustrious predecessors, and we shall not be unequal to the task we have before us."

The foundation of new faculties, and especially the rival teaching of the Catholic party, are much talked about by the medical body, and form the subject of every conversation. There is no doubt that much anxiety is entertained as to the results of these most radical changes. At the same time, there is no doubt that the spirit of competition is working good effects, and has produced throughout the whole body of teachers in the school or the hospital an earnestness and a zeal for labour and success which must be highly useful.

Before leaving the *cliniques* of La Charité, I may just add that, in addition to their general remarks, M. Trélat gave a very substantial lecture on the Diagnosis of Tumours of the Breast, whilst Prof. Sée judiciously insisted on the necessity of giving more importance to the therapeutics of clinical teaching, and stated his intention to devote two of his lectures, out of three a week, to the therapeutics of cases, and only the third to comparative diagnosis. His first lecture was on the Action of Drugs in General. As to Prof. Gosselin, the third lecturer at La Charité, he resumed his admirable lectures by a comparative description of several cases under treatment.

At the Hôpital des Enfants, Dr. Simon opened his lectures by a study of Infantile Paralysis, and at Cochin Dr. Bucquoy commenced with a lecture on Uræmia, in connexion with a case under observation.

No decision has yet been taken as to the nomination of the Dean, the two Assessors, and the two new Professors of the School, in place of Professor Bouillaud, who has retired, and the regretted Lorain, whose death I mentioned in my last letter. Maurice Raynaud, the learned author of "Molière and his Times," will very likely be nominated to the chair of History of Medicine, whilst Potain, the celebrated "clinician" of Necker Hospital, is almost certain to get the chair of Pathology.

The pulling down of the building which the "Assistance Publique" made use of as a central bureau for all the Paris hospitals will very probably give rise to an important change connected with the distribution of patients amongst the hospitals. Every hospital here can daily admit a certain number of patients presenting themselves directly to the house-surgeon on duty, but, on the other hand, a fixed number of beds is reserved for the Central Bureau, where patients present themselves, and whence they are distributed over the various hospitals, which, as you know, are all under one and the same administration. This entailed a great loss of time and great difficulties on patients, who were obliged to go from all the various and most distant quarters of Paris to the Central Bureau near Notre Dame, there to get tickets of admittance and afterwards to proceed to their respective hospitals, some of which are situate at great distances. In order to reform this, the Prefect of the Seine has suggested a plan by which there would be a small bureau of admittance in every *arrondissement* of Paris, connected with a central office by means of the telegraph. Each bureau would serve for its special quarter of the city. There is no doubt that this would be a great improvement on the present order of things. The authorities at the Assistance Publique hesitate, however, on account of the great increase in the number of medical officers which the reform would involve.

Amongst the recent measures brought for approval before the National Assembly, is one for the pulling down of the Ecole Pratique and the Hôpital des Cliniques, situate opposite the School of Medicine. The Ecole Pratique has become much too small and encumbered for the present requirements of the School of Medicine, and constitutes, besides, a cause of much complaint in that quarter of the town, as it contains the dissecting-rooms of the Faculty.

DEATH OF GIRALDÈS.

It is with great grief that I have to mention the death of the most learned of contemporary French surgeons, my respected master and friend, Dr. Giraldès. On Saturday morning I received a note which had been written on the evening before by Dr. Hahn, the librarian of the School of Medicine, and in which, knowing the friendship that existed between Dr. Giraldès and myself, he had hastened to inform me of the melancholy circumstances which had attended the death of Dr. Giraldès. At about seven the same evening, Dr. Giraldès had called at the library of the Faculty, when suddenly he felt ill, and began spitting blood. Dr. Hahn put him in a cab, and was accompanying him home, when about half way from the school to his house, Dr. Giraldès died in the arms of Dr. Hahn without any apparent suffering.

I enter into all these particulars because I know how many friends Dr. Giraldès reckoned in England. He was personally known, and most highly liked and esteemed, by Sir James Paget, Prescott Hewett, Holmes, Jonathan Hutchinson, Birkett, Critchett, Bowman, and many others, who, I know, will regret his loss very severely.

Dr. Giraldès was most remarkable for his erudition, which was one of the ornaments of modern French surgery. He was deeply versed in the surgical literature of every country, but most especially that of England. The most minute details of the history or modes of operations, the slightest anecdotal particulars relating to the advance of surgery in Great Britain, or to those who promoted its progress, were familiar to him. In all the academies or societies of which he was a member he rendered invaluable services by his complete and extensive knowledge of foreign surgery, and he invariably formed part of every committee appointed to investigate questions having a foreign connexion.

His erudition was not a matter of mere memory; it was a complete and careful storing up of facts, synthetised, compared together, sifted, and examined by a mind of remarkable keenness, and with solid judgment. These latter qualities were most conspicuous in his intellectual disposition. He had a quiet, sarcastic manner of disposing of so-called discoveries, a power of common sense and judgment which, added to his wonderful knowledge of facts, made him one of the most valued members of professional bodies.

He was a hard worker in the field of surgical science—actively engaged from early morn to evening, either in his wards in the hospitals or in his study, or in his practice in town, in the search for something to elucidate a problem or simplify a proceeding, something to do justice to whom it was due, or to alleviate the sufferings of humanity.

He had identified his name with the surgical wards of the Hôpital des Enfants Malades, where for several years he practised the surgery of children, and delivered most interesting and remarkable lectures on the subject. His lectures have been gathered and edited by one of his talented house-surgeons, Dr. Bourneville, and they form a most valuable book—a lasting production of the eminent man from whom it came, and a volume to be possessed by all who care to know the surgery of children.

I cannot in these hurried lines allude to all Dr. Giraldès' other titles to scientific eminence, to the esteem of his contemporaries, and the recollection of posterity.

As to his eminent qualities of mind and character, his independent and liberal spirit, his love of justice, his unbounded devotedness to his friends and pupils, I, who lived in his intimacy and was attached to his wards, can testify with the strongest feelings of personal gratitude and admiration, and I am confident that all who enjoyed his friendship will share this feeling.

Paris, Nov. 30th, 1875.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 2nd :—

Broome, Stephen Bernard, Camden-street.
Elcum, Donald, Warwick House, Cheltenham.
Houchin, Edmund King, High-street, Stepney.
Whitfield, William Clarke, St. Owen-street, Hereford.

The following gentlemen passed the Primary Professional Examination on the same day :—

Henry Frederick Bailey and John Gairdner, University College ; William Henry Rean, London Hospital.

THE Town Council of Londonderry last week re-elected Dr. William Miller to the office of Mayor.

AT a meeting of the Municipal Council of the City of Dublin, held last week, Dr. George B. Owens, J.P., was unanimously elected Lord Mayor of Dublin for 1876.

A man named Savage died in Kerry last week after completing his one hundred and sixteenth year. He was born in 1759, and three years ago voted at an election at Listowel.

Dublin Pathological Society.—The subject for competition this session is "On Bursitis, and its Pathology," and the author of the best essay sent in by students who attend the meetings of the Society is presented with a gold medal, value £5.

Royal Medical Society, Edinburgh.—The following is the list of office-bearers of this Society for the session 1875–76:—Presidents: Dr. A. R. Turnbull, Dr. A. R. Coldstream, Dr. Thos. R. Ronaldson, and Dr. Thos. D. Wilson. Hon. Secretaries: Mr. George Ogilvie, and Mr. Leslie Ogilvie. Curator of Library: Dr. J. J. Cox. Curator of Museum: Dr. J. Graham Brown. Hon. Treasurer: Mr. J. R. Young. Sub-Librarian: Mr. John Turner.

Water-supply.—At a meeting of the council of the Metropolitan Poor-rate League held last week, the form of a memorial to the Home Secretary on the water-supply question was agreed upon. The memorialists ask that the supply shall be placed in the hands of a governing body elected by the ratepayers; that immediate action be taken to prevent any increase of charge being made upon the anticipated increased assessments; and that the term "annual value" in the Companies Acts be defined to mean the "rateable value" and not the gross "annual value." It was also determined that the subject of local taxation generally should be brought under the notice of the government and the ratepayers.

The London Sick Poor.—At the regular meeting of the Metropolitan Asylums Board in Spring-gardens, on Saturday, Dr. Brewer presiding, it was shown that fever was somewhat diminishing among the pauper class, and that from small-pox the same class is wholly free, not one case being in hospital. At the Homerton asylums for fever there were 199 cases, as against 208 the previous fortnight. Of those remaining 139 were of scarlet fever, 39 of enteric, 11 of typhus, and 107 of other diseases. At Stockwell asylum there were on Saturday 114 cases of scarlet fever, as against 116 a fortnight ago, 27 cases of enteric fever, 1 of typhus, and 2 of other diseases, making in all 144. It was reported to the managers that the Commissioners in Lunacy had inspected the temporary imbecile asylum for children at Clapton and the imbecile asylum at Hampstead for adults, and the reports read expressed satisfaction with the general condition of the patients. Plans were laid before the Board for erecting administrative offices on the sites for asylums at Hatcham, Fulham, and Hampstead, and the cost in each case, it was stated, would not exceed £10,000. It was agreed that the plans should be presented to the Local Government Board.

Medical Appointments.

Allen, R. G., M.R.C.S.E., has been appointed Resident Physician to the Queen's Hospital, Birmingham.

Bigger, S. F., M.R.C.S.E., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

Branfoot, H. S., M.B., M.R.C.S.E., has been appointed House-Physician to the Radcliffe Infirmary, Oxford, vice Rayne, appointed Assistant-Physician to the Manchester General Hospital and Dispensary for Sick Children.

Cunningham, C. L., L.R.C.S.Ed., L.M., has been appointed Medical Officer to Bradshaw's Charity, Ore, Hastings, vice Cumming, resigned.

Dobbie, R. J. A., M.R.C.S.E., has been appointed Resident Medical Officer to the Dover Hospital and Dispensary, vice Pasley, who has received a Colonial appointment in the Island of Trinidad.

Edwards, F. S., M.R.C.S.E., has been appointed a House-Surgeon to St. Bartholomew's Hospital.

Emms, A. W., M.R.C.S.E., has been appointed a Medical Officer to the Leicester Provident Dispensary, to reside in the village of Belgrave.

Evans, D. T., M.R.C.S.E., has been appointed House-Surgeon to the Denbighshire Infirmary, Denbigh, vice Lloyd, resigned.

Farrar, C., M.D., L.F.P. & S. Glas., L.M., has been appointed Medical Officer of Health for the Chatteris Urban Sanitary District, vice Wilson, appointed to the Rochdale Urban Sanitary District.

Fowler, T., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer for the Thoydon-Garnon District of the Epping Union, Essex.

Greenfield, W. S., M.D., M.R.C.P.L., has been appointed a Physician to the Royal Infirmary for Children and Women, Waterloo-bridge-road, vice Sparks, resigned.

Horsley, J., F.C.S., has been appointed Public Analyst for Merthyr: 10s. 6d. per analysis; and 21s. per day, second-class travelling expenses, and hotel charges, when required to give evidence.

Hough, J., M.R.C.S.E., has been appointed Medical Officer to the Borough Gaol, Cambridge, vice Hammond, deceased.

Johnston, W., M.D., C.M., has been appointed a Medical Officer to the Leicester Provident Dispensary, vice Wilby, deceased.

Joynes, F. J., M.R.C.S.E., has been appointed Medical Officer to the West Gloucester Friendly Society, Dursley, vice D'Oyle, deceased.

Kite, J. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the whole of the Welwyn Union and the Workhouse, vice King, resigned.

M'Lachlan, S. F., M.B., C.M., has been appointed House-Surgeon to the Chorlton-upon-Medlock, Rusholme, and Moss-side Dispensary, Manchester, vice Daly, resigned.

M'Master, R. D., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

Malcomson, J. A., M.D., C.M., L.M., has been appointed Medical Officer of Health for the Middlesborough Rural Sanitary District: £150 per annum.

Meehan, N. J., M.D., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Oulart Dispensary District of the Enniscorthy Union, Co. Wexford, vice M'Swiny, resigned.

Owen, W., M.R.C.S.E., has been appointed Medical Officer for No. 6 District of the Parish of St. Matthew, Bethnal-green, vice Sarvis, deceased.

Shain, W. F. [not "J. M.," as stated on p. 823], has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

Shuter, J., M.A., LL.B., M.B., M.R.C.S.E., has been appointed Assistant Demonstrator of Physiology at St. Bartholomew's Hospital.

Smith, J. B., M.A., M.B., has been appointed Resident Surgeon to the Queen's Hospital, Birmingham.

Smith, W. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Clogher Dispensary District of the Clogher Union, Co. Tyrone, vice Scraggs, resigned.

Sterling, R., L.R.C.P.Ed., L.R.C.S.I., L.M., has been appointed Medical Officer and Public Vaccinator for the Eastern District of the Christchurch Union, vice Brash, resigned.

Sutherland, W., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the Rothley District of the Rothbury Union, Northumberland, vice Brodie, resigned.

Thomson, W., M.D., has been appointed Medical Examiner to the Customs for Ireland, vice Hamilton, deceased.

Walsh, T. B., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballyclough Dispensary District of the Mallow Union, Co. Cork, and Medical Attendant to the Royal Irish Constabulary, Ballyclough, vice Harrison, appointed Medical Officer for the Doneraile Dispensary District of the Mallow Union.

Wilson, J. H., M.B., C.M., has been appointed Assistant-Surgeon to the Leith Hospital, vice Vetch, resigned.

Wilson, T. D., M.A., has been appointed House-Surgeon to the Leith Hospital, vice Daniel, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Bullock.—On the 30th ult., at Isleworth, the wife of Henry Bullock, F.R.C.S.E., of a daughter.

Charteris.—On the 5th inst., at Blythswood-square, Glasgow, the wife of Matthew Charteris, M.D., of a son.

Hurd-Wood.—On the 2nd inst., at Great Bardfield, Essex, the wife of J. Hurd-Wood, M.D., of a daughter.

Lydall.—On the 2nd inst., at Mecklenburgh-square, the wife of Wykeham H. Lydall, L.R.C.P.Ed., of a daughter.

Mackesy.—On the 6th inst., at Waterford, the wife of G. I. Mackesy, M.B., of a daughter.

Waterworth.—On the 2nd inst., the wife of T. H. Waterworth, M.D., of the New Kent-road, of a daughter.

Wilbe.—On the 30th ult., at York Lodge, Finchley-road, the wife of Richard Haydock Wilbe, M.D., of a son.

MARRIAGES.

Hughes—Dixon.—On the 20th ult., at St. Mary's, Andover, Wm. P. Hughes, M.D., to Fanny Jane, widow of H. M. Dixon, M.D.

Wilson—Cowan.—On the 7th inst., at Mount-street, Aberdeen, John S. Wilson, M.R.C.S.E., L.R.C.P.Ed., F.R.G.S., of Greenock, to Isabella Henderson, daughter of Wm. Cowan, Esq., Locomotive Superintendent, Great North of Scotland Railway.

Wood—White.—On the 29th ult., at St. John's, Paddington, Henry Thorold Wood, M.R.C.S.E., to Alice, daughter of T. White, Esq.

DEATHS.

Barrett.—On the 1st inst., at Kilcullen, Co. Kildare, James M. Barrett, L.K.Q.C.P.I.

Buchanan.—On the 29th ult., at Gloucester, T. Cox Buchanan, F.R.C.S.E., aged 71.

Donovan.—On the 3rd inst., at Haddington-road, Dublin, James Donovan, M.B., retired Surgeon R.N., aged 74.

Hall.—On the 6th inst., at The Limes, Swadlincote, Christopher Hall, M.D.

Martin.—On the 3rd inst., at Pendlebury, Manchester, Thos. Martin, M.D., aged 37.

Reardon.—On the 25th ult., at Doneraile, Co. Cork, Robt. Reardon, M.D., aged 75.

Thorne.—On the 30th ult., at La Motte, St. Heliers, Jersey, James Thorne, M.R.C.S.E., L.R.C.P.Ed., in his 31st year.

Tothill.—On the 2nd inst., at Westbury, Gloucestershire, Wm. Tothill, Surgeon, aged 91.

Webster.—On the 1st inst., at York-parade, Northampton, J. H. Webster, M.D., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE LANCET COMMISSION ON LUNATIC ASYLUMS.

The Report of The Lancet Sanitary Commission on Hanwell Lunatic Asylum will appear next week.

Embolism of Fat after Fracture of Bones.

Obstruction of lung capillaries by fat has been found at post-mortem examinations, though injection of pure oil into the veins of animals cannot, as it appears from experiments of F. Busch and Bergmann in Dorpat, set up inflammatory action and formation of abscess. Busch, however, succeeded in some experiments conducted in Recklinghausen's Pathological Institute, in causing embolism and sudden death by rough handling of broken bones, and in proving that from the fractured spot particles of bone-marrow had been sucked into the torn veins, and carried on into the vessels of the lungs. Dr. Czeray, Professor of Clinical Surgery in the University of Freiburg, gives in the *Berl. Klin. Wochens.*, No. 44, the history of a case in which a healthy, robust mason, aged thirty-two, had his right thigh-bone broken, and died thirty-eight hours after this uncomplicated fracture with symptoms of acute obstructions in the lungs and brain. The autopsy showed a large extravasation of blood around the fractured bone-ends, in which great quantities of coagulated fat-drops could be seen floating. The broken surfaces appeared jagged on a fine splinter still connected with the periosteum. The smaller arteries and capillaries of the lungs appeared under the microscope distended with clear liquid fat throughout all parts of both organs, the right one being perhaps more filled with fat than the left. Boiling in ether drew the fat off. The endothels of the lung-cells of such pieces appeared richer in protoplasm, and their nuclei more distinct than in the normal state. In the smaller branches of the pulmonary artery quantities of coagula were found, which showed, microscopically, distinct fat-drops mixed with water. The same could be detected in the blood drawn from the femoral vein by means of a pipette. The brain showed on sectional surfaces numerous blood-spots in the cortical substance, some small, and at some places sufficiently numerous hæmorrhagic ecchymoses; the vessels leading to them were found under the microscope filled with branching emboli of fat. In the kidneys the vessels of the glomeruli were filled with fat. In the liver numerous small drops in the intra-lobular vessels could be seen, but no branching thrombus. No embolism was detected in the muscle of the heart. The filling of the lung vessels was of such extent that the obstruction of circulation, œdema, and carbonic-acid poisoning caused by it fully accounted for the sudden death, which might have been accelerated, as Dr. Czeray seems to infer, by the embolism of the brain. He thinks that cases of so-called traumatic delirium or reputed commotio cerebri may be caused by fat embolism after fractures. The pressure of the arterial blood flowing from lacerated vessels and the contractions of muscles may force the fat particles into the opened veins. Dr. Czeray contends, however, that a certain amount of fat embolism occurs with every fracture, and is easily overcome. As the melting point of human fat is as low as from 15° to 25° C., a febrile rise of the temperature of the body cannot cause any remelting of coagulated extravasations of marrow. Experiments on dogs to emulsionate injected fat by an after injection of a weak solution (two per cent.) of carbonate of soda always resulted in the death of the animals.

Mr. W. Stirling Anderson.—It shall be published very soon.

The School Board and the Darwinian Theory.

To the Editor of The Lancet.

Sir,—It would appear that the School Board for London, or at least a majority of that body, are believers in the theory that "the fittest survive," to judge from the way in which the children under their rule are, in spite of the present inclement weather, daily turned out from the hot school-rooms into the open air.

A mother, whose name I give in confidence, as she dreads being embroiled with the Board, quite recently sent her children to school, and, as they had some distance to go, gave them their dinner to take with them. On their return home in the evening, she asked them where they had eaten it, and they said in the playground. They would not be allowed to remain in the school-room during the dinner hour. As a natural consequence, these children have caught severe colds.

The same person also informed me that on two different occasions her little boy had required "to leave the room," but had been refused permission by the teacher. As can be imagined, the result was unpleasant.

Surely School Board teachers are not so obtuse as not to be able to discriminate between a child who really requires, and one who pretends to want, to go outside; or, if so, the sooner the poor little ones are confided to the care of others not so insensible to the wants of juvenile humanity the better.

Your obedient servant,

Old Kent-road, Dec. 7th, 1875. W. F. Greene, M.B., M.A., &c.

Mr. C. Cleaver.—The best work on Impediment of Speech is, we believe, by Hunt, and published by Longmans. Mr. John Bishop has written on "Articulate Sounds, and on the Cause and Cure of Impediments of Speech," published by Churchill.

Injustice to Medical Witnesses in Police Courts.

We lately published a case in which a medical witness received very inadequate remuneration in a Police Court. Mr. J. T. Williams, Barrow-in-Furness, complains to us of a still greater injustice. He, on request, attended the magistrate's court, and was kept waiting an hour and a half, and, because the case was dealt with summarily, was told that there was no fund out of which he could be paid a fee. He applied to the Home Office, and received that ample-margined letter, or rather two, to the effect that Mr. Secretary Cross was unable to order any fee to be paid. Strange injustice goes on under the forms of law. Our correspondent should decline to attend in future without being subpœnaed.

A. K. C.—Our correspondent is the best judge in such a question.

The Residence Condition of British Medical Graduation.

To the Editor of The Lancet.

Sir,—Whilst commending the leading article in a late number of your journal upon the sale of foreign degrees to men who have neither knowledge nor fitness in any way to hold them, and indeed to those who have passed through no curriculum at all, and who have given no proof of their competency to undertake the onerous and responsible duties which they assume to fulfil, I wish through you to bring home to the authorities in this kingdom another and most important phase of this question.

How is it that the registered practitioners of this country are hopelessly and for ever excluded from all possibility of obtaining degrees at home by an iniquitous combination on the part of the Universities to exact the residence clauses from men of five, ten, fifteen, or twenty years' standing in the profession? Such requirement, in plain language, simply means robbery and ruin to the registered practitioner who seeks such honours. For what man of any standing could leave his practice for one or two years without being both robbed in the price of his degree and ruined in his prospects in life? The attitude of our Universities to these hard-working men is simply disgraceful. Practically it is this: Our degrees are reserved for youths, whose time is of so little value that they can employ it in no better way than in too many cases in a useless residence, whose experience is nil, and whose theoretical knowledge may have been got up for the occasion, to vanish again as quickly. If men of position and ripened knowledge need degrees, they must submit to insult, robbery, and ruin; and by sacrificing their positions, which have cost large sums of money and half a life's labour to acquire, they may have them; and after this, as a practical and experienced man I doubt whether these Universities would extend a helping hand to their unfortunate graduates who were perishing with hunger beneath their windows. Such is life. Degrees at the price of ruin are to be despised and shunned, and hence the rapid increase of foreign ones. People cannot be expected to give £5 for a pennyworth of apples. I cannot get even £1 or 10*s.* for a 2*s.* 6*d.* bottle of medicine. The principle is the same. If the Universities of Great Britain cannot take other qualifications, position, and standing, say of five or ten years, in place of their residence clauses, and trust to examination alone in the case of such men, they ought to be disfranchised and superseded by those who can.

Take my own case, which is a type of hundreds more. I hold the three London qualifications; I have been nearly twenty years in practice; my character is unstained; my means ample to sustain the dignity of any degree; and my knowledge, theoretical and practical, would far surpass that of any youth turned out of any University, and yet no degree can I have without being ruined. Hundreds of us must seek degrees from abroad, and stand upon our legal rights. Once upon the Medical Register, upon any other qualification we can assume the foreign degrees in the face of the Medical Council with impunity; they can do nothing, since we have complied with all required of us by law in being placed upon that Register.

If you wish to avoid foreign degrees, abolish the residence clauses of Universities at home in the case of registered medical men of five years' standing, throw open the examinations to such men, and a national stimulus will be given men to work, general good will be done, and foreign degrees will be very little heard of.

Yours &c.,

November, 1875. Omega.

M.D.—The question was one of urgency, not turning upon the wages, or their relation to the weekly wages of the agricultural class—a question of starvation and of life and death. We maintain that there is decided absurdity in not giving absolute powers of medical relief in such a case to the medical officer.

Mr. Morgan.—It would be contrary to our custom to make such an announcement, except under very special circumstances.

The Registrar-General and the Nomenclature of Diseases.

To the Editor of The Lancet.

Sir,—It would probably be interesting to many of your readers besides myself to know the evidence and the authority upon which it is stated "that the sixteen deaths (since July 17th), attributed to small-pox in London, have all been fatal cases of *varicella.*" A similar statement was made in the Registrar-General's Return some weeks ago with reference to an isolated case of death from small-pox appearing in that week's Return, and it surprised me that the medical man (who must have been able to identify himself as having certified it) did not attempt to justify his diagnosis.

I am, Sir, your obedient servant,

W. W. Leadam, M.D.

Gloucester-terrace, Hyde-park, Nov. 27th, 1875.

⁂ The Registrar-General, in his classification of diseases, is under the necessity of condensing the thousand diseases enumerated in the nosology of the College of Physicians, and accordingly they are returned under rather more than a hundred headings in the publications of the Registrar-General. In this condensed classification, deaths from varicella have been returned under the same heading as those from variola. Hence the sixteen fatal cases of varicella in London between the 17th July and the 27th November were classed with small-pox, and it became necessary to explain that they were deaths from varicella. We are informed that after the end of this year deaths from varicella will be classed with "other zymotic diseases," instead of with small-pox, as hitherto.—Ed. L.

OPHTHALMOLOGY.

A DEBATE of great interest to oculists is now going on before the Academy of Medicine of Paris. On the one hand, it is contended that alterations of vision, such as strabismus, myopia, &c., are owing, according to one camp (M. Jules Guérin at the head), to muscular retraction. He considers the disturbance of sight as an effect or consequence of the retraction of the muscles of the eye, just as club-foot is the consequence of the retraction of the muscles of the leg. M. Guérin thus maintains that strabismus is, to use his own forcible expression, the club-foot of the eye. (It should be noted that M. Guérin has been for many years a distinguished orthopædist.) His adversaries (M. Giraud-Teulon, a scientific ophthalmologist, at the head) contend, physiologically, that in the phenomena of accommodation there is neither change of curve in the cornea or in the connexions of the lens, nor alteration in the muscles of the eye. They, in fact, hold that the phenomena are owing to changes of form of the surfaces of the lens, which changes depend on the contraction of the ciliary muscle. They consider myopia and strabismus, etiologically, as the expression and the result of certain changes in refraction. M. Guérin answers that these changes of refraction are secondary effects of strabismus and myopia, and that both are dependent on muscular retraction. Again, M. Giraud-Teulon's school consider, pathologically, myopia, amblyopia, astigmatism, &c., as distinct and separate entities; whilst their opponents say that these anomalies are all connected together, and may simply be explained by muscular retraction. Practically, says M. Guérin, modern oculists have no resource but glasses; whilst he relies on the division of the retracted muscles. Thus we have, on the one hand, oculists and opticians; and, on the other, physiologists and surgeons. M. Guérin considers himself as the leader of the latter.

Captain Bedford Pim.—We cannot exchange.

PRESERVATION OF VACCINE LYMPH IN CAPILLARY TUBES.

To the Editor of THE LANCET.

SIR,—Of the different methods of storing vaccine lymph, that of Dr. Husband in his capillary tubes is for many purposes, especially the revaccination of large numbers of people, undoubtedly the best; but in my hands it is subject to the one great objection, that occasionally after filling a tube you are unable to blow out the contents; and I wish to ask my brother vaccinators, through the medium of your widespread and influential journal, whether they have ever met with the same result, and are able to offer an explanation of its cause.

Dr. Husband, in his Instructions for the use of his tubes, states that "if you delay the sealing process too long, more than five or ten minutes perhaps, the lymph within the tube is apt from evaporation to become adherent, especially if it be more than ordinarily viscid, and it cannot afterwards be blown out"; but the coagulation to which I refer is not due to delay in the sealing, for it takes place instantly. I have long been in the habit, in arm-to-arm vaccinations at my station, of picking up the lymph from the opened vesicles by means of a tube, and then blowing it out on to the lancet; my reasons for adopting this plan being that by so doing you get the lymph perfectly pure, free from epithelial scales, pus-globules, or blood-discs; you avoid all tearing of the vesicles; and you are able to collect lymph from several different vesicles if the supply be small, a matter of great difficulty with a lancet; and this setting in the tube takes place in the few seconds that elapse between the picking up and blowing out, and consequently before the application of any heat to seal the ends. I have found this coagulation occur most frequently in lymph collected from typical vesicles—viz., those free from areolæ on the eight day, or from those somewhat retarded in their development. It is not nearly so frequent if the vesicles be full and plump, or the arm slightly inflamed; doubtless, because in the latter case the lymph is more limpid. By taking a tube that has set as above described, and breaking off an end so as just to include a small portion of the contents, you can draw out a fine thread or hair of coagulated lymph or serum; the remainder can then be blown out, and by using this for vaccination you generally (although not with certainty) obtain good results. I have microscopically examined several of these threads, and in *every case at present* found a minute trace of blood, possibly only three or four blood-discs, invisible to the naked eye, and never suspected until revealed by the microscope—for, of course, all visible blood is carefully avoided; and I think that this may offer the explanation that the coagulation is due to the serum of the blood inadvertently taken up.

I remain, Sir, yours truly,

Greenwich, Nov. 29th, 1875. J. P. PURVIS, Public Vaccinator.

J. H. B.—1. Bradbury and Evans, Whitefriars; or Chambers, Paternoster-row.—2. Nothing recent.—3. Churchill, New Burlington-street.

Mr. Mayer.—We fear our correspondent attaches an undue importance to the matter.

THE CORPUS LUTEUM.

To the Editor of THE LANCET.

SIR,—Allow me to say a few words on the corpus luteum. In the casebook of the Bristol Asylum I found the following details entered by my distinguished predecessor, Dr. Benham:—"Patient, A. B., epileptic, admitted before the age of puberty; died during menstruation, a considerable time after. At the post-mortem her hymen was found entire, and a perfect corpus luteum in one of her ovaries." In 1851 Dr. Letheby read a paper before the Royal Society, in which he described two cases in every respect similar to the one recorded by Dr. Benham. Many years ago in Edinburgh a lamp-lighter killed his childless wife, and in her ovary a true corpus luteum was found. From these four interesting cases I infer that true corpora lutea are found in the ovaries of both impregnated women and virgins, but oftener in the former than in the latter; that when found in the virgins they have died menstruating; and that at present we are as ignorant as to the cause which produces at one time a true and at another a false corpus luteum, as we are of what produces at one time a male and at another a female child.

Yours faithfully,

HANMER DICKSON,
Late Assistant Medical Superintendent,
Nelson-square, S.E., Dec. 2nd, 1875. Bristol Asylum.

"EARTH TO EARTH."

A NEW kind of receptacle for the dead has been introduced by the London Necropolis Company. The object had in view in its construction is the same as that contemplated by Mr. Seymour Haden in his suggestion of the use of wicker-work—viz., to hasten dissolution. The new coffins are made of compressed pulp, held together by wooden fillets, look very much like ordinary coffins, and are as substantial till consigned to the earth. Then a change rapidly ensues, the damp soon affecting the pulp, which softens and falls away, leaving the earth to act upon the body.

Mrs. A. M. Nolan (Preston) will perceive that her subject has received attention.

THE SANITARY ASPECTS OF THE SACRAMENTS.

To the Editor of THE LANCET.

SIR,—The laws of health are necessary to the well-being of mankind in all the relations of life, and there is no station too exalted and no office too sacred to be independent of these laws.

With this exordium I desire to point out to the medical profession the duty that devolves upon them to instruct the church in sanitary matters. Already much has been accomplished in respect of burial of the dead; but there is one subject that laymen shrink from discussing—viz., the sanitary aspects of the sacraments, especially of the supper. Practitioners of medicine may well object to the early appearance at church of a woman and her infant, through which cause many lives are lost, still they have the power to restrain their patients from precipitancy of action; but as respects the other sacrament they are powerless.

The sanitary evil that ought to be abated is the use in common of one cup. There is danger in this use of communication of mouth disease. The usages of society would have long since swept away this common use of one vessel but for the dread that man feels for meddling with sacred rites.

I reiterate "there is no office too sacred to be independent of the laws of health."

I am, Sir, your obedient servant,

Rochester, Dec. 4th, 1875. FREDERICK JAMES BROWN, M.D.

Alpha.—The matter should admit of the most complete and easy adjustment. A. having practically declined to go, as requested, to see his patient, B. was perfectly right in going. B. would have done well to have taken an early opportunity of seeing A. to explain and receive explanations; but neither his not doing so nor his taking charge of the case gives any justification of the words used by A., which should be simply withdrawn. Strong adjectives, such as those used by A., should be reserved for very different cases. At the same time we can readily believe that they were the expression of a temporary irritation, and not of any permanent opinion. B. is justified in asking for their withdrawal.

Mr. Adams Parker.—Very soon.

A Constant Reader, (Brussels.)—14, Cockspur-street.

A CAUTION TO GIVERS OF TESTIMONIALS.

To the Editor of THE LANCET.

SIR,—In a moment of weakness I unfortunately wrote a letter on behalf of an old pupil at King's College, whom I remembered years ago as a respectable person, and who assured me he was in distress, mainly through the effects of an injury. This letter was granted by me for the express purpose of an application to the Medical Benevolent Fund.

I find that the individual in question has made extensive use of this letter for begging purposes, and has annoyed a great number of old King's men, and my medical friends in this neighbourhood especially. I regret exceedingly that I should have been the means of this annoyance, and I take this step of writing to you for the purpose of putting them on their guard, and thus making all the reparation in my power for the annoyance I have caused them by my act of indiscretion.

Yours obediently,

Wimpole-street, December, 1875. HENRY SMITH.

Z. D. Y.—Our correspondent should, to say the least, have received intimation of the change from the patient's friends, who should have been instructed as to their duty in this matter by the family doctor. Possibly he gave such instructions.

IMPROVED TRUSS.

To the Editor of THE LANCET.

SIR,—In your journal of to-day's date, under the heading of "New Inventions," appears an improved truss with ball-and-socket joint, which allows the pad to be placed in any position. We beg to say that neither principle nor general construction of the truss referred is *new*. The *ball-and-socket* principle, with screw adjustment to fix the pad at any angle, was patented on the 28th of August, 1874, No. 2947, and we purchased the patent right of the said inventor. At the Leeds Exhibition this year one of the trusses referred to has been exhibited by us. We likewise enclose the patent specification for your inspection, in which you will find the *ball-and-socket* principle, which can be fixed at any angle, is claimed by the inventor.

We much regret having to trespass on your valuable space; but can scarcely allow the truss to be called a new invention, the same having been anticipated at least fifteen months ago.

We remain, Sir, your obedient servants,

West Smithfield, Dec. 4th, 1875. ARNOLD AND SONS.

THE TREATMENT OF RINGWORM.

To the Editor of THE LANCET.

SIR,—I beg to inform Dr. Welsh, through the medium of your columns, that I have at present a case of ringworm under my care, in which I have for five weeks persistently used iodine in the form which he recommends, but without success. I have since tried sulphur &c., and am now, by the advice of a medical friend, applying petroleum, the result of which remains to be seen.

Your obedient servant,

Claughton, Cheshire, Dec. 5th, 1875. J. FOURNESS BRICE, M.D.

ULCERATED NIPPLES.

M. LEGROUX (*Annales de Gynécologie*, Nov. 1875) advises the following treatment:—Spread with a camel-hair brush a layer of elastic collodion around the nipple, in a radius of an inch or more; a piece of gold-beater's skin should then be placed over the nipple and collodion, taking care to make a few holes with a pin over the part of the gold-beater's skin which covers the nipple, so as to allow the milk to ooze through. No collodion should be spread on the nipple itself, as some pain might thereby be occasioned. By the rapid evaporation of the ether the collodion dries up, and the gold-beater's skin adheres. The nipple is then more or less pressed down by the latter, which in drying becomes tense. When the child is to be nursed, the end of the nipple should be wetted with a little water. The gold-beater's skin which covers it becomes soft and supple, allows the nipple to swell, and protects the ulcers and fissures from the strain of suction. The mother or wet-nurse thus suffers no pain, and the ulcers heal in a few days.

THE paper of *Mr. S. J. Knott* shall be published at a very early date.

Mr. Nankivell is thanked.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Pray allow me to correct two important errors in your report of the proceedings of the Medical Society of London in the last number of your journal, p. 804. I did not say, as reported, "that worms were never introduced into the system by vegetables." I said that tapeworms in man were never so introduced, the author of the paper, Dr. Brunton, having stated "that they sometimes were." In the epidemic sore-throat the glands of the "*back*" of the neck were never affected, as stated in your journal.

Yours obediently,

Beaufort-street, Chelsea, Dec. 6th, 1875. EDWARDS CRISP.

J. A.—The subject has been noticed before. Our correspondent should refer the circular to the Bodies whose diplomas the person in question holds, and ask them if they can do anything in the matter. We shall be glad to have the replies.

TROUSSEAU'S COMPRESSOR.

To the Editor of THE LANCET.

SIR,—I was much interested in the report of the surgical cases in the Cashel Union, described by Mr. Laffan in your last issue. Would you allow me space to ask him where "Trousseau's compressor" may be obtained.

I am, Sir, yours &c.,

Liverpool, Dec. 3rd, 1875. W. MACFIE CAMPBELL, M.D.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Prof. Attfield, London; Mr. H. Smith, London; Mr. C. Heath, London; Mr. Barwell, London; Mr. Bond, London; Dr. Garrod, London; Dr. A. Meadows, London; Mr. Morgan, London; Mr. Greenwood, Liverpool; Mr. Barker, Blackburn; Mr. Blackford, Cannock; Dr. Elkington, Ontario; Mr. Frowde, London; Mr. R. P. White, Dublin; Mr. Clouting, Thetford; Dr. Pritchard, London; Dr. Rivington, London; Dr. Duncan, London; Mr. Grace, St. Andrews; Mr. Rogers, Ottawa; Dr. Campbell, Liverpool; Messrs. Mart and Co., London; Dr. F. Robinson, London; Mr. Dickson, London; Mr. R. Nelson, Gosport; Dr. Brown, Rochester; Dr. Farquharson, London; Mr. Larkin, London; Mrs. Baines, London; Mr. Macnamara, London; Mr. Ingpen, London; Dr. B. Sanderson, London; Messrs. Arnold and Sons, London; Mr. J. W. Groves, London; Mr. Bunting, Tottenham; Mr. Brown, Uppingham; Mr. A. Parker, Birmingham; Mr. A. W. Nankivell, Chatham; Messrs. Young and Postans; Mrs. Nolan, Preston; Dr. E. Crisp, Chelsea; Mr. Donnelly, London; Mr. Bodine, Trenton, New Jersey; Mr. Spurway, Paignton; Mr. Ogilvie, Edinburgh; Mr. C. Young, Bridgwater; Dr. Knott, London; Dr. Brice, Claughton; Mr. Norton, Leeds; Mr. Philip, Caterham; Dr. Anderson, Middlesborough; Mr. Leitch, Silloth; Dr. Mayer, London; Mr. R. Hook; Mr. Pim, London; Dr. E. Watson, Glasgow; Mr. Braidwood, Birkenhead; Mr. Scott, London; Dr. Hurd-Wood, Great Bardfield; Mr. Gould, Liverpool; Dr. Thornley, Leicester; Mr. Wall, Cambridge; Mr. Cappe, Brookwood Asylum; Mr. Skrimshire, Abergavenny; Dr. de Chaumont, Southampton; Dr. Crowther, Luddenden; The Registrar-General of Edinburgh; Anti-Monopolist; Y. S., Old Subscriber; Chirurgeon; S. L.; Surgeon; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Candotti, Queensland; Messrs. Levy and Co., Dundee; Mr. McGregor, Widnes; Mr. James, Cwm Avon; Mr. Thorne, La Motte; Mr. Blount, London; Dr. Adam, Bebington; Mr. Miller, South Brent; Mr. Johnson, Bedford; Mr. Janson, Darlington; Mr. Williams, Kingsland; Mr. W. Anderson, St. Andrews; Mr. Roper, Blaxhall; Mr. Fox, London; Medicus, Selkirk; D., London; Medicus; H. E. B., Pontypool; F. M., Twickenham; J. C. H.; G. S.; T. E. J., Bradford; B. C.; Medicus, Bradford; X. T.; A Student; J. H.; Theta; F., Lancaster; A. W., London; B. B.; A. S.; Douceur.

Western Morning News, Hastings Observer, Western Daily Mercury, Cork Constitution, Birmingham Morning News, Newcastle Chronicle, Manchester Guardian, Isle of Man Times, Huddersfield Chronicle, Hereford Times, North British Daily Mail, Lincoln Gazette, Indian Medical Gazette, Metropolitan, Croydon Advertiser, Liverpool Post, Surrey Advertiser, East London Observer, Dublin General Advertiser, and *Glasgow Herald* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, DEC. 9TH, 1875.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Dec. 3	29·82	N.E.	...	32	...	36	30	0·29	Overcast
„ 4	29·83	N.W.	...	30	...	33	28	...	Foggy
„ 5	30·03	N.E.	...	32	...	33	31	...	Overcast
„ 6	30·11	N.E.	...	31	...	34	26	0·25	Snowing
„ 7	30·42	E.	...	31	...	36	29	...	Overcast
„ 8	30·41	N.E.	35	36	...	39	30	...	Overcast
„ 9	30·41	N.	35	37	...	...	34	...	Overcast

Medical Diary for the ensuing Week.

Monday, Dec. 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Henry Lawson will exhibit M. Hayem's new mode of estimating the Amount of Blood-globules.—Mr. Alfred Freer, "On a Case of Impalement, with Post-mortem results four and a half years afterwards."

Tuesday, Dec. 14.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8. P.M. Ballot.—8½ P.M. Mr. Marsh, "On a Case of Abdominal Section for Intussusception in an Infant."—Dr. Fagge and Mr. Howse, "On a Case of Abdominal Section for Intussusception in an Adult."—Mr. Hutchinson, "On a Case of Operation for Intussusception into the Colon."

Wednesday, Dec. 15.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Dec. 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. Henry Davis, "On a Larval Cirripede."—Mr. John E. Ingpen, "On the Measurement of Angular Aperture."—(No meeting on Dec. 24th).

MEDICAL MICROSCOPICAL SOCIETY. — 8 P.M. Dr. U. Pritchard, "On a new form of Freezing Microtome."—Mr. J. Needham: Specimens.

Saturday, Dec. 18.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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A Clinical Lecture

ON

THE BEST MANNER OF EMPLOYING INSTRUMENTS IN CASES OF STRICTURE WHERE MUCH DIFFICULTY EXISTS.

Delivered at University College Hospital on November 25th, 1875.

By Sir HENRY THOMPSON,

SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE HOSPITAL.

(*Reported by* Mr. G. Buckston Browne.)

I have now to consider the question, How are you to deal with a case of stricture of the urethra in which real difficulty exists in passing an instrument into the bladder? Let a case be supposed in which attempts have been made, perhaps by several hands, and hitherto without success.

First, let me point out in what the chief mechanical difficulties in such a case might consist. There are four:—

1. Extreme narrowness of the stricture.
2. The stricture may be tortuous.
3. It may be complicated with false passages.
4. The urethra behind the stricture may be irregularly dilated and reticulated.

Difficulties of another kind, not mechanical, are frequently met with; these are two in number, and are to be considered hereafter—viz., (1) the stricture may be very resilient, and liable to become narrower, and to produce absolute retention on any instrumental contact; and (2) any use of the instrument may produce in the patient an attack of rigors.

1. Let us consider first the mechanical causes of difficulty, of which the first is extreme narrowness.

In regard to this, the first thing you must do is to see the patient make water. The failures to pass the instrument may not necessarily have arisen from narrowing of the urethra or from tortuosity; there may be a false passage in the canal. It may, indeed, be that there is no stricture at all. No greater mistakes are made than those which occur with patients who have little or no stricture, either from the surgeon not knowing well how to pass the instrument, or from there being a false passage into which it enters, so that it does not reach the bladder at all. You are first, then, to see the stream of water, perhaps on more than one occasion, so as to estimate it fairly, and you will judge by that what size of instrument is to be used. And always let the instrument correspond with the size of the stream which you see; but it should correspond only in this way—the instrument should be a little smaller. You will sometimes see a patient who scarcely passes a stream at all; the urine issues only in a succession of drops. This being his constant, and not a temporary or accidental, condition, how very small must be the instrument which is adapted in size to traverse fairly the stricture.

The first step to be taken with such a case, after having ascertained, as I assume to have been done, the situation of the stricture, is to introduce very gently the smallest English gum catheter without a stylet, and try to insinuate it through the obstruction. For this purpose I have endeavoured to obtain some exceedingly small instruments, much smaller than any hitherto made.* This tiny catheter, which I show you, containing a slender steel thread rather than a stylet, may be used either with or without it. The value of this little instrument, after its extreme tenuity, is its ability to transmit a drop of urine through its interior, and so assure you of its position when the bladder has been reached, an assurance, I need hardly tell you, of great importance. It is worth while making a careful and somewhat prolonged trial, and if you succeed, the instrument is to be tied in at once and the route secured. If I fail with this, I then try a silver catheter of the smallest size.

But there is one very important matter in relation to the silver instrument—namely, that it is an extremely dangerous one in inexperienced or in incautious hands. Nothing is easier than to implicate its slender point in a lacuna, and if the slightest force be used, the point leaves the route and finds a track among the loose tissues outside the urethral mucous membrane, and thus a false passage is commenced. If you cannot train your hand to employ it with extreme lightness and delicacy, by no means use it. It should be held and moved with so much tenderness, that if the point meets with any resistance in its course, the fingers rather should slip down the shaft than communicate pressure to the instrument. Any kind of force in its use is not to be thought of—its only value is in its capacity for being insinuated between closely applied surfaces, and any sense of opposition to its point is a clear intimation that its route may lie right or left, but not straight on. It is not fit for the hand of a tyro, but when he is habituated to the use of somewhat larger instruments, the ability to use this will follow. A careful trial, however, with the very small gum catheter, first without and then with the stylet, will in many cases make this unnecessary; but these failing, I know no instrument so valuable as a very fine silver one with a little increase of size in the shaft, to render it steady. The final three inches should not exceed half the size of No. 1 of the English scale; the shaft should gradually rise to fully No. 2.

2. A stricture may be more or less tortuous; in other words, it does not necessarily follow the exact direction of the urethra.

It may be a little on this side of the axis or on that, not necessarily in the middle. You may see this sometimes in the dead body; and you may infer it from experience on the living. When you have to deal with a very narrow or with a tortuous stricture, there are two quite distinct systems of using an instrument, either of which you may employ. What I have to say, then, applies to the manipulation necessary in all cases of difficulty under the present and preceding heads; and I have reserved it therefore until now. First, the little instrument employed, whatever its nature, may be applied by what may be called "groping"—that is, by carrying the point in any and every direction, with the utmost care of course, until by chance it has entered into the stricture, as you may feel by the sensation of the point being "held" or "grasped." For this purpose very slender solid instruments are made of gum-elastic, of catgut covered or not with gum, or of whalebone, since these can be produced of rather smaller size than the hollow instruments which I have just described. In order to add to the chance, as is supposed, of finding the orifice, there are some of the first-named material, the ends of which are formed somewhat into the shape of a corkscrew, or are otherwise made to deviate from a straight line. All these are of French design and workmanship, but none have the advantage of being hollow, to demonstrate their presence in the bladder when they arrive there.

Now, I advise you not to rely on mere groping to find the orifice; it is exceedingly dull, mechanical work to be constantly groping for a considerable time on the chance of success.

There is a method of search, however, conducted on a fixed principle, which I much prefer and always employ. I advise you to adopt that, or any other you can devise, provided that it be a systematic one, and also an exhaustive manner of making the necessary exploration and researches for the orifice of the stricture. Some of you have often seen me apply it to patients in the wards upstairs. According to this manner you proceed systematically and examine each side of the urethra *seriatim*. We will suppose the urethra to require examination on four sides—a roof, a floor, a right side, and a left side. You are to take your slender silver catheter and slide its point delicately along each side successively from the orifice to the place of obstruction. If the orifice of the stricture is not *exactly* in the middle line, and we may fairly believe that it rarely is so, then there is one side of the passage which will more easily lead into the narrow way than any other. These diagrams will show what I mean. If I go down on this side I shall probably not get into the stricture; but if I slide down gradually on the other I shall probably get the instrument in, because you see there is less obstruction on that side. Begin, then, by the roof. The roof is the firmest part, the least likely to furnish obstruction in the way of ducts or lacunæ, and by following it you will be most likely to carry the point in. The floor, on the contrary, is the softest, loosest, and most spongy part, and will be most likely to yield to the instrument and give way. If your first effort does not succeed, take the right side; if that does not do, take the left; if that fails, try the floor. If you are very careful you may make the attempt in this manner for thirty or forty minutes without doing any damage; but if the patient suffers, or if he bleeds, or if you are losing patience, give up the task, or you may make a false passage, and increase the difficulty considerably.

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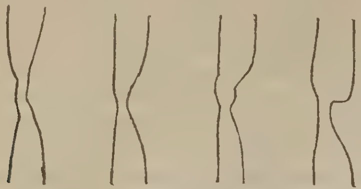
* Messrs. Weiss and Son have taken great pains to accomplish this for me, and have produced some slender delicate instruments much smaller than No. 1, which have been of great service.



3. The existence of a false passage leading out of the urethra is another serious obstacle to the introduction of instruments into the bladder.

The principle which must guide your action here is to be very careful to avoid the side on which the false passage is. A false passage commences usually on the floor, and no doubt for a reason already mentioned—viz., the fact of the structures below being looser and more delicate than those above. When you examine a patient with a false passage, you may find the instrument passing to its very end, notwithstanding which no urine flows. Hence the false notion of stricture at the neck of the bladder. When the instrument has thus passed, put your finger into the rectum, and you will know instantly whether there is a false passage; for, if so, there are only the coats of the bowel, which are very thin, between your finger and the instrument, so that you feel it very distinctly; and very commonly not in the middle line, but rather to the right or to the left. But if the instrument is in the right passage, the whole thickness of the prostate, not always very considerable, is felt between it and your finger. It is almost always in the bulbous portion that the instrument leaves the urethra and gets under the prostate. What you are to do, then, is to withdraw the catheter two inches or so, pass it on again, keeping as close along the upper part of the urethra as you can, ascertaining by means of the finger in the bowel that the instrument is not passing into the old route. But when a false passage exists, it sometimes constitutes the chief obstacle to the introduction of an instrument, for, as I have before hinted, the stricture itself may be only inconsiderable. The size of the stream will help to determine this point; and if, so far from being a mere thread it has a volume equal to a No. 6 or 7 catheter, use a No. 5 silver one, so that you can guide it, and try each side of the urethra successively until you discover which it is that enables you to clear the orifice of the false passage. Remember the result, and you have a key to the difficulty which will enable you to overcome it with ease on the next occasion.

4. Difficulty presented by dilatation and reticulation of the urethra behind the stricture.

Suppose next, that, following these hints, you have carried the instrument through the stricture; there is a sort of grasp felt on attempting to move the instrument which is quite unmistakable. But that very "grasp," which you are so satisfied to feel, makes it less easy to manipulate the point of the catheter after it is through the stricture, and you may have a source of danger to encounter in the urethra beyond. Thus the mucous membrane, being sometimes reticulated from the presence of dilated lacunæ, it is easy to engage the point of the instrument in one of these, and make a false passage. Besides this, as the result of long continued fluid pressure and straining, the urethra behind the stricture is occasionally much dilated, and the whole surface is so irregular that it requires care and an acquaintance with this condition to traverse it safely. Here especially, with a small instrument already firmly grasped, you may require all the caution you can command in completing its safe course into the bladder.

The consideration of the difficulties which are not mechanical must be deferred to another meeting.

ON EXCISION OF THE ANKLE.*

By JAMES F. WEST, F.R.C.S.,

SENIOR SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

Excision of the ankle, although admitted to be of the highest value in gunshot fractures of the bones implicating the tibio-tarsal articulation, and also to be very suitable in severe cases of compound dislocation of the ankle, has not hitherto been regarded with much favour for chronic disease of that joint.

Resection has probably been less frequently performed of this than of any of the other joints. Objections have been made to it on various grounds. Prejudice against the operation has been entertained and freely expressed by some, who, having never performed it, have condemned it as useless, or even improper, for chronic affections of the ankle-joint. Thus Holmes, in the first edition of his System of Surgery, spoke disparagingly of the operation, having never done it; but in his second edition he says—"my individual experience, though limited to two cases, which recovered very rapidly, has been very satisfactory. ...... I believe it is very advisable and advantageous in appropriate cases." And again he says in another place—"In cases of successful excision the limb is very much superior in usefulness to any stump which can be formed, whether by Syme's or any other method of amputation." Others who have had one or two unfortunate cases have been deterred from performing resection again, forgetting that almost always the early days of any operation are beset with obstacles and disappointments. On the other hand, those who, like Hancock, Langenbeck, Lee, and Heyfelder, have given it a fair trial have been rewarded with excellent results; and their success ought, I think, to establish it for ever as one of the most legitimate resection of joints which surgery has at its command.

Resection of the ankle, or, in fact, of any other joint, is of course not justifiable until attempts have been made to remedy the joint-mischief by all the means at our disposal. Rest; immobilisation; counter-irritation, by blisters, iodine, or by the actual cautery; and, lastly, free incision into the joint and removal, if possible, of any fragments of loose necrosed bone,—must each, in succession, have been resorted to; while at the same time the patient's general condition has been to the utmost improved by fresh air, good living, and such tonics as iron, quinine, and cod-liver oil.

Still, after the adoption of all these measures, suppuration in and about the joint, pulpy degeneration of synovial membrane, ulceration of cartilage, and caries of the cancellous structure of the bones, will in some cases continue, and then arises the question, Shall the leg be amputated by Syme's or Pirogoff's method, or shall the patient have the chance first offered to him of keeping his foot, even although this will necessitate a somewhat difficult and tedious operation and a protracted convalescence?

I entertain a strong opinion that by adopting Ollier's (of Lyons) mode of subperiosteal resection, the future history of excision of the ankle will be far more satisfactory than the past has been. Experience has also shown that partial resections had better be given up, and that it is better to excise the entire joint than to limit the operation to the removal of the obviously diseased portions of it. Attention to the following measures during the after-treatment will also add greatly to the number of successful cases:—1. Early and complete immobilisation of the limb. 2. The use of the anterior iron bracketed splint, by means of which, as after resections of the knee, the leg can be suspended in a Salter's swing, and the lateral openings formed in the joint dressed without much disturbance of the parts. Lastly, the employment of drainage-tubes, passed from one side of the ankle to the other, by which pus and carious débris may be removed, and through which the wound may be daily washed out by some weak disinfecting solution, as carbolic acid or Condy's fluid.

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* A paper read before the Birmingham and Midland Counties Branch of the British Medical Association.

The originator of resections, as of so many things that still hold good in surgery, was Celsus, as we learn from this passage: "Ideo quod excedit, abscindendum est." But the first to apply this principle to the ankle was an English provincial surgeon, Hey, of Leeds, who in 1766 resected the lower ends of the tibia and fibula for compound dislocation; and since that time resection of the ankle has frequently been performed under similar circumstances with such good results that few would question the propriety of performing resection for compound dislocation of that joint, rather than of at once recommending amputation of the leg. Hey's success led to the adoption of the operation for chronic articular disease by Moreau, and in 1792 he first removed the lower ends of tibia and fibula for disease.

It is perhaps advisable to recall the names of those who have performed the operation, and who have expressed their opinion in favour of it, before calling attention to the case which I intend to bring under notice, and which I hope and believe will induce many other surgeons to give it a trial in any suitable case they may have under their care.

Mr. Hancock, in his lectures at the Royal College of Surgeons in 1867, referred to 19 successful cases of his own, and mentioned that Heyfelder had given 26 examples of this operation, of which 5 died, 1 suffered consecutive amputation, and the rest proved successful; and that of Jaeger's 24 cases 23 proved successful and only 1 died.*

Mr. Stokes, in the *Dublin Quarterly Review* of 1870 enumerates 51 cases of resection of this joint, with good results in 38. No doubt many of these operations were performed for traumatic injuries, and objection may be taken to them on that account; but, on the other hand, numerous cases may be found in the medical journals of the past few years, and in the works of recent surgical writers, in which resection has been performed for chronic articular disease with admirable results. Thus, in March, 1870, Mr. Erichsen excised the ankle of a woman, aged twenty-eight, for scrofulous disease of the ankle, removing at the same time part of the os calcis, with success.

In December, 1870, Dr. Watson showed at the Medico-Chirurgical Society of Edinburgh a boy from whose right foot he had some months previously excised the astragalus and the ends of the tibia and fibula. The result was remarkably good, the patient being able to stand on the foot, having considerable power of flexion and extension, and the limb not being shortened more than half an inch.

In THE LANCET for Jan. 20th, 1872, is a case of excision of the ankle by Mr. Canton, performed at Charing-cross Hospital on Dec. 9th, 1871, on a man, aged thirty-one, who had had chronic disease of the joint for eight years. The man's progress is said to have been "highly satisfactory, and at no time had there been any constitutional symptoms."

In the *British Medical Journal* of Sept. 7th, 1872, Mr. Sydney Jones records the case of a boy aged fifteen, whose ankle was excised for articular caries on Jan. 24th. The limb was not taken off the splint for two months, and "there was then firm bony union, and the line of the foot with the leg was very good."

Chassaignac† performed resection of the ankle on a woman aged twenty-three for chronic suppuration in the joint and necrosis of the fibula, in whom there was such "extreme mobility of the foot that it was only held in place by the skin and by the tendons, which were in part exposed," and yet after two months a good recovery occurred.

Ollier, of Lyons, relates a case of resection for comminuted fracture of the bones of the ankle, which seems to surpass all the others on record, for in that instance there was so much reproduction of bone that the patient could walk ten miles, and even dance.

Sédillot, in a memoir read before the Academy of Sciences in 1867, also speaks highly of his experience of this operation.

Lastly, in Jan. 1874, and again in May, 1875, Mr. Henry Lee brought the subject of resection of the ankle forward at the Medico-Chirurgical Society of London, and after relating his own experience, which was highly in favour of it, a discussion ensued, in which Messrs. MacCormac, Maunder, and others joined, and most of them had a good report to give of the operation.

I will now briefly narrate a case in my practice, and then call attention to the mode of operating which I prefer, and to the advantages which resection offers.

Alfred C——, aged sixteen, a stable-boy, was admitted into the Queen's Hospital on Nov. 10th, 1873, for synovitis of the ankle-joint, followed by ostitis of the tibia and fibula. The following history was obtained:—Ten weeks previously he had sprained his ankle while jumping from a loft, a distance of ten feet. Considerable swelling followed, but not much pain, so that he was able to continue his work for a fortnight; at the end of that time he was obliged to take to his bed. Previous to admission an incision had been made into the swelling, and a large quantity of pus evacuated. He complained of great pain in the joint at night.

On admission, there was considerable swelling around the ankle, and the patient was unable to put the foot to the ground. Openings on either side of the joint discharged a large quantity of fetid pus. There was great pain on the slightest movement, and the patient could obtain but little rest at night. By means of a probe it was found that the lower ends of the fibula and tibia were necrosed to a considerable extent. The joint was immobilised by means of a gutta-percha splint, and the patient was ordered half an ounce of the iodide-of-iron mixture three times a day.

Nov. 25th.—Patient's health being remarkably good, but the purulent discharge continuing copious, chloroform was administered, the actual cautery applied to the surface, and subsequently a drainage-tube passed right through the joint.

Dec. 20th.—The lad's general health being good, and the case seeming favourable for resection, the operation was performed as follows:—Lateral incisions were made parallel to the tibia and fibula; the fibula was first divided with the chain saw, then the tibia with Butcher's saw, and lastly the astragalus with Hey's saw. The articular surfaces of all the bones were found to be devoid of cartilage and superficially necrosed. The operation was performed by Ollier's subperiosteal method, and, Esmarch's bandage having been used, it was quite bloodless. No tendons were divided. A drainage-tube was inserted between the bones of the leg and foot, and the limb at once immobilised with bandages and a gutta-percha splint. Chloroform was used, and well borne by the patient.

28th.—A week after the operation it was noticed that there was free discharge, and that the patient's condition was very good. An anterior splint and swing apparatus (Salter's) were employed. A fresh drainage-tube was passed through from one side of the joint to the other, and he was ordered one ounce of quinine mixture three times a day.

Jan. 22nd.—Less discharge; limb comfortable; eats and sleeps well. Carbolic acid lotion used for dressing, as the discharge is fetid.

Feb. 2nd.—Granulations in the wound rather exuberant. Red lotion to be used, and pressure made by means of a piece of sheet lead around the ankle.

March 2nd.—Wound nearly healed, and much general consolidation about the union of the bones, so that he can lift the limb easily. This was about eleven weeks after operation.

A starch bandage was subsequently applied, and it was noticed on March 23rd that the union of the bones was firmly consolidated, that the lines of incisions looked healthy, but that there was still some discharge of pus.

April 4th.—Patient left the hospital, less than four months after the operation, with the wounds discharging but little, and the shortening was then about one inch.

He is now, December, 1875, able to earn his living, and to walk four to five miles without inconvenience.*

My manner of making the incisions in this case was almost identical with that described and recommended by

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* THE LANCET, vol. ii. 1867, p. 121.

† Opérations Chirurgicales, vol. i., p. 706.

* The patient was exhibited at the meeting on Dec. 9th, 1875; there was not more than an inch of shortening, and the bones of the leg and foot were firmly anchylosed together. Mr. Prosser, of Bromsgrove, has paid great attention to the boy, and has conduced largely to the good result

Hancock, except that the lateral incisions were not carried forwards and downwards on the tibial side as far as the projection of the inner cuneiform bone, nor on the fibular side to within half an inch of the base of the outer metatarsal bone; such free incisions are, in my opinion, rarely necessary, and further tend rather to lead to subsequent suppuration among the tarsal bones. Lateral incisions are far preferable to the semicircular incisions which I have seen employed at the Leeds Infirmary and elsewhere, inasmuch as with the former all the tendons are saved, and no vessel of importance is divided. Excision of the ankle is one of those operations in which the advantages afforded by Esmarch's bandage are most appreciated. Not only is the patient free from hæmorrhage, but in consequence of the parts not being covered with blood, we can see clearly what we are doing, and need only take away as much of either of the bones as is absolutely diseased, and if on taking one section of bone caries is still evident, we can take slice after slice of bone away until we get to sound osseous tissue, without having our view of the joint cavity in any way obstructed. The joint having been opened on the outer side and the fibula exposed, I separate the periosteum from it with the raspatory, and then cut off the lower end of that bone with the chain-saw. I prefer the chain-saw because it can readily be passed round the bone, and can be kept close to it, so as not to endanger the peronei tendons, and hence I think it presents greater advantages than Hey's or Butcher's saw. I then divide the internal lateral ligament, keeping close to the bone, so as to avoid the flexor tendons and the posterior tibial artery, push the lower end of the tibia through the fibular opening, denude the periosteum, and cut the articular surface and inner malleolus off with Butcher's saw, and lastly with Hey's saw I remove the upper part of the astragalus. Should that bone be extensively diseased it should be freely gouged, and the carious or necrosed portions cleared out with the osteotrite. In some cases it has been successfully removed entire, along with some portion of other of the tarsal bones, as in Mr. Swain's case of a boy, aged fourteen, for whom at various times he excised the ankle-joint and the bones of the tarsus for caries; but, as a rule, when more than one of the tarsal bones is largely affected with caries, it will be better to amputate at once by Syme's method. Pirogoff's operation, though recommended by some surgeons, is not, as I have before proved, suitable in such cases, in consequence of the great risk of caries recurring in the remaining portion of the os calcis.

I hold that complete resection of the joint is better than partial, and in that respect I differ from Mr. Bryant, who says, "Resection in cases of disease is very hazardous, except in partial resection of the fibula, which is generally successful." Now, having myself tried partial resection of the fibula more than once, and especially recently on a boy aged sixteen, whose disease seemed limited to that bone, and having had subsequently to submit the patient to secondary amputation, I cannot agree with Mr. Bryant's opinion, and I think he will modify it when he has had some personal experience of complete resection of the ankle, which up to the present time he admits he has not had.

Immobilisation of the limb before the patient leaves the operating-table I deem to be essential. I care very little whether that condition be obtained by a gutta-percha or leather case or by a starch or plaster of Paris bandage with suitable windows on either side of the ankle, but the immobilisation must be thorough, and the apparatus, whatever it is, should not, if it can be avoided, be disturbed for at least a couple of months. The limb may, with comfort to the patient, be suspended by one of Bartleet's or Watson's anterior splints in a Salter's swing.

As new bone is often formed rapidly in young subjects, and concomitantly there is an abundance of exudation material about the ankle, it is advisable in the course of two or three months to give support and compression to the new tissues by means of a piece of sheet lead one-eighth of an inch in thickness, retained *in situ* by careful bandaging.

Another feature of the operation of great value, to my thinking, is the preservation of the periosteum by means of careful employment of the raspatory, so as to avoid cutting that membrane. The instrument should be kept close to the bone as possible, so as to detach some of the granules along with the periosteum.

The idea of regenerating bone by this means, so generally attributed to Ollier, of Lyons, belongs, as Giraldès candidly points out in his "Mal. Chir. des Enfants," to our countryman Goodsir, who, as early as 1845, discovered the fact that by preservation of the periosteum with the subjacent and still adherent fine particles of bone new bone could be formed.

Preservation of the length of the limb and greater consolidation of the parts, both points of immense importance as regards the patient's future condition, are gained by this method of subperiosteal resection, and I cordially echo all that has been said in its favour by Professor von Langenbeck in his work "On the After-results of Joint Resections," and not less by another great authority in the treatment of diseases of joints, Dr. Sayre, of New York. Drainage-tubes applied at the time of resection, so that the joint cavity may be kept free from discharge, and thoroughly cleansed daily with some weak disinfectant solution, are small, though not unimportant, matters to be attended to in the after-treatment of the case.

Having now glanced at most of the points connected with the operation, let me, in conclusion, commend it to your consideration. It may be the means of saving a foot; it is true the foot will probably be anchylosed to the bones of the leg, but still it will prove more valuable and convenient for walking than any artificial foot that can be fitted to a stump. Sometimes there is a sort of fibrous anchylosis between the bones of the leg and foot which allows of such free movement that the patient, as in one of Ollier's cases, may walk ten miles and dance an evening through. Firm bony anchylosis is very likely to result, and there will probably be comparatively little shortening if the periosteum is left.

The chief objection that can be urged against the operation is that recovery from it is tedious and protracted, and therefore that it is more applicable for patients in the upper class of society than to those who are found in hospitals. Still this is after all not a very formidable objection; three to six months' confinement will certainly be necessary, but perhaps a patient who had submitted to amputation of the leg might be quite as long before his stump would bear the pressure of an artificial limb.

Another argument in favour of resection is that it is scarcely a more dangerous operation than amputation, either at the ankle or in the lower third of the leg; and, lastly, it has this to its credit, that should resection fail, as it sometimes does, from such patients having but little constitutional or recuperative power, we can still submit the limb to amputation as a *dernier ressort*.

Birmingham.

ON SALICYLIC ACID.

By J. C. OGILVIE WILL, M.D.,
ASSISTANT-SURGEON TO THE ABERDEEN ROYAL INFIRMARY.

Although salicylic acid has been much vaunted by continental surgeons, more especially by Thiersch and Kolbe, as superior as an antiseptic to carbolic acid, it has not, so far as I am aware, come into general use in this country, and the recent discussion at the Clinical Society will probably not do much to advance its cause. A pretty extended trial of it has, however, convinced me that in it we possess an agent of extreme value in a large class of cases; but I do not intend at present entering on a detailed account of the cases in which it is found useful, but simply to direct attention to its value as an antiseptic, to its advantages over other substances used for a like purpose, and to a few of the forms in which it may be employed, with brief notes of some cases as illustrative of its beneficial action.

Godeffroy, by a series of careful experiments, proved that salicylic acid is three times as powerful in its anti-fermentative action as carbolic acid. He used dough formed of yeast, flour, and water, to separate portions of which he added varying quantities of carbolic and salicylic acids, and noted the length of time that elapsed before fermentation took place. In other experiments, milk, urine, beer, mustard-meal, and other substances have been employed, the results invariably proving that fermentation was either prevented or greatly retarded by the addition of salicylic acid. For example, fresh cow's milk mixed with 0·04 per cent. of salicylic acid, curdled thirty-six hours later than a similar quantity of milk to which no agent had been added; urine, to which salicylic acid had been added, remained clear and free from odour till the third day, while another specimen of the same urine, with which nothing had been mixed, was putrid. Its anti-fermentative powers are already so well recognised by chemists in this country, that many of them add small quantities of the acid to such preparations as are liable to undergo fermentative decomposition, with most satisfactory results. These experiments are undoubtedly conclusive as to the value of the agent used as a preventive of fermentation, and experience has proved that it is equally reliable as a preventive and corrective of putrefaction when applied to sores and wounds, and that it materially assists reparative action.

In proof of its powers as a corrector of putrefaction, I may briefly refer to two cases: one of amputation of the thigh, at present under Prof. Pirrie's care in the Aberdeen Royal Infirmary; the other, mammary cancer.

The former patient, a girl aged nineteen, was the subject of extensive necrosis of the femur; she was much reduced, and amputation was had recourse to, but with very grave doubts as to the ultimate result. The vessels were acupressed and water-dressing applied. As was expected, there was considerable suppuration, accompanied by great fetor. The applications used at this time were daily syringing with 1 to 40 solution of carbolic acid and dressings impregnated with red lotion. Salicylic ointment was then applied, and within two days the fetor entirely disappeared and healing action commenced. I on several occasions directed the attention of the students to the almost marvellous change that in this case followed the use of the new antiseptic. Another noteworthy point connected with the case was the extremely small, healthy, and highly vascular condition of the granulations with which the lips of the wound were studded, forming a marked contrast to those which Mr. Callender stated he had seen when salicylic dressings were employed. The ointment used was the one containing paraffin, the formula for which will be found below, and though it is a pretty strong one—1 part of acid to 7,—the patient repeatedly stated that it neither gave rise to pain nor smarting.

In a case of medullary cancer of the mamma, where the fungoid growth involved the entire gland, extended upwards nearly to the clavicle and well down into the axilla, and from which the fetor was so intense that the patient had to be removed to an out-of-the-way apartment, I ordered daily syringing with a 1 to 40 carbolic solution and a liniment of olive oil and salicylic acid, with which the sore was covered. By these applications putrefactive changes were arrested, the fetor disappeared, and the patient was rendered comparatively comfortable, while the attendants were not, as before, repelled from attending to her, which they had been by the disgusting odour pervading the atmosphere surrounding her.

These two cases of themselves show that salicylic acid is a trustworthy antiseptic. But carbolic acid has been proved beyond doubt to be so also, and boracic acid is largely used for similar purposes; therefore, unless salicylic acid possesses advantages over both, its substitution for either cannot be justified. It does, however, seem to me to possess certain advantages, which, though few in number, are not of less importance on that account; they may, I think, be best elicited by comparing carbolic and boracic acids with it. The two manifest objections to the use of carbolic acid, valuable agent though it be, are its irritating action and its smell. Salicylic acid can hardly be termed an irritant, and preparations containing only a small percentage of it can be thoroughly relied on as trustworthy antiputrescents, and it is odourless. These two points constitute its main claims to superiority to carbolic acid. The more important of the two is, however, not yet universally allowed, for, from the statements made by Mr. Callender and Sir William Jenner at the Clinical Society's recent meeting, it would seem that in their experience salicylic acid had displayed most markedly irritant properties. But this is utterly at variance with the observations of continental observers, and also with my own, even where very much stronger preparations have been employed, for, though I have used it constantly since January, in only one case has pain been complained of—in that of a large varicose ulcer of the leg, for which a 1 to 8 ointment was prescribed,—and I have never seen the vesicular eruption, to which Sir William Jenner referred, following its action. But bearing the remarks of these accurate observers in mind, and for the purpose of testing whether it really gives rise to irritation or not, I dusted a granulating surface with the pure acid, purposely selecting a very nervous and susceptible patient, and one who was prone to give vent to his feelings on the slightest provocation. A number of students were present in the ward at the time, and heard the man state distinctly that he felt neither pain nor smarting; an hour afterwards I again visited him, and he still said that there had not been any pain. I then applied a little water to the acid, and rubbed it gently into the surface, but, beyond the slight uneasiness due to the pressure of my finger, he felt nothing, and next day the nurse said that she thought the man had been easier than usual. It seems almost impossible to reconcile this statement with those before referred to as emanating from Mr. Callender and Sir W. Jenner, and so different are they that one would be almost led to infer that either my sample of acid was a very weak one, and theirs a very strong one, or that some impurity had crept into the specimen employed, or that it was due to some peculiarity of constitution of the patients treated by it.

With regard to boracic acid, very many still doubt its reliability as an antiseptic, and I confess I am not yet convinced that implicit trust can be placed in it; but even granting that it is a useful agent, on account of the extreme difficulty of blending it with fatty substances it is the bane of those who have to compound ointments into the composition of which it enters. Salicylic acid can, on the contrary, be easily incorporated with such menstrua; salicylic acid is, on the other hand, only sparingly soluble in water, but a sufficiently strong watery solution can be readily prepared by the addition of a small quantity of biborate of soda and heating. The presence of a minute portion of borax could only seldom be looked on as objectionable, and might in fact be of value in those cases where the action of a mild astringent is indicated. Still, as aqueous solutions of carbolic and boracic acids of the strength now in vogue do not act as irritants, it is unlikely that watery solutions of salicylic acid will ever come into general use, though Thiersch and others employ them. I certainly do not class this as a virtue possessed by the new antiseptic, but for the reasons given it can hardly be looked on as an objection. Finally, salicylic acid is not volatile, therefore dressings impregnated with it retain their antiseptic properties longer; it is tasteless, and non-poisonous.

Preparations of Salicylic Acid.—Thiersch, who follows Lister's mode of treatment, with the exception of the substitution of salicylic for carbolic acid, employs cotton-wadding or jute impregnated with the acid in place of gauze; but as the preparation of his dressings is a complicated process, and requires a lengthy description, I may refer to notices of his paper which appeared in a medical contemporary for May 26th and June 2nd of the present year, where full particulars are given. The watery solutions employed by him contain 1 part of acid in 300 parts of water. As an application to granulating surfaces a lotion containing 1 part of acid, 3 of sodium phosphate, and 50 of water has been found useful. As already mentioned, heat and the addition of borax increase its solubility; a clear lotion of considerable strength can thus be obtained: for instance, ten grains of acid can be readily dissolved in one ounce of water by heating and then adding six grains of borax, or even twenty grains of the acid will be taken up by an ounce of water if fourteen grains of borax are added. These solutions, in addition to their use as lotions, may be used as gargles, where an antiseptic and astringent gargle is indicated. To a surface where it can be accurately applied, and where the discharge is slight, though I have tried it with excellent effect where it was profuse, as in the case of the girl above noticed, the cerate suggested by Professor Lister for rodent ulcer—salicylic taking the place of boracic acid—is a nice application. The formula is from half a drachm to a drachm of salicylic acid, one drachm of white wax, two drachms of paraffin, and two drachms of almond oil; melt and rub up in a heated mortar. It should be spread on strips of muslin or fine linen.

Another ointment may be made of sperm oil, one drachm and a half; oil of theobroma, five drachms and a half; salicylic acid, from half a drachm to a drachm. This forms a thick paste, which should be thickly spread on lint. The heat of the surface acting on the oil of theobroma, a diffusible ointment is formed, which is a suitable application when it is desired to have the discharge thoroughly saturated with the antiseptic. An ointment less easily acted on by the body-heat consists of sperm oil and paraffin, of each a drachm and a half; oil of theobroma, two drachms; oil of almonds, one drachm; salicylic acid, from half a drachm to a drachm.

A very simple and most useful ointment, and one which answers admirably in some affections of the skin, is formed of half a drachm to a drachm of the acid to seven drachms of simple ointment. Though neither watery nor oily preparations of this acid belong to what is termed elegant pharmacy, yet a liniment of salicylic acid and olive oil will be found of much efficacy in burns; as an example, I may cite a case of burn, involving the upper arm and nearly the whole back of a child aged seven, where I recently employed it. Carron oil had been applied; and when my advice was requested, two days after, free suppuration had taken place, accompanied by great fetor. Lint soaked in olive oil and salicylic acid—twelve drachms of the acid to sixteen ounces of oil—was prescribed. The result was most satisfactory; the fetor disappearing, the suppuration rapidly decreasing, the pain greatly abating, and kindly healing action taking place. In less than a fortnight the whole surface was healed, with the exception of two small spots covered by healthy granulations, to which red lotion was applied. I have since found that a much weaker oily solution (two drachms of the acid to eight ounces of oil) was all-sufficient in a case of severe scald of the foot lately under treatment.

For cancerous sores Thiersch recommends dusting with the pure acid, or with equal parts of the powder and starch, or powder formed of charcoal and the acid might be employed for the same purpose, or for dusting over the face of poultices applied to sloughing surfaces. Endless preparations might be devised; but those I have described seem to me as useful as any combinations with which I am acquainted, and therefore I shall leave others to modify them in any way that may suit their tastes or modes of treatment.

Though I stated in the outset that I did not intend entering on details of cases, yet I cannot refrain from urging its use in eczematous affections, for nowhere is its beneficial action more marked than in them. In the eczema of children, more especially in that found affecting the head and face, it is far superior to any remedy I have yet employed; it was, in fact, the results attending the use of salicylic acid in a case of the kind that first convinced me of its value, and I have since found that others have formed a like estimate of it in similar cases. A child, aged eighteen months, had been under my care for many weeks with a patch of eczema rubrum on the cheek; I had tried all kinds of local applications, and had given arsenic and iron wine internally, but with no avail; for though at times it seemed to be giving way to treatment, a fit of itching, I suppose, had caused the child to rub it, and increased irritation always followed. I had not before used salicylic acid, and had but little faith in good accruing from its exhibition, but as a last resource I prescribed an ointment containing one drachm of acid to an ounce of lard. When I next visited the child, a few days after, the patch had nearly healed, and very shortly after it was perfectly whole. In another case the result was almost equally striking, but here it was the first application used. A child, aged six months, had a patch of E. impetiginodes on the occiput; it had first appeared about a month before. As some parts were thickly covered by crusts, a poultice was used to detach them, and then salicylic ointment was rubbed in. In six days every vestige of disease had disappeared. A brother and sister, aged three and five, were the subjects of eczema narium of short standing. Salicylic ointment was applied on a Friday, and on the following Monday the surfaces were perfectly healed. It is unnecessary to occupy space by entering on details of other cases, but I may simply say that in very many I have found it answer admirably.

Aberdeen.

CASES OF SCIATICA AND NEURALGIA SUCCESSFULLY TREATED BY GALVANISM.

BY S. J. KNOTT, M.R.C.S.,
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As sciatica and neuralgia are at times most obstinate complaints to treat, even by the most skilful, I have much pleasure in publishing several cases treated by me with galvanism, some of them most chronic, and defying all medicines. If there is any inflammation of the nerve, then galvanism must be used cautiously. I believe in all cases where the nerve is implicated that faradisation would cause great pain, and do harm. The great thing to determine is how the galvanism acts in these cases, because it does good in cases where several counter-irritants have been used, such as blisters, liniments, &c. It depends on the cause of the sciatica or the neuralgia how the galvanism is used, and if the cause is decided on, then the amount of galvanism applied would be, up to a certain amount, as a tonic and stimulant to a nerve which is asthenic; the cells used would be few, and the application light. But if the complaint has been caused by cold, sitting on a wet seat, gout, &c., and the nerve is tender when pressed upon, and the pain very acute, then the cells must be very much increased, and the poles pressed well into the part. The operation should be only for a few minutes, but severe. Sometimes around the cutaneous parts on which the charcoal points have been placed there occurs a herpetic eruption. If galvanism is applied in this way it is the most powerful counter-irritant possible, and the relief to the sufferer is very great.

Sometimes one has to treat cases of neuralgia caused by great debility, at other times shock, and often in two applications the patients are well. Now no medicines do this, and if any apparent benefit is obtained the stomach or some other organ suffers, as the head does in large doses of quinine. Then there is the morphia treatment by hypodermic injection. Now this line of treatment is all very well for the time being, to relieve the great pain and distress, but does it cure the malady? No. About five months ago five cases came under my notice where for months and months men had been treated with morphia injections. One man had got up to four grains and three quarters daily. If this kind of treatment is persisted in where is it to stop? the patient may as well be an opium eater. At last this particular patient got a large abscess in the gluteal region, from the irritation of passing the needle, I presume, and thus got rid of his sciatica. In the case of asthenic neuralgia I believe the mild application of galvanism not only stimulates the weak nerve at the time, but is of a lasting character, for I have often heard a patient say that the whole limb kept warm for two or three days after. I also believe that by this more or less continuous stimulation fresh nerve-cells are caused to be formed, and so the weak nerve is permanently strengthened. And the reason that faradisation is injurious in this class of complaints is that it causes contraction of the enfeebled nerve, and if used strongly a breaking up of nerve-cells, and great pain at the time, and most likely followed by an aggravation of the symptoms. If others have been as successful as myself in the treatment of this class of complaints by galvanism, then I hope it will be tried generally, and it certainly will be a great boon to patients to have this done, instead of taking the powerful medicines some do, and after all only to ameliorate their complaint.

B. G——, aged fifty-four, a surgeon, came under treatment on June 15th, 1873. His history was that two months previous he had got wet and was obliged to sit in his damp clothes for nearly two hours. When he got home he shivered a little and felt cold all over. He went to bed, but was called up in the night and had to go to a midwifery case, at which he stayed some time. On the following day he felt much out of sorts, and in the evening had some pain and stiffness down the back of the left thigh, which, in spite of everything he could do, gradually got worse. He then consulted a well-known physician, and he was put through all the usual modes of treatment, but with little effect; in fact, in spite of very large doses of quinine and aconite liniment, he used to get worse towards night. At the end of the fifth week the pain used to get very severe, and last for about two hours, every twelve hours. He then came to me as a last resource. He walked into my room supported by two sticks. The pain he complained of reached along the left sciatic nerve, commencing just below the sciatic notch and extending to the popliteal space; he also began to feel pain in the loins.

I looked on this case as one of great congestion of the nerve, followed by effusion under the neurilemma; and the pain in the back as caused by the disease extending upwards towards the cord. I advised him to leave off all medicines so as to give the galvanism a fair trial, and to have recourse to the latter daily. I began with eighteen cells of Stöhrer's battery. After the first application he stood up and said, "I believe this will do me good; the whole limb feels warm, which, in spite of wool, flannel, &c., it has not done for weeks." After the first week, I galvanised him only three times a week, then twice; and in three weeks he said he thought he was quite well—at any rate, he would see if he could do without the galvanism; he did so, and has been perfectly well since. He took no medicine from the day he first came, and at the end of the first week left off all the wool and flannel, and only continued his ordinary merino drawers.

E. B——, aged fifty, servant, came into the hospital on February 13th, 1875. She says except an attack of congestion of the liver five years ago, she has always had good health up to nine weeks ago, when she slept in a damp bed. A few days after she was taken with great pain in the lower part of the back and down the left hip, a few days after extending down the back of the thigh and leg to the back of the ankle-joint. The pain always gets worse at night, commencing between 7 and 8 o'clock, and particularly so in wet weather. Ordered hypodermic injection of one-sixth of a grain of morphia twice daily, and ten grains of compound colocynth pill at bedtime. Broth and milk diet.

February 16th.—No better. To go on with morphia injection, and to have a mixture containing three grains of iodide of potassium, ten grains of bicarbonate of potash, and a drachm of glycerine, to an ounce of peppermint-water.

18th.—About the same. Continue injection.

22nd.—A little better. Repeat pill, mixture, and injection.

24th.—Pain worse. Ordered a blister over sciatic nerve.

26th.—No improvement. Mixture twice daily; to be galvanised every other day.

27th.—Twelve cells from Stöhrer's continuous battery applied. Seemed to feel it a good deal.

March 2nd.—Says she certainly has less pain, and gets much better sleep since the galvanism. To leave off morphia injection.

4th.—Is better. Says the galvanism is painful at the time, but thinks it is curing her.

6th.—Is going on well. Mixture to be left off, and only ten cells to be used now. Repeat aperient pill.

9th.—Is much better. To get up to-morrow.

12th.—Pain much less. Is ordered to walk about a little.

16th.—Continues to improve; pain nearly gone. To be galvanised twice a week, and only eight cells used.

19th.—Is now convalescent; only complains of a little stiffness.

22nd.—Discharged cured. She promised to let me know if it returned; but I have heard no more of her.

E. L——, aged thirty-two, came to me on April 15th, 1874. Said he first caught cold; and after that got very weak, and then pain slowly came on in the back of the right thigh. This was about four months ago. Before he came to me he had been an out-patient. He had marks of three good-sized blisters on the back of the thigh and hip, and several small specks could be seen on the hip and thigh. These he told me were the marks of the hypodermic needle; and stated that he had had several kinds of medicine, but they had not done him any good. Of late there was always some pain and tenderness in the back of the thigh, and then at times it would get much worse and the pain would be almost unbearable. He looked very anæmic, his tongue was slightly furred and flabby, his muscles were soft and flaccid, and he said he had lost nearly a stone in weight since he was taken ill.

I galvanised him daily, commencing with sixteen cells, "which he felt very much," and dropping two each day. In eight days he was much better—in fact, so much better that he only had the battery every third day, and only eight cells. In three weeks he was quite well, and went into the country. I have seen him repeatedly since, and he has had no trouble up to the 15th November last, when he caught a severe cold and got wet; and he had, he said, suddenly found the pain return the day before his call. I applied twelve cells three times every other day, and that quite got rid of it. This is the 1st December, and he has had no return.

I believe in the first instance this case was purely of the asthenic form, from the wasting of the limb, the constant wearing pain, and the slowness with which it came on. In the second instance it was different in character; there was great tenderness along the course of the nerve, and the pain was of a more shooting character. This, then, was of the congestive form.

Mrs. L——, aged thirty-eight, came to me April 10th, 1874. She was a thin, delicate person, looked pale and weak, pulse feeble, bowels constipated, appetite bad, nights restless. She said she had had a great deal of trouble and grief during the past month, and ten days before coming to me she was taken with pain in the right side of her face, and down the neck to the clavicle; it was nearly constant, but increased at night, and each day it gained in intensity. The pain seemed very general over the whole side of the face and neck.

I applied six cells of the continuous battery, the charcoal points being covered with lint and dipped in salt and water. I applied them for twenty minutes all over the part affected, and at the end of that time she said, "Thank you; the pain is gone now." She then told me that whenever she was weaker than usual, or worried, she always had neuralgia; and she had tried medicine over and over again, and although it set her right it took days to do so; but whenever she could get the battery applied it cured her at once.

I have no doubt this was a case of asthenia of the nerve, causing pain, and at once relieved by a stimulant tonic, galvanism.

T. D——, aged thirty-one, came under treatment on the 15th Feb., 1875. This was a very chronic case, having, he said, suffered for over two years, without hardly a day's intermission. When first taken with pain in his hip and thigh he had tried a very great many kinds of treatment, and had seen a good many medical men, but for the last twelve months he had done nothing but have morphia injected night and morning, and when the weather was very wet and the pain worse, he had it done three times a day, and had got up to four grains of the acetate of morphia per day! I reduced the morphia to two grains a day, and after ten days left it off altogether, and he never returned to it regularly, but he had to be about a good deal in all weathers, and four times he had a slight relapse for a day or so, and I gave him half a grain at bedtime.

I commenced to treat him with twenty cells of the battery, and pressed it well against the thigh, and after the first week I gradually lessened the strength until I got down to eight cells. He slowly improved, and at the end of two months he was very much better, and went into the country, and that completed his cure. The treatment had not quite fair play, as the man had to go out in all weathers at five o'clock in the morning, and besides this, to keep the cold out, he took a goodish drop of whisky.

I believe in this case there was effusion into the sheath of the nerve, for there was commencing numbness down the leg and foot, and the whole limb was beginning to waste.

J. N——, aged fifty-four, came under treatment April 15th, 1875. He complained of great debility, especially in the right leg, which at times gave way under him, also of pain in the front of the thigh and all around the knee, and at times in the leg. He had heard of electricity he said, and that it would do him good, so he went and got faradised; but it increased the pain he thought, and he only had it done twice.

I commenced with six cells of the continuous current every other day, and this did him so much good I did not increase it. At the end of the second week the pain was nearly gone, and the only thing he complained of was weakness of the limb, but gradually the strength and size came back.

This seemed to me a marked case of asthenia of the nerve. And so the faradisation increased the pain by giving a shock to, and causing contraction with spasm of, the enfeebled nerves, and most likely breaking up some nerve-cells instead of causing the formation of fresh ones as the galvanism does.

Burwood-place, Hyde-park, W.

INTRACRANIAL ANEURISM.

By WILLIAM E. HUMBLE, M.D. Lond.

I am glad to be able so soon to forward, according to promise, an account of the termination—and, I rejoice to say, successful termination—of the case of intracranial aneurism which was published in The Lancet of Oct. 2nd. The fact of its course having been carefully watched from the commencement, and the very interesting and distinct phenomena which attended the consolidation of the aneurism, render the case one deserving of record, and its successful issue affords encouragement for a future trial of a similar mode of treatment.

It will be recollected that the first symptoms of aneurism occurred in March, and the disease, which was at first diagnosed as a case of some kind of tumour at the base of the brain, was recognised to be aneurism at the cavernous sinus about the end of May or beginning of June.

The aneurismal bruit was first heard by the patient on the 17th of March, and by myself, by means of the stethoscope, at the above-mentioned time. The operation of ligature of the carotid having been declined by the patient, and it being found impracticable to carry out fully Mr. Tufnell's method of treatment by absolute rest and restricted diet, I determined on adopting Dr. Balfour's plan of treatment by iodide of potassium. On the 26th of June she began with nine grains of the iodide daily, and the dose was regularly increased till she took thirty-six grains daily. This treatment was steadily continued for just four months, and it is noteworthy that these large doses of the iodide (from Apothecaries' Hall) produced no appreciable symptoms whatever, the patient improving in general health and stoutness.

During the whole of this time the aneurismal bruit continued without intermission, varying in loudness somewhat according to the force of the circulation, and much resembling the sound of a cardiac valvular murmur. About the latter part of September it became louder and rougher for a week, but then subsided to its former intensity. For the last fortnight preceding its cessation I fancied it was not quite so loud, and rather softer than it had been. During the last two months the strabismus diminished, but there was more neuralgia of the brow and side of the head, and she used to complain of the pressure of the stethoscope. The improvement in her general health has been observed by all her friends.

On the morning of October 21st, I was sent for hurriedly at 9.30 A.M. She told me she had had a bad night, the aneurismal bruit having been very loud. She was taken during the night with vomiting and purging, with some headache. The vomiting was attended with much urging, and she was purged, she says, between twenty and thirty times. About 6 A.M. the aneurismal sound became different and constantly varying, at times resembling clanging wires. It then became very feeble, and she heard what resembled several cracks. She then felt very strange, and was astonished at everything appearing unusually silent, when she observed that the sound had ceased. When I saw her no bruit whatever could be heard. She was a little pale and weak, partly from the bad night, and partly because she feared some serious change for the worse had occurred. I explained to her that probably the wished-for event had occurred, and that the first step towards consolidation of the aneurism had been gained. I prescribed some medicine to stop the sickness and diarrhœa, and enjoined the greatest quietude in the recumbent posture, but with the head raised. The right side of the head was very tender, so that she complained very much of the pressure of the stethoscope. This neuralgic condition has existed more or less for some weeks.

Oct. 22nd.—Passed a tolerably good night. No return of the bruit. Says that for about an hour to-day she had slight throbbing within the head. Complains of a strange sensation in the neck and front of the chest, especially if she laughs slightly. No murmur can be heard. Right side of the head still tender, and slight noises, as the opening or shutting of a door, annoy her. Some headache. Says how strange the silence appears to her after seven months and a half of loud pulsation. Iodide to be continued in half the quantity.

24th.—Has suffered more from headache, but not severely. Says she has experienced slight throbbing on the other (left) side of the head. No bruit heard. Pulse continues rather weak, but otherwise normal. Will not remain in bed as advised. The squint has nearly disappeared.

From this time she continued to improve. The throbbing continued for a time in the left side of the head, and was explained to her to be no doubt owing to the artery on that side being enlarged to compensate for the impervious state of the diseased one. She now (Nov. 26th) continues quite well, except some neuralgia. The throbbing has ceased. No bruit has been heard since its cessation on the 21st of October, and I imagine that, five weeks having elapsed, the cure may be considered complete.

Corfe Castle, Dorset.

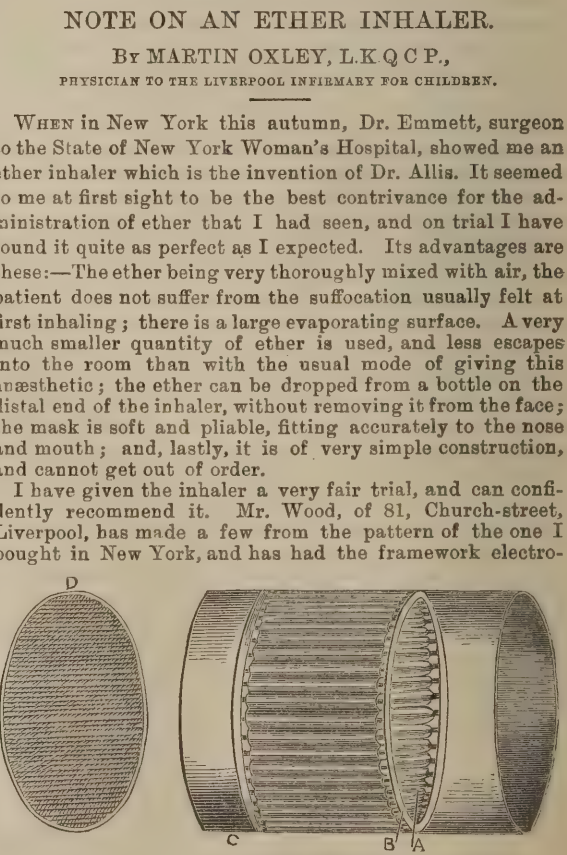
NOTE ON AN ETHER INHALER.

By MARTIN OXLEY, L.K.Q.C.P.,

PHYSICIAN TO THE LIVERPOOL INFIRMARY FOR CHILDREN.

When in New York this autumn, Dr. Emmett, surgeon to the State of New York Woman's Hospital, showed me an ether inhaler which is the invention of Dr. Allis. It seemed to me at first sight to be the best contrivance for the administration of ether that I had seen, and on trial I have found it quite as perfect as I expected. Its advantages are these:—The ether being very thoroughly mixed with air, the patient does not suffer from the suffocation usually felt at first inhaling; there is a large evaporating surface. A very much smaller quantity of ether is used, and less escapes into the room than with the usual mode of giving this anæsthetic; the ether can be dropped from a bottle on the distal end of the inhaler, without removing it from the face; the mask is soft and pliable, fitting accurately to the nose and mouth; and, lastly, it is of very simple construction, and cannot get out of order.

I have given the inhaler a very fair trial, and can confidently recommend it. Mr. Wood, of 81, Church-street, Liverpool, has made a few from the pattern of the one I bought in New York, and has had the framework electroplated. The inhaler consists of two stout oval frames which are joined together by wire bars three inches long and about one-eighth of an inch apart, making a sort of small birdcage open above and below; through these bars a bandage is



A. Bandage. B. Frame. C. India-rubber sheeting.
D. Edge of bandage.

threaded, so as to fill up the inside of the cage, the edges of the bandages presenting at its open ends; over this frame is drawn a piece of stout sheet india-rubber, which has been stitched together at the edges, so as to make a covering for the frame, projecting over one end two inches, to form the mask, and at the other one inch. The ether is poured on the bandage, which forms a close, well-made artificial sponge.

Rodney-street, Liverpool.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CHRONIC ULCERS OF BOTH LEGS; DRY GANGRENE OF BOTH LEGS—GRADUAL IN RIGHT, SUDDEN IN LEFT.

(Under the care of Mr. Hulke.)

An extremely interesting case of dry gangrene of both legs is at the present time in this hospital. Such a condition as that described below is, we believe, rare, if not altogether unique, in surgical practice. The explanation offered of the mechanism of the gangrene by Mr. Hulke is not only ingenious, but the only one that would account for all the facts. We shall report later on the subsequent progress of this remarkable case. For the notes of its history and progress we are indebted to Mr. G. Sherman Bigg.

The patient, an illuminator, aged thirty-three, had been in the hospital during several of the summer and early autumn months, with chronic ulcers of very old date in both legs. He was discharged on Oct. 12th, greatly benefited by the rest and the care bestowed on him, but with the ulcers incompletely cicatrised. It indeed seemed scarcely probable that they would ever completely and soundly close. After this he stayed at home a fortnight, and then went to his work—illuminating—for two days. On the third morning he noticed that the lower (the unhealed) part of the ulcer in the right leg, just above the inner ankle, was slightly discoloured. It was bluish, then greenish, and next day black. This discolouration shortly extended from the ulcer to the instep, and soon the third and fourth toes became blue, and later black and shrivelled. In this state he applied on the 23rd of November to be readmitted. The two toes, a patch of skin on the instep half the size of the palm of the hand, and the lower half of the ulcer in the right leg were in a condition of dry gangrene. He was placed in Handel ward, and the foot and leg were wrapped in dry cotton-wool, and, as he complained of much pain, he was ordered opium in doses of one grain at intervals, regulated by his suffering. Next day it was ascertained that in the night his left leg had become very painful, and the left foot in the morning was found cold and numbed; it was also dull white and shrunk, and the cutaneous veins, instead of preventing their usual prominence, were indicated by faint, scarcely marked lines, like little channels. It was now discovered that all arterial pulsation was absent below the groins, nor could any be felt in the left external iliac artery. Mr. Hulke was very doubtful whether there was not a feeble pulse in the right external iliac, the uncertainty on this point being caused by the suspicion that the extremely faint pulse which Mr. Hulke thought he detected here might actually be in the deep epigastric artery, and this suspicion was heightened by the very conspicuous collateral distension of the communicating veins of the internal mammary and epigastric systems. This latter feature disappeared after about twenty-four hours.

In the course of some clinical remarks on the 7th inst., Mr. Hulke observed:—This is a case of gangrene beginning and slowly progressive in the right leg, and suddenly supervening in the left leg. The gangrene was dry, and dependent on arterial obstruction. The disease began in the right leg, and the hard cylindroid form of its superficial femoral artery, so far as it was accessible to touch, showed the obstruction to be due to clotting. What, then, was the origin of this? Clots, Mr. Hulke said, originate either at the place where they are found, or they have their origin in a plug or embolon, often a morsel of fibrine, brought by the blood-stream from some distant point. Was the clot in the right leg, so to speak, autochthonic or embolic in its inception? Turning to the heart, there was not any evidence of the existence of valvular disease, so that it was highly improbable that a plug should be derived from this source. Next, by listening to the abdominal aorta, this vessel could be heard to pulsate unusually forcibly for a certain distance short of its bifurcation; at this point the pulsation became very faint, and was now quite inaudible. Dr. Greenhow co-operated in ascertaining these data. The fulness of the patient's belly did not allow of an absolute decision, but the conviction was very strong that the inaudibility of the pulsation here was not due to the presence of any tumour or other extraneous mass overlying the vessel, but to its actual cessation. The origin of the clotting had, then, to be sought in the limb itself. The two chief factors on which the fluidity of the blood depends are, they were aware, the constant motion imparted to it by the heart, and the healthiness—in particular the smoothness—of the vessels through which it circulates. The most common disorder which roughens the inner surface of the arterial tubes is chronic deformitive endarteritis, a process exactly corresponding in the textural alterations it induces to endocarditis. Chronic endarteritis is, however, usually a widely diffused disorder, and as the arteries of the upper extremities and those of the head bore no traces of its presence, both Dr. Greenhow and Mr. Hulke felt compelled to exclude it from consideration. This narrowed down the field of inquiry to the part where the gangrene first showed itself—the lower end of the chronic ulcer. This first, it will be remembered, became bluish-green, then black—in short, gangrenous. He thought it most likely that some of the smallest vessels, bordering on the ulcer, first were obstructed, whether from textural changes induced in them by the proximity of the ulcerative process, or whether some of them gave way and the occluding clot which sealed them passed inwards along their lumen, is of little moment. Once begun, the clot extended peripherally, blocking the arterial twigs supplying the skin of the instep, and later those distributed to the toes, killing those parts and it extended also centripetally, rising through the tibial arteries, through the superficial and common femoral arteries, the external and common iliac arteries, till it projected into the lowest part of the abdominal aorta; there its tapering apex, encountering the downward rush of blood in the main trunk, was swept off by it, plugging suddenly the left iliac or one of its main divisions, when, the obstruction being complete on both sides, the clot grew upwards for a certain height into the aorta itself.

What, Mr. Hulke asked, is the probable forecast in such a case? Though very grave, the man's condition was not hopeless. The gangrene was still slowly spreading, but he judged that it would not ascend above the knees. By using dry dressings desiccation of the mortified parts would be arrested, and by that means the fetor would be kept down and the amount of infective putrid diffusible substances in the limb lessened, and with this the risks of a fatal septicæmia would be diminished. Oakum and charcoal were very useful for this.

In discussing the question of amputation, Mr. Hulke remarked that to do so now, before the eventual limits of the gangrene were known, would be to court gangrene of the stump, necessitating, if the man rallied from the double operation, a second amputation nearer the trunk. Even should a line of demarcation form, the safer plan would be to simply cut through the dead parts, and leave an inch or so of them to be spontaneously thrown off. Such stumps would of course be conical, but later the soft parts could be pushed back and a piece of bone removed if necessary. A not very small experience of gangrene from frostbite gathered in the Crimean campaign, and the unfortunate results of amputation in dry gangrene of limbs in typhoid fever, had taught him that a cautious expectant treatment was safer for the patient than early operative measures in gangrene dependent on arterial obstruction.

Dec. 7th.—His temperature, which since his admittance has varied between 98·8° to 99·6°, has risen to 100·2°. His pulse averages about the same—116. His feet are both becoming darker, although the pulsation is rather stronger, especially on the right side, than previously. He still requires six opium pills a day (one grain each) to keep him free from pain.

9th.—Complains of sore throat, which is somewhat relaxed. Ordered chlorate of potash gargle. The line of demarcation on the right foot is beginning to show itself above.

11th.—The left foot is losing its dark colour and assuming one of a more pinkish hue; the right foot is also improving, but the line of separation above is more marked. His temperature is 101·4°.

13th.—The line of separation daily becomes more conspicuous on the right leg. The two toes, which were black, are still quite firm, and do not show any signs of separating. The left foot is beginning to assume a more natural colour. The pulsation in the right groin is very much stronger, but does not extend below the groin; on the left side the pulsation is not so marked, but is stronger than when the patient was admitted; it also cannot be felt below the groin. Sore throat is now quite relieved. Last night and this morning his temperature has been for the first time normal. Patient states that he feels better and much improved in general health. The thighs are warm.

MOORFIELDS OPHTHALMIC HOSPITAL.

(Cases under the care of Mr. Hutchinson.)

SYPHILITIC KERATITIS AT AN UNUSUALLY EARLY AGE.

Amongst the patients at Moorfields on Monday morning, December 13th, 1875, was a child aged three, who was suffering from well-marked and symmetrical interstitial keratitis of about a month's (?) duration. The child looked healthy, and had a good set of milk teeth, but there was the history that it had been treated at St. Bartholomew's Hospital in infancy for a long-continued rash and severe snuffles, and that it was then not expected to live. Mr. Hutchinson remarked that the interest of the case was in the unusually early age at which the keratitis occurred. There could, he said, be no doubt, from its character, that it was due to inherited syphilis, but he did not recollect ever to have identified this form of eye disease in so young a patient; he had several times seen it at five years old, but as a rule it did not occur till from eight to ten, and was yet more frequent about the time of puberty; it might even be delayed to the age of thirty or thirty-five, and then develop in a most characteristic manner. He was not prepared at present to give any explanation of this wide difference of range.

SUPPURATION OF THE LACHRYMAL SACS IN INFANTS.

A child of three years old was brought on account of discharge of matter from the eyes. The mother stated that her doctor discovered within a few days of the child's birth that matter came from the corners of its eyes, and that this had persisted ever since. There had never been any inflammation of any part. On pressure over the lachrymal sac pus regurgitated freely through the canaliculi. Mr. Hutchinson remarked that he had seen but one similar case; in that instance he was consulted by a surgeon in the case of his own child, an infant of a few days old, which had suppuration of both lachrymal sacs. There was no redness or evidence of inflammation. Pressure over the sac caused a free escape of puro-mucus. On account of the delicacy of the parts it was thought better, for a time at least, to abstain from mechanical treatment; and in the course of a few weeks, under the use of an astringent lotion, it entirely ceased. It was very difficult to form any conjecture as to the cause of the symptom in these two cases. Both the children were quite healthy; in both it occurred so immediately after birth that it was difficult to suspect any exposure to cold, and in both it occurred on each side, making the action of any accidental cause improbable.

STANLEY HOSPITAL, LIVERPOOL.

SUCCESSFUL CASE OF HERNIOTOMY; REDUCTION OF LARGE MASSES OF OMENTUM.

(Under the care of Mr. Rushton Parker.)

Old omental hernia; strangulation of ileum; sac congenital.—A labourer, aged fifty-two, had had for two years a reducible left inguinal hernia, which he kept up easily with a truss. For about thirty years he had had an irreducible right inguinal hernia, for which he had never worn a truss, and which increased in size at times, the increase having always disappeared when he lay down.

On the 1st April, 1875, this additional portion came down soon after mid-day, when he had eaten an unusually hearty dinner, and he could not reduce it. For two days he remained at home, unable to work, or eat, or rest, and he came to the hospital on 3rd April among the out-patients.

On admission he had a large three-lobed tumour of the right scrotum, the smallest lobe being in front and having the size and shape of a testicle, but feeling as if it contained fluid. No translucency, however, could be detected in any part of the swelling, which also was everywhere dull on percussion. There was pain in the abdomen, which was tense, but not enlarged, and he appeared thoroughly uncomfortable and rather restless, though not anxious or seriously distressed. The pulse was not perceptibly abnormal, and there was an entire absence of vomiting. An occasional eructation, however, gave a clear warning of impending strangulation of an obstructed hernia.

He was put to bed with the pelvis raised and knees flexed, and had a quarter of a grain of morphia subcutaneously every four hours, after a reasonable trial of taxis, which failed. Three or four hours later he vomited a glass of brandy-and-water which had been given him, and twelve hours after admission regular stercoraceous vomiting set in and lasted at moderate intervals for six hours more, when he was put under chloroform.

The operation was performed fifteen hours after the first act of vomiting, six hours after the first appearance of stercoraceous matter, and exactly three days after the descent of the hernia. A vertical incision was made down to the external oblique muscle, and an attempt made to reduce the hernia without opening the sac, by first incising the edge of the external ring, but this failed. The sac was opened, and a piece of small intestine was found extending down into mid-scrotum. A narrow neck was found at least two inches below the external ring, much less than half an inch wide. This was incised, and a couple of inches of gut, slightly reddened but uninjured, was liberated, and returned with the portion above into the abdomen, constantly irrigated, after exposure, with 1 per cent. carbolic lotion (the spray apparatus not being at hand). About three-quarters of a pound of omentum was next pulled from the scrotum, passing through the narrow neck by a still narrower pedicle, and being found quite healthy was returned into the abdomen, after being well washed with the carbolic lotion. Much fluid escaped with the release of the omentum, which was found to occupy a congenital sac, the small diverticulum of which was stripped up and cut off.

The inguinal neck of the sac was sown up with carbolised catgut, and carbolised waxed silk sutures were used for the external wound.

The abdominal part of the wound healed without suppuration, but pus formed in the scrotum by the fourth or fifth day. The man was up wearing a double truss in five weeks. In spite of the continual administration of morphia or opium, he had stools each day after the operation for several days, but, fortunately, without harm. He vomited twice after the operation on the same day; and on the fourth day was much distressed by hiccough for many hours, but this disappeared at once on his following an old popular plan of slowly sipping some liquid (milk in this case) as long as he could without breathing.

Bequests, &c., to Medical Charities.—Mr. Frederick Sheppard bequeathed £1000 to the Seaside Convalescent Hospital, Seaford, and £300 to the Chelsea Hospital for Women. Mrs. Johnson bequeathed £500 to the Chesham Hospital.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 14th inst., Sir James Paget, F.R.S., President, occupying the chair. There was a very large attendance, and the whole evening was occupied by the question of the operation of abdominal section for the relief of intussusception, which was raised in three communications by Mr. Howard Marsh, Dr. Fagge and Mr. Howse, and Mr. Hutchinson. In the discussion that followed it was evident that there was a prevalent opinion as to the advisability of the operation in cases where other means of reduction failed; and, although it was somewhat lost sight of in the debate, it must not be forgotten that it is to Mr. Hutchinson that is owing the introduction of this new method of successfully treating cases which, if left alone, would inevitably terminate fatally. Sir James Paget but expressed the whole feeling of the meeting when he said that this operation was destined to become as prevalent and as valuable as ovariotomy.

The first paper read was that contributed by Mr. HOWARD MARSH on a "Case in which Abdominal Section was successfully performed for Intussusception in an Infant seven months old." The child, a patient of Dr. Miller and Dr. Barnes, of Eye, in Suffolk, was attacked on the 29th of last March with symptoms apparently of dysenteric diarrhœa—sickness, griping abdominal pains, and too frequent action of the bowels. This condition was for a time relieved by medicine, but in two or three days it recurred, and was then accompanied with tenesmus and the passage of blood and slimy mucus. The child remained about the same, but with no serious disturbance of the general health, till the morning of April 11th, when the whole complexion of the attack suddenly changed: the pain became very severe, sickness frequent, tenesmus violent and almost constant, and he grew pale and restless. Dr. Barnes found the bowel projecting two inches beyond the anus, and could see the ileo-cæcal valve at the extremity of the protrusion, while in the abdomen a firm cylindrical tumour was felt extending in the course of the descending colon from the left of the umbilicus to the left iliac fossa. Insufflation and the careful distension of the large intestine with lukewarm water failed to reduce the intussusception. When the child was seen late in the evening he was in a state of collapse, with a frequent and feeble pulse; he was, moreover, pale, and frequently sick. It was then decided to perform abdominal section. Accordingly, chloroform having been administered, Mr. Marsh proceeded to open the abdomen to the extent of two inches in the middle line, just below the umbilicus. Great care was required to avoid wounding the intestine, which protruded into the wound. Failing to reduce the intussusception by the introduction of two fingers into the abdomen, the bowel was first withdrawn from the abdominal cavity; reduction was then easily effected. It was difficult to estimate the precise amount of bowel invaginated, but it comprised at least one-half of the colon and an equal part of the small intestine. The only difficulty in the operation consisted in the return of the considerable amount of intestine that now lay on the surface of the abdomen, but this was accomplished without any great delay, and the wound was closed with harelip pins and superficial sutures, being further supported by strapping and a bandage. Small doses of laudanum were given, and milk and water with occasional addition of brandy. No bad symptoms followed. Sickness ceased at once after the operation; flatus was passed on the next, and a feculent motion on the third day; the sutures were removed at the end of eighty-four hours, and the child was convalescent on the fourth day. Mr. Marsh remarked that the interest of the case was increased if it be read in connexion with Mr. Hutchinson's paper on the same subject, published in the 57th volume of the Medico-Chirurgical Transactions, for it confirms in a striking manner that writer's observation that in many cases of intussusception the volvulus is neither inflamed, adherent, nor strangulated, but is like a piece of intestine lying loose in a hernial sac, and admitting of being easily reduced by an appropriate slight force. In the present case it seems almost certain that the intestine was for thirteen days merely invaginated, and that inflammation, with all its attendant dangers, set in only twelve or fourteen hours before the operation. Mr. Hutchinson in his paper expressed his anticipation that abdominal section would be less likely to succeed in very young children. This, however, to judge from the present instance, is not the case. Mr. Marsh concluded by referring to the necessity for the careful consideration of any particular case before the operation is performed; but he thought it should be undertaken, if all other means had failed—(1) in acute cases of not more than twelve or eighteen hours' duration; and (2) in chronic cases, in which there had been no symptoms of inflammation or strangulation of the intestine.

The second paper was contributed by Dr. HILTON FAGGE and Mr. H. G. HOWSE. It dealt with a "Case of Intussusception in an Adult, without symptoms of Strangulation, treated successfully by Abdominal Section." The case recorded in the paper was that of a woman, aged thirty-three, whom Dr. Fagge was called to see in consultation with Dr. Adcock, of Abbey-street, on June 28th, 1874. She had been suffering for fifteen days from paroxysmal pain in the abdomen, and after she had complained of this for eight days, Dr. Adcock had observed a tumour which was at first situated in the right iliac fossa, but which afterwards moved over to the left iliac fossa. She had had a little sickness, but no decided constipation. The tongue was clean, the pulse was scarcely above the natural rate. From the character of the tumour it was diagnosed as an intussusception, and inflation of the rectum was practised the same day, but with no result. On June 29th Mr. Howse was called in, and the bowel was again inflated with better instruments. This gave intense pain, but had the effect of altering the position of the tumour, which now lay behind the umbilicus. On June 30th inflation was practised for the third time, without producing any change in the tumour. On July 1st the condition of the patient was the same. She had had a slight return of the sickness in the morning, and a little pain; her bowels had not been open since the first inflation; the tumour was still to be felt. Another consultation was held, and, having obtained the consent of the patient and her husband, Mr. Howse proceeded to open the abdomen by a vertical incision opposite the umbilicus. The intussuscepted mass was readily felt, and as it could not be reduced *in situ*, it was drawn out of the wound. Even then pulling at the ends failed, and it was only by a kind of kneading movement, with pressure upon the distal end, that reduction was effected; and it was particularly noticed that there was a little hitch just when the last part of the invaginated mass was emerging. The length of the included bowel was at least eighteen inches. All the precautions of the antiseptic method were employed during the operation and in the after-treatment, and special care was taken to prevent any considerable quantity of carbolic lotion from flowing into the peritoneal cavity. She recovered without a bad symptom, the temperature never rising above normal, and the wound healing by the first intention. At the present time she is well, and expecting her confinement. In this case hæmorrhage from the bowels was absent, which has hitherto been regarded as a cardinal symptom of intussusception. In their remarks the authors showed that it was of great importance not to delay the operation of abdominal section until hæmorrhage occurred. The significance of this symptom had hitherto been misunderstood. It had been supposed by some writers, including Dr. Fagge, to indicate the commencement of the processes which lead to the sloughing and detachment of the invaginated part of the bowel. The authors now pointed out that this is a mistake, but they also showed that it often is evidence of extreme congestion and swelling of this part—a condition which may destroy the patient's life in a few days, and which may render the operation of abdominal section a failure by making it impossible to reduce the intussusception when the abdominal cavity has been opened.

The third paper was by Mr. JONATHAN HUTCHINSON. It was entitled "A Second Case of Abdominal Section for Intussusception into the Colon; with Remarks on the Details of the Operation." It consisted of the narration of a fatal case of operation for intussusception in an infant, aged six months, whom he had attended in consultation with Dr. Madge. The intussusception involved the whole length of the colon, and the ileo-cæcal valve, introverted, constituted its extremity, and was easily felt by the finger in the anus. The symptoms had been the usual ones; they had lasted three days, and the usual method of treatment, perseveringly carried out, had failed. As the child was evidently about to sink, the operation was at once performed. Considerable difficulties were encountered in effecting the reduction of the intussuscepted part. Its neck was tied back in the loin by the meso-colon, and could not be brought into view, and, although there were no adhesions, it was found quite impracticable to draw the intussuscepted bowel out of the sheath. At length it was discovereed that although the upper end of the intussusception was fixed, its lower one, containing the sigmoid flexure of the colon, was quite loose. This was readily brought out, and by gently pulling the sheath downwards reduction was without difficulty effected. The appearance of the appendix vermiformis, just at the completion of the reduction, confirmed the opinion formed as to the introversion having begun at the cæcum. Considerable difficulty was encountered in replacing the intestines within the abdomen. They were accordingly punctured with a harelip needle in two or three places, and at the conclusion of the operation the infant was in an alarming collapse. It rallied, however, afterwards, took the breast, and passed a motion. Death occurred about six hours after the operation, and the post-mortem showed evidences of recent extensive peritonitis. In connexion with the fact that the child's sister had died at the same age a year ago with a precisely similar condition of things, it was of interest to note that the cæcum appeared to be quite loose, possessing a mesentery, which allowed of its very free displacement. The author suggested that this condition as a congenital peculiarity is probably the one which admits of displacement of this special part. He stated also that one of his chief objects in bringing the case before the Society was to suggest, for the guidance of future operations, the propriety of always seeking first the lower end of the intussusception. He believed it would generally be found much easier to bring the lower end into the wound without allowing escape of the rest of the intestines. He thought it probable also that it would usually be found much easier (as it was in this instance) to effect reduction by drawing the sheath downwards from off its contents, than by drawing the contents upwards from within the sheath. The difficulty in reducing by traction results from the fact that the sheath becomes puckered up into rings, which act as so many strictures upon its contents. He thought it even possible that, by attention to this rule, reduction might sometimes be effected without bringing the parts externally.

Dr. BUZZARD opened the discussion. He said that he would keep strictly to the point as to the advisability of the operation. Dr. Brinton had pointed out that out of 600 cases of intestinal obstruction, forty-three per cent. were due to intussusception; and of the cases of intussusception thirty to forty per cent. terminated favourably. Thus Brinton, in considering the question of gastrotomy, found himself compelled to eliminate intussusception, the operation being only of value in the early stages of the affection, when the condition was not one of obstruction, but of enteritis. Dr. Buzzard said that he would be inclined to place the proportion of reducible intussusception quite as high as Brinton did, and he inquired whether a dangerous operation was justified in a disease of which the proportion of cases capable of relief by other means is so high?—Mr. MAUNDER related two cases of intussusception in infants, one in which reduction was effected by inflation and injection of water; and the other where, although the ileo-cæcal valve presented at the anus, there was spontaneous reduction. He characterised the papers of the evening as indicative of new triumphs in modern surgery, and drew attention to the points insisted on by the authors.—Dr. WEST thought a distinction should be drawn between intussusception in the adult and in the child. In the latter the diagnosis is not difficult, and one of the earliest signs is the passage of blood or blood-stained mucus. It had seemed to him that this depended on the position of the intussusception, and took place from the constricted and congested bowel. The diagnosis was not difficult, even in cases where the invaginated intestine could not be felt, and where there was only indistinct fulness of the abdomen. A certain proportion of these cases—not so many as Dr. Brinton had stated—recovered independently of treatment, or under simply soothing applications. Others, again, only yielded under inflation or injection; experiments, however, which should not be pushed beyond reasonable limits, remembering the susceptibility of the nervous system in childhood. It was a question, indeed, how far the nervous system of the child could bear the shock of an operation. Dr. West concluded by saying that when every other means had failed in producing reduction, surgery must be had recourse to, and the cases related gave every hope of success. The changed light in which abdominal surgery was now regarded was interesting to one who contrasted the present views with those held twenty-five years ago, and we had learnt from ovariotomy that long incisions into the peritoneal cavity might be made with impunity.—Dr. E. G. BARNES, in whose practice occurred the case related by Mr. Marsh, said that the child was now perfectly well, and the cicatrix in the abdominal wall was quite firm. It was important to note the difference between intussusception in the child and in the adult; and between those cases where the invagination took place at the ileo-cæcal valve, and those of the small intestine, which occurred after sloughing. The diagnosis of intussusception was not more uncertain than that of any other internal disease—e.g., pneumonia or pleurisy. That length of time during which the intussusception had lasted was not, as supposed, sufficient to render the case a hopeless one, from the fear that adhesions might have been set up, was, he thought, shown by Mr. Marsh's case. In two cases which he had examined after death—one in which the invagination had lasted three days,—it was comparatively easy to reduce the intussusception. Granting, then, that the diagnosis is certain and the case not hopeless, it is imperative to have recourse to operative interference if other means have failed in effecting reduction. Injections, together with insufflation, should always be tried.—Mr. T. SMITH drew attention to the significance of hæmorrhage, which could not occur if there were complete strangulation. He did not think the size of the incision of much moment, since, if we have learnt anything from ovariotomy, it is that mechanical interference with the peritoneum is not an element of great danger. The danger in such cases lay in the retention of a little blood or pus in the peritoneal cavity, and all the viscera could be sponged with impunity. The length of the incision would probably facilitate the operation, the only difficulty thus produced being in the return of the bowel. It would be often necessary to puncture the intestine with a fine trocar or needle. In reply to Dr. Buzzard, Mr. Smith said that surgical interference would not be had recourse to unless other means had failed. He did not think any value could be placed on Dr. Brinton's statistics, and he believed that were Dr. Brinton now living, he would have found reason to alter his opinion on this head.—Mr. HOLMES thought that a long incision would facilitate the return of the bowel. He had only once performed abdominal section (for intestinal obstruction), and although the incision was a free one, he had no difficulty in returning the gut into the cavity. He agreed with Mr. Smith as to the inutility of making any deductions from alleged cases of recovery. It should be remembered that those cases in which an operation was deemed necessary were mostly cases which, if left alone, would probably not recover. With regard to hæmorrhage, he thought the occurrence of blood in a hernial sac was evidence that bleeding could take place from strangulated intestine. The three cases under review were different: in Mr. Marsh's and Mr. Hutchinson's cases it was evident that unless relieved their condition was hopeless, but it was impossible to say if this were so in Dr. Fagge's case.—Mr. GEORGE POLLOCK thought the hints contained in the paper by Dr. Fagge and Mr. Howse, as to the danger of over-distension by injection, were of great importance. Some years ago he had made some experiments on this point, and found that when the bowel was but slightly distended the peritoneum was very apt to crack. This rupture of the peritoneal coat might be the cause of peritonitis.—Dr. HARE pointed out that the cases could be grouped under two categories—one in which the bowel was constricted, the other in which it was strangulated. In the former class there was great congestion of the intussuscepted portion, for the reflux of blood by the veins was cut off, but the arteries still remained patent. He urged the injection of *ice-cold* water to reduce this congested state. He had in analogous cases succeeded by this means, aided by application of ice to the abdomen. Not only did cold act by emptying the congested vessels, but also by diminishing the volume of air in the bowel. — The PRESIDENT, in calling upon the authors to reply, said that the papers were of great value, opening up a large field of abdominal operation, which he believed would be as fruitful in result as ovariotomy was. He could remember when the value and expediency of ovariotomy had been called in question at this Society.—Mr. MARSH said that the question really was, what degree of risk is incurred in the operation of abdominal section *per se?* Was it more than in any other capital operation? Certainly the history of ovariotomy had shown with how great impunity the abdomen might be laid open, and the power of resistance to such ordeal was exhibited in cases where the operation had been accompanied by pregnancy. The favourable results of ovariotomy, as contrasted with those obtained in the earlier days of the operation, were largely owing to the increased care taken to remove all septic fluids from the peritoneum. He concluded then that abdominal section was not a dangerous operation. As to the selection of cases of intussusception, he thought acute cases of twelve or eighteen hours' duration might be operated on, and he related a fatal case of obstruction, due to internal strangulation, with symptoms of eight days' duration, and the patient did not come into hospital until the time for successful operation had passed. — Dr. HILTON FAGGE said that the point which he and Mr. Howse had wanted to show in their paper was that the occurrence of hæmorrhage indicated a change in the bowel—an increasing congestion,—and therefore the greater danger of deferring operation. If that condition could be anticipated, the bowel could be more easily reduced at the time of operation. In the present case Dr. Fagge stated that in determining on the operation he was no doubt influenced by a case which he had seen in which no hæmorrhage occurred, and no operation was undertaken; that case terminated fatally. With regard to statistical facts, he said that no one more carefully collected his cases than Dr. Brinton, but it must be remembered that a large number of cases of intussusception were not diagnosed until the invaginated segment sloughed and was passed per anum.—Mr. HOWSE referred to the advisability of puncturing the intestine, which, owing to the great difficulty experienced in returning the bowel, was often found to be necessary. In two cases he had punctured the intestine with a fine trocar and canula, but had found that, owing probably to the inflamed state of the bowel, and consequent paralysis of the muscular coat, the punctures did not close, and a gradual oozing of fæces took place, leading to fatal peritonitis. This seemed to have occurred in Mr. Hutchinson's case. In one case he had tried to sew up the small aperture, but found this very difficult from the softened condition of the serous coat. He thought in such cases it might even be wiser to make a free incision into the intestine, and then sew the margins of the wound together. The hæmorrhage in intussusception probably took place in the first stage of strangulation, before that was complete; and he did not think the analogy of bleeding into a hernial sac held good as evidence that hæmorrhage took place from a strangulated bowel; for it must be remembered that in hernia the sac itself might be the source of the hæmorrhage, especially as most blood was found in cases where taxis had been much applied.—Mr. HUTCHINSON said that much light would be gained if statistics were compiled of cases of intussusception of the colon where the cæcum appeared at the anus, and the characteristic sausage-like mass could be felt in the iliac fossa. Before his first case all such cases he had seen had ended fatally. With regard to the operation, he was not inclined to regard the length of the incision as unimportant. There was no analogy with ovariotomy, where one had to deal with flaccid abdominal walls after the removal of a large tumour. In intussusception, on the other hand, all the contents of the abdomen that were extruded had to be replaced, and this replacement was difficult just in proportion to the length of the incision and the amount of prolapsed bowel. He had sometimes to reduce the size of an incision before he could replace the intestines. The present was the only case in which he had punctured the intestine, and he hoped never to do it again. It was to this puncture that he attributed the fatal issue.

The meeting then adjourned.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of the Society was held on Dec. 10th, Dr. Buzzard in the chair. Some very remarkable cases of cures of diabetes by skim-milk were brought forward by Dr. Donkin, and Mr. Haward narrated a case of bold and somewhat novel treatment of lymphadenoma, which elicited an interesting discussion. There was a very fair attendance of members of the Society, although not so good as usual. The election of Sir Thomas Watson, Bart., and Dr. C. J. B. Williams, as honorary members of the Society, was announced.

Dr. SCOTT DONKIN brought forward a case of Diabetes cured by the use of skim-milk. The patient, who was shown to the Society, was a hale, robust-looking man, forty-five years of age, a carman by trade. He had an accident three years ago, suffering a blow on the head, which laid him up for a while. At the end of June, 1875, he had another accident: his cart coming into collision with a cab, he fell between the shafts, and was dragged some distance and bruised, but not severely injured. Soon afterwards he began to suffer from polyuria, with great debility and much thirst, but the practitioner whom he consulted did not recognise the case as one of diabetes, and sent him into the country for change of air. There, on an unrestricted diet, he grew rapidly worse, and, as the existence of diabetes was suspected, he was sent back to London. On Oct. 6th he was first seen by Dr. Donkin, having then suffered from these symptoms for six weeks. At that time he was passing daily from twelve to fourteen pints of urine, of sp. gr. 1045, containing a quantity of sugar, which was estimated, by means of Duboscq's polarising saccharometer, at twenty-eight grains to the ounce. There was urgent thirst, a parched mouth, dry skin, and great voracity, and the sight was impaired. There was loss of sleep from the frequent calls to micturate at night, great debility, and loss of flesh, but no other complications. The patient was at once (on Oct. 7th) put on skim-milk diet, seven pints a day, without other food. Two days later the quantity of milk was increased to eight pints a day. The treatment was followed by a rapid diminution in the quantity of urine, and on the fifth day from its commencement only four pints and a half of urine were passed. On Oct. 14th, or seven days from the commencement, the specific gravity of the urine was 1010, and there was no sugar to be discovered in it. The health had greatly improved, the patient slept well, having no calls to pass urine at night. Nine pints of milk were now allowed per diem, a part being given as curd. On Nov. 5th three-quarters of a pound of mutton chop was added to the diet, the skim-milk being reduced to six pints. On the 12th the specific gravity of the urine was 1012, and he was allowed an additional chop. On Nov. 18th, or six weeks from the commencement of the treatment, the patient's health was restored and there was no sugar in the urine, and he was allowed some fish. On the 21st he resumed his occupation, which he has since continued. On Dec. 3rd he was seen again; he came then free from disease. On the 10th his urine was of sp. gr. 1017; no sugar could be discovered with Fehling's solution, and the quantity was from four pints to four pints and a half per diem. He was now allowed some tea and a little pale brandy. In remarking on the case, Dr. Donkin observed that some might be inclined to regard it as one of traumatic origin, but this was not his opinion. The great quantity of sugar passed and the rapid emaciation showed the case to be a very severe one. It was a fact of great importance that the copious formation of sugar was arrested under a diet which contained eight ounces of milk sugar per diem, that being the estimated quantity in the amount of milk taken, and it corroborated the observation which he had previously made, that lactose does not cause an increase in diabetic sugar. Dr. Donkin also gave some particulars of another case under his care—a young lady ten years of age, who for three months had been suffering from great thirst and frequent micturition. The practitioner who was consulted found the case to be one of diabetes. The specific gravity of the urine was 1040, and it contained much sugar. He ordered a meat diet and small quantities of Dover's powder. She still, however, suffered from thirst and occasional giddiness, and on Oct. 2nd she was put on a diet of skim-milk, which she continued for ten days. This was followed by a rapid fall in the specific gravity of the urine, which reached 1010 on October 12th, when she came to London to consult Dr. Donkin. The same treatment was continued, and on November 6th she was seen by Sir T. Watson, who stated that the specific gravity of the urine was 1015, and it contained neither sugar nor albumen. Since that time the patient had continued well, and on December 6th the specific gravity of the urine, which had varied from 1014 to 1016, was 1023 (the quantity of urine being less than usual); the child was in good health and spirits, and the diet was being gradually altered towards an ordinary one. Dr. Donkin remarked that these cases show in a striking way the arrest of the disease by the treatment when it is applied in the early stages, before the disease has been fully established or has produced irremediable lesions. The fact that the method was so often applied only as a last resource, when all other measures have failed, must be borne in mind in estimating the value of the treatment; this was especially the case with hospital patients, who so often only apply for relief when broken down and worn out by the disease, and hence the frequent failure to obtain any successful result.—Dr. Coupland inquired whether the patient was of temperate habits, or was in the habit of taking malt liquors.—Dr. Donkin replied that he was very temperate and moderate.—Dr. Glover suggested that the urine should be examined by the secretaries in order that confirmation might be given to the remarkable facts of the case. One very striking fact in the history of the case was that the patient had actually, as he had ascertained by questioning him, lived solely on skim milk for a month. Moreover, he was restored to perfect health. Now if any other remedy were introduced which produced half so remarkable effects, we should think it a very important addition to the pharmacopœia. The second case was even more astonishing, as the disease in old people may often be held in check for a long time by careful dieting, but in early life they were usually much less amenable to treatment.—At the suggestion of the chairman, Dr. Glover and Dr. Southey made an examination of the urine, and reported that it was entirely free from sugar.

Mr. Warrington Haward read the notes of a case of Lymphadenoma. The patient was a little girl, four years of age, who came under his care at the Children's Hospital. When first seen, there was a mass of enlarged glands on the left side of the neck, occupying the anterior and posterior triangles, and nearly reaching the middle line; it measured four and a half inches vertically and six inches transversely, and was most prominent at the upper part. The mass was firm, freely movable beneath the skin; the superficial veins prominent; the skin natural. There were no enlarged glands elsewhere; the liver and spleen were not enlarged; and there was no increase in the white corpuscles of the blood. The temperature was normal. The child's parents were healthy, but two relatives had died of phthisis. The child had had measles and small-pox, the latter a year previously; and soon after a gland behind the left ear began to enlarge; this was followed by others lower down in the neck. Then loss of flesh began, but no other glands enlarged till shortly before admission to the hospital, when she was pale and thin, but intelligent and cheerful. Mr. Haward determined to remove the gland in order to avoid, if possible, any further infection of the system. This was done on July 10th; the anterior triangle of the neck was exposed, and the enlarged glands shelled out, the carotid sheath being exposed during the operation. The wound was dressed with antiseptics. On the following day the temperature was 101°; pulse 100. The patient had slept well. There was a rapid subsidence of the traumatic fever, and on July 29th the wound was almost closed. On the 30th the glands were removed in a similar manner from the posterior triangle of the neck, the wound being treated as before. The febrile reaction was much greater than before, but the wound did well, and by the end of August was nearly cured, and the child left on August 30th much improved in every way. On October 9th she was again admitted with slightly enlarged glands at the angle of the jaw, and on November 5th there were growths in the axilla and some also in the mediastinum. There was rapid emaciation and great pallor, and the temperature rose to 102° every evening. The glands rapidly increased in size, masses appearing on each side of the neck, in the axilla, and in the right groin. There was great emaciation, no diarrhœa, but slight cough, and the evening temperature was about 103°, that in the morning about 98°. She gradually became weaker, and died on Nov. 14th. At the post-mortem masses of enlarged glands were found in the neck, the axilla, groins, and anterior mediastinum; the lungs contained numerous grey semi-transparent granulations; the liver, spleen, and peritoneum also contained numerous small nodules of adenoid growth. Mr. Haward said that when Hodgkin first described the disease, he stated that there was no treatment of any value, and this was still the case after the lapse of forty years. It seemed to him, therefore, that when the earlier growths were in a readily accessible situation, we might, by early removal, prevent the occurrence of general infection. Cases were sometimes fatal even before this occurred, as in a case to which he referred, where death was caused by pressure on the œsophagus. In this child the disease was confined to one side of the neck for a year, and a remarkable alteration ensued on the operation. No return had occurred in the posterior triangle—a fact which Mr. Haward attributed to the more complete removal possible. At any rate, it was justifiable to attempt operation in so serious a disease, if there were any chance of arresting it.—Dr. Douglas Powell remarked that his own feeling with regard to this novel method of treatment was one of doubt, and he should differ from Mr. Haward with respect to the prospect of its being of any use. He was strongly of opinion that the glandular enlargements were of constitutional origin, and that the situation of the enlargement was more the result of accident than of anything else. Probably the explanation of the frequency of scrofulous enlargement of the glands in the neck was to be found in the frequent irritations about the head in children, but these only acted as determining causes. And he should fear that such an operation as that described would tend to set up further irritation in other glands.—Dr. Southey inquired whether any nervous symptoms had been observed during life, to which Mr. Haward replied in the negative.—Mr. T. Norton said that he had removed similar masses from the neck, but he was inclined to believe them to be of constitutional origin, and they might be reduced by treatment. He would not operate if the enlarged glands passed more deeply.—Dr. Silver observed that Mr. Norton was speaking of a disease of an entirely different nature. He wished to mention the case of a woman who had recently been under his care, who had a mass of enlarged glands in the left side of the neck, over which the skin was freely movable. There was also evidence of masses in the mediastinum and of enlargement of the spleen. In that case there were certain clinical features of interest, one of the most characteristic of which was a great variation of temperature. Another point was that the red blood-corpuscles were not numerous, and they exhibited a tendency to run together into masses, and not into rouleaux; the blood also contained masses of granules, apparently of a fatty nature.—Dr. Greenfield had also observed in two cases a very remarkable condition of the temperature, which rose very rapidly to 105·5° or 106°, falling again with equal rapidity. These attacks of rise of temperature were sometimes attended with slight shivering, and sometimes with slight discoloration of the skin. They were so transient that they would probably not be observed if the temperature were taken only in the morning and evening. He inquired whether Mr. Haward had observed clusters of small red spheroidal corpuscles in the blood, such as had been described by the name of microcythæmia, which he had found in the blood in one such case. He was inclined to believe, with Mr. Haward, that the disease was an essentially malignant one, and that although histologically the growth in the glands, and in the liver, spleen, &c., might be indistinguishable from that occurring in other forms of overgrowth or new formation of adenoid tissue, yet that in its life history and mode of growth and invasion it exhibited a distinctly malignant type. He adverted also to the inconvenience and confusion which resulted from grouping together and applying the names of lymphoma, lymphadenoma, &c., to diseases so different as simple overgrowth of the glands, new formation of adenoid tissue of non-malignant type, whether homologous or heterologous, and the essentially malignant type, simply on account of their similarity in microscopic structure.—Dr. Powell inquired whether Mr. Haward had been able to make the diagnosis of Hodgkin's disease in this case, and if so on what grounds, as there was no fever till after the second operation. He had seen a case of Hodgkin's disease in which the fever was intermittent, occurring every five days for a period of twenty days, and on each rise of the temperature there was enlargement of the glands.—Dr. Silver, in reply to Dr. Southey's remark, stated that in the patient referred to by him the earliest symptoms were supposed to be hysterical or choreic, the nervous symptoms being much more marked than the glandular enlargement.—Dr. Southey said that he put the question because he had collected twenty-two cases of lymphadenoid disease, in several of which the nervous phenomena were very marked. In one of the cases the symptoms were at first hysterical, of very pronounced character, subsequently passing into epileptiform attacks.—Dr. Moxon always felt great responsibility with regard to these cases in deciding whether any operative procedure was advisable. He had feared operation on account of the danger of causing acute laryngeal œdema. He referred to cases which were stated to have been cured by the use of arsenic abroad. He himself had used arsenic without effect.—Dr. Glover mentioned the case of a man fifty years of age, who had an enormous glandular mass in the right axilla, great enlargement of the liver, with a contracted, wrinkled condition of the spleen, and anasarca. The remarkable feature of the case was the sensation of great cold of which the patient complained; he inquired whether this had been observed in any of the cases referred to. The thermometer showed no rise of temperature. — Mr. Haward, in replying, said that he had wished to make it clear that he excluded scrofulous enlargement of the glands from consideration; in cases of scrofula there was no doubt a general vulnerability of the lymphatic system, which predisposed to enlargement from slight local causes. Here, however, there was no local condition; it was true that the swelling was first observed soon after an attack of scarlet fever, but the eruption of small-pox was rather a general than a local irritation, and there was no reason why it should be localised in the neck. His object was to inquire how far the removal of the glandular enlargements by surgical means was applicable. Cancer is not cured by removal, but there is often very material relief following such removal, and so also there was in this case. He thought he could remove the whole of the affected glands, and as the disease was a progressive one, he thought the operation justifiable. As to the diagnosis from scrofulous enlargement, he believed that if the glands were so much enlarged from scrofula they would also be caseous, whereas there was no tendency to suppuration, and no implication of the skin. In the earlier stages the diagnosis would be much more difficult. As to the condition of the blood, he had not found any such granules as those described; there were fewer red corpuscles than normal, but no aggregations of smaller globules. The temperature had not been regularly intermittent, there was no elevation above 103 except on one occasion, and it was noteworthy that it was not at all elevated in the early stages. There were no nervous symptoms at any time. He had not tried arsenic in these cases.

MEDICAL SOCIETY OF LONDON.

At the meeting held on the 6th inst., Dr. Routh, President, in the chair, Mr. Maunder exhibited a patient whose elbow had been excised by him seven years ago at the time when he first discovered it was possible in the operation to secure active extension of the triceps muscle, and certainly in this case the extension was very good. Mr. Maunder requested, and the President, with the sanction of the few fellows present, accorded, that the discussion should be postponed to the next meeting.

Dr. Robert Lee brought forward a Pessary invented by Mr. Napier, which he (Dr. Lee) thought was calculated to supersede all others. He also showed a large number of well-known pessaries, and dilated at some length on their advantages and disadvantages from anatomical, mechanical, and physiological points of view. He considered red vulcanite to be the best material for them, and Mr. Napier's pessary is made of that material.—Mr. Napier said his pessary was on the same principle as his catheter, and originated from Mr. Henry Lee and himself. He thought simplicity was a great thing, and considered an elastic substance to be of advantage, as it went well with the movements of the body.—Mr. Henry Lee was of opinion that the defect of most pessaries was that they dilated the muscular fibres of the vagina, and the fibres being dilated were likely to become paralysed.—Dr. Godson stated that he had constantly used a pessary similar in shape to that of Mr. Napier's, though made of black vulcanite and not being elastic, but he had never made use of it except as a last resource, and he preferred the ordinary Zwanke's pessary.—The President was sorry to disabuse Mr. Napier of the idea that his (Mr. Napier's pessary was a new invention, as he (the speaker) had possessed a similar one made of soft india-rubber for ten years; he thought it laboured under great disadvantages in practice, and had found the ordinary Zwanke's pessary to answer very well.—Mr. H. Lee then stated he had tried a common india-rubber instrument and found it of no use. — Mr. Napier said his pessary was not supposed to meet all cases, but that it could be constructed of different sizes.—Dr. Robert Lee briefly replied, and the meeting adjourned.

NEW PREPARATION.

We have received from Messrs. Bullock and Reynolds, of Hanover-street, a sample of a new salt—the citrate of iron and quinetum. Like the citrate of iron and quinine, it is in thin scales, of a greenish golden-yellow colour, and readily dissolves in water, forming a clear solution.

The process of Dr. de Vrij for obtaining all the alkaloids of the East India red bark (to which have been given the name Quinetum), and the introduction of the sulphate by Mr. Whiffin, promise to be of great importance both in commerce and therapeutics. It appears to be well established that every one of the chinchona bark alkaloids is possessed of antiperiodic properties; and quinine is generally considered the most powerful and certain in intermittent and remittent fevers. The relative value of the whole group as they exist in the bark, however, has not been at present experimentally determined, although the presumption is that the alkaloids collectively may prove to be in some respects more efficacious than any one of them when separately employed.

Many practitioners have expressed the opinion that quinine alone does not fully represent the remedial powers of the bark in substance. Is this opinion based upon experience in the employment of these remedies as general tonics and restoratives, or as antiperiodics? The citrate of iron and quinine, for the most part, is employed as a tonic and restorative, and we may fairly anticipate that the citrate of iron and quinetum will be found to equal, if not to excel, in efficacy the corresponding salt of quinine for these purposes. At the same time, a considerable saving will be effected by its use, it being cheaper than quinine; and, as the employment of the latter is much restricted by its costliness, we may hope the introduction of quinetum and its salt will prove a very general advantage.

Poisoning by Mussels.—A man at Dewsbury is stated to have been seized with symptoms of poisoning after partaking of a dish of mussels, purchased from a hawker. Despite the efforts of the doctor called to the case, the unfortunate man died about two hours after the commencement of the symptoms.

THE LANCET.

LONDON: SATURDAY, DECEMBER 18, 1875.

The frightful colliery explosions of the last week or two and the profound grief into which they have thrown the nation, render it necessary to review our knowledge in regard to such disasters, and to inquire what precautions may be adopted and what experiments tried with a view to reducing their frequency and fatality. The present state of things cannot continue. Measures must be found for diminishing the evil, and no economical or commercial considerations must or will be permitted to stand in the way. For not only is the mortality of such disasters terrible in itself and productive of misery in hundreds of homes, but it falls, as scarcely any other calamity does fall, exclusively upon a section of our community to whose labours every individual is indebted.

Fire-damp is a mixture of gases which varies somewhat in composition, but which consists essentially of methane or marsh gas. This is the lightest and most diffusible gas known, except hydrogen. It is not poisonous, is very inflammable, and, when mixed with air, highly explosive. Carbonic acid, the "choke-damp" or "after-damp" of miners, is produced by its combustion. Under ordinary circumstances its flame does not pass through wire-gauze, and hence the protection of the safety lamp; but this valuable safeguard is lost when a rush of explosive gas takes place, or when the lamp is swung violently in the explosive atmosphere. Fire-damp is emitted very irregularly in mines. Some mines are considered safe—a safety which too often proves illusory; while others are known to be "fiery," and even in the latter all calculations are constantly disturbed by the sudden outburst of a torrent of compressed gas released by the blow of a miner's pick.

Of the causes which lead to explosions, some are no doubt due to mere carelessness of employers, or men, or both. It is notorious that the men will, if they can, take the tops off their Davy lamps to get a little more light, even in a fiery mine; and in one of the recent narratives we noticed that lucifers had been found in the pockets of some of the men. Many accidents arise, it may safely be presumed, from blasting. And, lastly, many are led up to by the dangerous assumption that a mine is safe because it has always been reckoned safe. For all such disasters—we will not call them accidents—obvious remedies suggest themselves. The inspection of lamps is already pretty rigidly enforced in all mines, we believe, but the inspection of men should be equally rigid. There are always reckless men who will smoke their pipes in a dangerous mine as they would in a powder magazine, but they must be suppressed in the one case as they are in the other, since they cannot run their risk alone. As for blasting, when blasting is really necessary, and not a mere piece of unnecessary economy, it must be carried out under stringent regulations, and never when the galleries are crowded with men. And, finally, all mines must be assumed to be dangerous if not conclusively proved to be safe.

Of scientific safeguards against explosions, the most important is admitted on all hands to be thorough ventilation. It can never be a complete protection, for some mines cannot be kept free from fire-damp, and the sudden bursts of gas of which we have already spoken set it for a time at defiance; but it is at all times most valuable, not only as diminishing the chance of explosion, but also as tending to localise and diminish the force of an explosion when it occurs. The dangerous work of exploration after an explosion might, we think, be lessened by an application of the Denayrouze apparatus to which we drew attention some time ago; and it is conceivable that respirators packed with fragments of caustic potash might be used for the same purpose. They would, of course, have to be kept ready for use in air-tight cases.

But, after all, further scientific appliances are urgently wanted, and might, we believe, be found, if sufficient diligence were used. What has become of Mr. Ansell's exceedingly ingenious "fire-damp indicator"? We have seen it in use, and can testify to its marvellous delicacy. We are aware of the difficulties which lie in the way of its employment. It is excellent when suddenly brought into the doubtful atmosphere, and will, by the completion of an electrical circuit, carry its indications to any distance—say to an office at the surface; but it becomes inert when it has remained for some time in any atmosphere, good or bad. Nevertheless we do not think it has had a sufficient trial, and should never be surprised to hear that some slight modification had made it all that could be wished as a mere indicator. What is wanted in this direction is an indicator not liable to get out of order, which shall from hour to hour carry trustworthy records of the state of the atmosphere from all parts of the mine to an office on the surface. The responsible man would then know where his immediate attention was required, and if no other good result ensued he would, at any rate, know in any given case whether blasting might or might not be permitted. If Mr. Ansell's apparatus cannot be made to do this, some other might probably be found, and coal-owners would no doubt be glad to co-operate with Government in affording ample encouragement and reward to anyone who could offer even a chance of supplying the want.

The present Coroner for Central Middlesex has held office for a little more than twelve months. He had previously been deputy coroner for as many years; and it is curious to contemplate the resolute manner in which, "armed with a little brief authority," he has shown his disregard for the golden opinions he had won while holding the subordinate post. When Dr. Hardwicke was a candidate for the vacant coronership we gave him our unqualified support because we felt that his conduct as a deputy fully justified his election to the more important office. A reference to the expressions which we used when commenting on Dr. Hardwicke's candidature and election will show that our bias was entirely in his favour, and that nothing but a grave sense of our duty towards the public would be likely to draw from us any strong terms of adverse criticism on his shortcomings. Dr. HARDWICKE had not been in office three months before his want of tact in the matter of Sir CHARLES LYELL's death was spoken of in terms of just rebuke by the Home Secretary in the House of Commons. Commenting on this unpleasant episode, we expressed our opinion that "Dr. HARDWICKE failed in that discretion which is, or ought to be, a principal quality in a coroner"; and that a "few more such errors would destroy the strong public faith in medical coroners." At the same time we expressed a hope that, profiting by his experience, his future conduct would be marked by more discretion. The delusive nature of this hope was, we are sorry to say, amply demonstrated before Dr. HARDWICKE had been three months more in his office; and it was in May that he made the wholly unwarrantable statement that, in a certain case, "the conduct of the medical officers was simply atrocious." Reviewing his conduct upon this occasion we observed that the gentleman whose conduct was called in question was, in our opinion, in no way deserving of censure, and that "the Coroner's remarks were not only unnecessarily harsh, but calculated to mislead the public, whom soberly to instruct is one of the coroner's duties." Again, in May, we find Dr. HARDWICKE holding an inquest at St. Mary's Hospital on a cabman who had fallen dead off the box of his cab, and, without calling the medical man who had attended him, and without a post-mortem examination, allowing a jury to return a verdict of "Death from natural causes." For the next five months the Coroner's conduct was not publicly called in question; but in November we hear of his encouraging a jury to censure a medical man for contempt of court, when he ought to have known that only his own beadle was to blame. The murmurings of disapproval have scarcely died away when the name of Dr. HARDWICKE again becomes prominent; and it is a singular and an unfortunate fact that this last resembles the previous cases, in that the Coroner is found in unfortunate collision with the members of his own profession, towards whom he has systematically behaved with marked discourtesy under a mistaken notion probably of publicly exhibiting his impartiality towards all classes. The facts of this last case are briefly as follows.

An eminent member of our own profession, Mr. ACTON' who had just entered his sixty-third year, had been for some months past in failing health. This was a fact well known in his own circle. On Sept. 29th he fainted in the streets, and was brought home by a policeman in a cab. This warning was not lost upon the deceased, who at once set to work to settle his affairs and leave his estate in order for his executors. At the same time he consulted Sir JAMES PAGET, Dr. MURCHISON, and Dr. QUAIN respecting his health; and we believe these high authorities concurred in the opinion that Mr. ACTON was the victim of heart disease. Dr. MURCHISON might be looked upon as his ordinary medical attendant, but, Mr. ACTON himself being a medical man, Dr. MURCHISON only saw him occasionally, the last time being in October. On the morning of Dec. 7th Mr. ACTON was found dead in his dressing-room, and his family summoned their nearest neighbour, Dr. HALL DAVIS (who had not, however, been consulted by Mr. ACTON during life), whose melancholy duty it was merely to inform them that life was really extinct. On December 8th, Dr. MURCHISON, assisted by Dr. CAYLEY, made a post-mortem examination, the result of which was to verify beyond question the diagnosis which had been made during life. In the meantime, however, the Coroner, through his beadle, had made arrangements for an inquest, and had deputed Dr. HALL DAVIS (who had never seen the deceased professionally during life, and consequently knew nothing of his condition except by hearsay, and whose devotion to obstetric medicine causes a post-mortem examination to be to him a prohibited duty) to make the post-mortem and give the necessary evidence. Dr. HALL DAVIS deputed Dr. CAYLEY to make the post-mortem, and these two gentlemen both agreed with Dr. MURCHISON as to the cause of death.

Now here we have the case of a medical man, whose condition had been diagnosed during life by the heads of the profession, dying of the disease which had been diagnosed, and the diagnosis further confirmed by a post-mortem and microscopic examination by two persons than whom none are better qualified in the profession to come to a proper conclusion on the matter.

After the post-mortem examination the following certificate was furnished by Dr. MURCHISON:—

"This is to certify that William Acton, aged sixty-two last birthday, repeatedly consulted me during his lifetime for symptoms of heart disease; that I last saw him in October; that he died on December 7th, at 17, Harley-street; and that the cause of his death was fatty degeneration of the heart, confirmed by post-mortem examination."

If the circumstances attending Mr. ACTON's death were such as to justify a coroner's inquest, then we say advisedly that we cannot conceive any circumstances under which an inquest would not be justifiable.

To continue our narrative. Since the Coroner had issued his order for the inquest, Mr. ACTON's son took the above certificate to the Coroner, in order, if possible, to avert what could not be but a painful proceeding to his family. The Coroner's conduct, when confronted with the certificate, is, to say the least, instructive. He informed Mr. ACTON jun. that he was unable to accept the certificate unless they would do so at the Registry Office; and at the Registry Office this gentleman was informed that, since the Coroner had issued his order for an inquest, they dared not accept the certificate under pain of a heavy penalty. The Coroner, not seeing fit to countermand his order for an inquest, the inquest was accordingly held; and we understand that Mr. ACTON has, in the most public-spirited manner, brought the whole matter officially under the notice of the Home Secretary, who, probably, will forward the facts for the Lord Chancellor's perusal; and it remains to be seen whether Mr. CROSS or the Lord Chancellor is capable of holding in check that excessive zeal which has now on too many occasions proved harassing and vexatious to the inhabitants of Central Middlesex.

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IN the first of the two letters with which Dr. JOHN SUTHERLAND has recently favoured us (THE LANCET, Nov. 7th), the attention of our readers can hardly fail to have been arrested by the following sentences:—"In the whole history of human progress there is nothing more remarkable than the advance of sanitary improvement in India during the last ten or twelve years. There is nothing in the West that can be compared with it. The work is far from being done; but very much has been already accomplished." If this view of the progress of sanitary work in India be right, it should serve as an additional incentive to sanitary workers in this country to bestir themselves, so that at least sanitary improvement here may keep abreast of sanitary improvement in India, if it may not hope to keep in advance. If the view be wrong, it is necessary that it should be corrected, lest delusive conceptions of work accomplished should aggravate the mischief arising from such faulty methods of work in India as we had occasion to direct attention to last week (THE LANCET, Dec. 11th). At all times we have never failed to acknowledge and express our admiration of the greatness of the sanitary work done by the Government of India since 1864; but we have been accustomed to measure that greatness by the peculiar difficulties it has had to overcome, not by comparison with work done in this country. But Dr. SUTHERLAND, in the interest of the Army Sanitary Commission, now challenges this comparison; for we presume that his reference to the West really means to this country, any other comparison being, so far as we can apprehend, purposeless. It is difficult to approach the discussion of the question thus raised with gravity. In England, from 1848 to the present time, the whole aim of sanitary legislation has been the development of local sanitary self-administration. Every step in legislation since that date has been the result of a growing desire on the part of local authorities to possess additional powers for dealing with matters relating to the public health; and the Public Health Act of 1872 made a notable step to the completion, on the administrative side, of this steady process of local governmental education in sanitary matters. Parliament, indeed, has lagged behind rather than kept in advance of public feeling on these subjects. Sanitary work has progressed in due proportion to the progressive education in local sanitary government, marked by the growth of sanitary legislation. The amount of work done, measured by a cost of millions of money, is unimportant compared with the fact of its doing and maintenance having depended on the action of the people, or rather the ratepayers themselves. Turn we now to India. It is to the honour of the great administrators of that Empire that they have held that true sanitary progress among the populations of India will, as a rule, best be secured in proportion as it can be based upon a principle of local administration analogous to that developed in England. This view, we believe, has been steadily maintained by successive Viceroys, and its development has at all times been regarded as of primary importance in the working of the present sanitary organisation of that Empire as it affects the civil population. But what has been accomplished? Under an impulse dating from the Royal Sanitary Commission of 1859, and primarily relating to the health of the army in India, and by an expenditure wholly Imperial, this has been done: The army has been put into a healthier state; and a commencement has been made, by the appointment of sanitary commissioners for the different provinces and capital cities, of an organisation for the sanitary administration of the civil population. We have brought, at an enormous cost, under decent sanitary control the British army in India—numbering, say, 70,000 men; we have made a respectable beginning of getting under like control the Native army—say of 130,000 men; we have started sanitary works, on European models, in the capital cities of the Presidencies, with their collective population of, say, 2,500,000; and for the balance of the population of India—say 180,000,000—we have provided some twelve sanitary commissioners for provinces and a few medical officers of health for big towns, and have through them induced local sanitary action at a few points, and have regulated religious and other fairs. We have also promoted vaccination. This is the kind of result which, it is to be inferred from Dr. SUTHERLAND's letter referred to, the Army Sanitary Commission holds to surpass sanitary progress in this country—that is to say, the West. If this be the view of the Army Sanitary Commission, it proves that it mistakes the actual position of sanitary progress in India, as it has mistaken the requirements of sanitary investigation and work.

Indian sanitary work can well afford to stand upon its own merits. To claim for it other credit than that which properly pertains to it is to prejudice it in the minds not only of this country but of other nations. The difficulties which beset sanitary administration and work among the civil population of India are much too serious that it should be attempted to veneer them with fallacious comparisons. It must be sufficiently difficult already, we should imagine, having regard to the proceedings of the late International Sanitary Conference, for the Indian Government to satisfy Continental Powers that it is doing not only all that was practicable for it to do, but all that could, with certain reservations as to method, reasonably be required from it in sanitary works, without having to contend with obstacles raised by its own advisers.

Annotations.

"Ne quid nimis."

OVERWORK AT SCHOOLS.

THE letter written by the Rev. Frederic W. Farrar, which appeared in the *Pall Mall Gazette* of the 14th inst., confirms our statement that at Marlborough, as at other first-class schools, the hours of work are not excessive. Mr. Farrar says "the time spent in our school by any boy only amounts to twenty-six hours a week, and, even with the necessary preparation of lessons, falls very far short of the forty-five and forty-eight which are required at some schools." Marlborough has a high repute for scholarship; its boys do well at the universities, and in the competitive examinations for the Civil Service and Army there are few schools which can show greater measure of success. Yet this is attained without any undue pressure or forcing. The secret of this success lies, no doubt, in the method of teaching adopted. And, as we have said before, the more closely the old public school traditions are adhered to, the sounder will be the system of education, and the greater will be the ultimate success of the scholars. Our remarks have been considered to have pressed hardly on the masters of the schools censured for working their pupils eight to nine hours a day; and it is urged the fault lies with the Government and with the examiners who require so high a standard of excellence in such a multiplicity of subjects that cramming becomes a necessity. We hold, however, to our first opinion. We have seen how, at the chief public schools and at well-managed proprietary colleges like Marlborough and Cheltenham, considerable success at these examinations can be attained with a moderate amount of work; and we are sure, wide as is the range of subjects required by the majority of competitive examinations, they are within the grasp of the intellectual capacity of the average schoolboy if properly taught him. And we believe that examiners are learning to discriminate between a thoroughly taught and gradually matured mind, and the ill-digested masses of information acquired by the pupil of the grinder. We believe the real fault lies with the parents, who insist that their sons shall have "every advantage"; hence Greek, Latin, French, German, mathematics, drawing, modern history, ancient history, ditto ditto geography, chemistry, botany, natural philosophy, philology, &c., are poured in at the rate of so many hours a day, utterly regardless of the boy's natural bent or capacity. A few boys with retentive memories retain some smattering of this farrago of learning, and achieve some success, which, duly advertised, renders other parents anxious to join in this "fetish worship," more especially as the school possessing "every advantage" is often also more economical than the public schools or the higher class of proprietary colleges. The extent to which the evil is carried on, especially in the neighbourhood of London, is extraordinary. A gentleman connected with an educational establishment of high standing, and who has often spoken with authority on educational questions, considers the subject to be worthy of Government inquiry. Only a Royal Commission could get at the real truth and reveal the amount of mischief that has been done by the reckless employment of the grinding system. In the same manner that factory children are protected from excessive physical labour ought the children of our middle-classes to be protected from excessive strain that ambitious parents and schoolmasters would put on them. It should never be forgotten that youth is the period of growth and development, and that the boy is then laying in the stock of health which has to bear him bravely through the vicissitudes and struggles of adult life. A few hours of work can speedily be made up later on, but nothing can restore the tone to the jaded nerves exhausted by premature toil and excitement.

ALCOHOL AS A MEDICINE.

A DIFFICULT question in medical casuistry was suggested the other day at an inquest held by Dr. Diplock. An infant died under the following circumstances. After two days' illness, during which only some medicine from a chemist had been administered, Dr. Woolrych was sent for, who found the child suffering from an acute lung affection, and ordered that the child should have brandy and milk. The father refused to give the child brandy; he was a total abstainer, and "did not believe that it would do any good." Dr. Woolrych then declined to attend the case. Another medical man was sent for, but before he arrived the child was dead. Dr. Woolrych was asked by the coroner whether he suggested any other stimulant, such as ether or chloroform, and replied that he did not. It was impossible to say that brandy in this case would have saved the child's life; indeed, it is obvious that the child was already past hope. Accordingly an open verdict was returned. The wider question, however, is raised, Is a medical man justified in withdrawing from a case in which his directions as to the administration of stimulants are openly repudiated? Ought he to refuse his help, or should he endeavour to replace the obnoxious brandy by other stimulants—ammonia, ether, chloroform? It is doubtful how far these stimulants can take the place of brandy. Their effect is different; their action produces other secondary consequences more deleterious than those of ethylic alcohol. They cannot be substituted for wine or brandy. They may supplement, but cannot replace the latter. A case could not be treated on such conditions without deliberately accepting an inferior vantage ground for the contest with disease. It is certainly a course more consistent with self-respect, more consistent with due regard for the wider interests of humanity, to decline to undertake the treatment of disease weighted with such needless and prejudicial conditions. It may be suggested that the difficulty might be in many cases overcome by administering alcohol under the guise of physic. But this is a deliberate deceit, and it would be better to decline the management of a case on such terms, and to allow the responsibility of the results to rest where it is deliberately assumed.

THE HARVEIAN LECTURES.

THE second of these lectures, on Bright's Disease considered in relation with arterial tension from blood contamination, was delivered before the Harveian Society on Thursday, the 9th inst., by Dr. Sibson, to a numerous and appreciative audience. The greater part of the lecture was occupied in the demonstration, by means of the oxyhydrogen lamp, of the sphygmographic tracings of the pulse in cases of the different forms of Bright's disease under varying conditions of pressure and tension. Of these, although of great interest, it is impossible to give any idea without the aid of diagrams. Dr. Sibson exhibited a sphygmoscope which he has long used to estimate the pressure in the vessels, and also a modification of the sphygmograph, in which, by means of a screw, the pressure can be more easily and rapidly regulated than in Dr. Sanderson's modification of Marey's instrument. In the latter portion of the lecture Dr. Sibson took up the subject of treatment, classifying the therapeutic measures under three heads. These were, first, to promote the elimination of the effete products from the blood by the various channels; second, to avoid the introduction of other poisonous material which could tend to aggravate the condition of the blood; and, third, to enable the patient to live above and in spite of the blood condition. To fulfil the first indication, the ordinary measures were recommended. Under the second heading, Dr. Sibson dwelt especially on the importance of feeding the patient on substances which are free from the products of tissue oxidation and yet afford a great amount of nourishment; and on this ground he strongly recommended milk as a diet in preference to beef-tea, the latter containing so large a proportion of extractive matter. The drinking of pure water, such as Malvern water, or of soda water in quantity, was also advised. On the other hand, the lecturer eloquently enforced the danger of administering alcohol in such cases; he regarded it as only adding fuel to the fire, and overloading the blood with a poison which in itself is liable to set up similar changes in the blood and vessels to those induced by the morbid poison of Bright's disease. He allowed, however, that in some cases the administration of alcohol seemed to give tone to the system, and enabled it to excrete the morbid materials more readily. The employment of opium or morphia, whether subcutaneously or otherwise, was justly condemned in strong terms in cases where there are albuminuria or signs of renal and vascular degeneration; and the lecturer urged the importance of examination of the urine before the administration of these drugs.

Finally, in order to enable the patient to live above the influence of his disease, Dr. Sibson strongly recommended that plenty of exercise should be taken, since the muscular action not only enables the heart to perform its work with less effort, but promotes elimination. Cheerful society, healthful bodily and mental work were, he considered, far better than inaction, for by means of them the healthful balance of function and the mutual reaction of organs might be maintained even with a partially diseased organ, and the patient be thus in a state of relative, if not of actual health. Dr. Sibson concluded an interesting lecture by thanking those who had enabled him to undertake and assisted him in a course of investigation at various hospitals, which had extended over many months.

THE OPPONENTS OF THE CONTAGIOUS DISEASES ACTS AGAIN.

WE gather from the *Folkestone Chronicle* that the agents of the Society for the Abolishment of the Contagious Diseases Acts recently convened a meeting in that town, with the view of getting a public expression of opinion adverse to the Acts in question. If the opponents of these Acts were content to address their appeals and arguments to those to whom they should be limited, we should be content to leave this subject alone, and to accept the verdict of impartial persons of reflection in regard to it, but we must strongly protest against the course that is now being adopted. We learn that during the day of the meeting "bills of a most objectionable character were circulated about the town and put into the hands of young girls, in which they were asked to attend." There was a large gathering of males, including a number of the more respectable inhabitants, but we are glad to learn that no female was present at the meeting. The attempt on the part of the deputation from the Association for the Repeal of the Acts was a miserable failure—indeed, the tables were completely turned on them, for the amendment in favour of the Acts was carried all but unanimously. The deputation might have known what to have anticipated from the fact that the inhabitants of Folkestone have had an opportunity of observing for themselves what has been the effect of the working of the Acts in their neighbourhood, and many of those at the meeting were well acquainted with the subject, especially Dr. Gill, who replied in the most effective manner to the statements and reasons adduced by the deputation. To borrow the words of our contemporary, "in no town have they been so entirely snuffed out as in Folkestone." The Mayor, very rightly, refused the deputation the use of the Town Hall, and we heartily concur with the *Folkestone Chronicle* in believing that "such agitations against these Acts are thoroughly unjustifiable and indecent."

OFFICIAL WORRY.

IF we were asked to assign one cause as more potent than another, or possibly than all the rest put together, for the existing discontent among army medical officers, we should have no hesitation in referring to the state of worry and irritation brought about by constant changes. This has been going on for years past. What with the constant succession of new or amended warrants, regulations, army circulars, and what not, nobody knows exactly where he stands or what he is to do. This worrying system seems to have affected all branches of the public service more or less. We recently saw it aptly remarked somewhere that the Government treats a public service exactly as a schoolboy does the seeds that he has sown in his garden; he is for ever digging them up to see how they are getting on. Let anyone address himself to the first half dozen men belonging to as many public services, and what will he hear? That everything seems to be for ever changing, and nothing fixed; that regulations are like words writ in sand—gone before you know where you are! To-day a Liberal wave effaces this, and to-morrow the Conservative reaction re-established that; while a host of minor officials belonging to both parties, or to no party at all, seem to employ themselves in giving a new or different meaning to what is the natural one to everything they come across. The army medical service is organised on neither a regimental, general, nor any other basis at present; but a sort of hybrid system exists which pleases no one, and those charged with its working are loud in their complaints that their rights and privileges have been curtailed or abrogated altogether. The last regulations as to the issue of forage or forage allowance will be sure to add to the discontent. We question whether it will be found practicable to carry them out, and, so far as we can discern, nobody will be benefited by the new ruling that duty and not rank is to be the officer's only title to forage, unless it be the equestrian statues in London, and they may fairly claim a title to a forage allowance inasmuch as they are "permanently mounted."

THE PRINCE AND THE DOCTOR.

OUR contemporary, the *Examiner*, recently devoted an article, under this heading, to the sudden and unlooked-for check which the triumphal progress of the Prince of Wales through India had experienced. Dr. Fayrer, the medical ruler of the expedition, having heard that cholera had shown itself in some parts of Madras, issued an edict tabooing, it said, the "benighted presidency." Here lies cholera, there lies cholera: at Coimbatore and Bangalore, at Madras and Pondicherry, wherever the inhabitants of the "benighted presidency" do congregate, our contemporary went on to say, the scourge of the East is uplifted, and the doctor puts his veto on the projected excursion. Our contemporary agrees with everybody that Dr. Fayrer was only discharging his duty, if cholera existed in Madras, by putting the presidency under the ban; but it goes further, and points out that Dr. Fayrer has evidently not yet learned to discriminate between the two forms generally assumed by the disorder in the East. Of epidemic and endemic cholera there is little fear, the season having advanced too far for an outbreak; and as to the sporadic type, now or until very lately existing at Madras, that may be found in almost every great Indian city at all seasons of the year. Dr. Fayrer will probably be amused, if not instructed, by the points of contrast between the two forms of cholera indicated by our contemporary, should he happen to read the article in question. It is neither an impossible nor a very improbable conclusion, however, to assume that a physician who has spent all his life in India will have already learned anything that the article in question is capable of teaching him. Meanwhile, the Prince's arrival in the "benighted presidency" has been announced, although of course our contemporary was at the time quite justified in regarding it as very improbable that such would be the case.

THE KEIGHLEY GUARDIANS AS HYDROPATHISTS.

Now that the Keighley Guardians have lost the excitement of antagonism to law and common sense, by abandoning their opposition to the Vaccination Acts, they are to be invited to other displays of the art of mixing up the two functions of guardians and doctor. "The chairman," we read, at a recent meeting "gave notice that he would, at the next meeting of the board, bring forward a motion for the purpose of getting the board and the medical officer of the north district—Mr. Roberts—to co-operate in treating patients hydropathically." Why "Mr. Roberts, of the north district," should enter into this sort of medical partnership with the guardians is not stated. We have one amendment to make on this suggestion of the chairman.

We should propose to substitute for the word "patients" the word "guardians." We could imagine nothing better for the guardians of Keighley than cold-water treatment. They have had a good deal of cold water thrown on them lately by the Court of Queen's Bench, by other boards of guardians, and, most of all, by a few sensible members of their own board. We should not, however, object to see them subjected to hydropathic treatment by Mr. Roberts; but we should decidedly protest against the paupers being subjected to hydropathic treatment, the result of co-operation between the guardians and Mr. Roberts. If Mr. Roberts thinks any of his patients want any particular form of treatment, he will doubtless see that they are supplied with the means of applying it; but on the mere instigation of the chairman of the Keighley board, to "occasionally" give paupers, in the hard conditions of winter, a turn of hydropathy, is a proposal which seems to us to deserve watching by the Local Government Board. Things must have come to a pretty pass in the Keighley board when the chairman has to suggest the treatment of patients to the medical officer! What next?

THE EPIDEMIOLOGICAL SOCIETY: CHOLERA IN SYRIA.

At the meeting of the Epidemiological Society, on the 8th instant, the President, Mr. Netten Radcliffe, in the chair, a paper was read communicated by Dr. Wortabet, of Beyrout, on the recent outbreak of cholera in Syria. The paper dealt rather with the manifestation of the disease in Beyrout than with the general distribution of the epidemic in Northern Syria. It threw no light upon the origin of the outbreak, and the author maintained a judicious reserve upon this question, hesitating to express an opinion where the information was so imperfect. In the discussion which followed, and in which Mr. Cornish, the Sanitary Commissioner for the Madras Presidency, Mr. C. Macnamara, Inspectors-General Dr. John Murray and Mr. R. Lawson, Dr. Thorne Thorne, Dr. William Squire, and others, took part, the subject chiefly considered was the data which existed regarding the origin of the outbreak. These were so imperfect that it was obvious discussion was idle, and more than one speaker protested against certain speculations which were already being indulged in as to the so-called *de novo* origin of the disease. Mr. Macnamara especially showed how, in regard to other outbreaks of cholera, long regarded as indicating that the epidemic disease could have birth elsewhere than in India, that they were filiated with the malady prevailing elsewhere. Some interesting remarks on the question of the dormancy of epidemic diseases were made by Dr. Thorne Thorne and Dr. William Squire.

THE EFFECT OF COLD WEATHER UPON MORTALITY.

The mean temperature was continuously below the average during the twenty-two days ending 11th inst.; at the Royal Observatory, Greenwich, the mean for this period was no less than eight degrees below the average. The mean temperature of the week ending 4th, was more than a degree below freezing point, a lower temperature than in any week during the cold weather in November and December last year. The rate of mortality in English towns, however, does not hitherto show nearly the same excess as prevailed at this time last year. During the five weeks ending 27th November, the rate of mortality in eighteen of the largest English towns had been remarkably stationary, and averaged 24·1 per 1000, whereas in the two weeks ending 4th and 11th inst., the rate increased to 25·9 and 28·1, respectively. In London the rate in the five weeks ending 27th ult. averaged 23·4, and has been equal to 24·7 and 28·1 in the two subsequent weeks. From published metereological returns it appears that the temperature has recently been lower in London and Bristol than in the more northerly towns, and hence the death-rate has shown, in the past two weeks, a higher percentage of increase in the metropolis than in the seventeen provincial towns. According to the Registrar-General's last published weekly return, the death-rate in London from diseases of the respiratory organs was equal to 7·7 per 1000 in the week ending 11th inst., against 4·6 in the five weeks ending 27th ult., thus accounting for about two-thirds of the excess rate from all causes, which was equal to 4·7. It it worth notice that in spite of the recent cold weather the death-rates in Leeds, Sunderland, and Newcastle-upon-Tyne, have steadily declined during the past three weeks in face of a large increase in most of the other towns.

THE CATASTROPHE AT NORWICH HOSPITAL.

There is but little to add to the details contained in the local papers of the late terrible occurrence at Norwich Hospital, but at the moment of going to press we have received a few additional particulars. The three unfortunate lads who were murdered had their heads simply crushed and smashed by repeated blows with the tongs, the weapon used by the alleged murderer. A fourth boy, named Clarke, a patient of Dr. Eade's, has lost the slight sign of rallying that was manifested, and a fatal issue is feared. He is suffering from a fractured skull, and has been unconscious from the first. The fifth lad, also a patient of Dr. Eade's, has a battered and injured skull, but is much less seriously hurt, and it is confidently hoped that he will survive his injuries. It does not appear that any blame is attributable to anyone—certainly not to those in the hospital. But for the very gallant and determined stand which the house-surgeon made against the frenzied man the consequences, already so terrible, might have been frightful to contemplate, and we think his conduct deserving of the greatest praise.

FLOCKS.

A correspondent of the *Glasgow Herald* has called attention to a hitherto unsuspected source of disease. For stuffing beds and furniture a substance called "flocks" is in common use, and the source and character of this material are, it is said, such as to render it a most undesirable material for the purpose, and one not unlikely to be a ready and effective vehicle for the conveyance of contagion. The flock manufacturer collects rags of every kind, and for the most part of the most filthy material, "the pickings of ash-pits, the worn-out clothes of all classes, including the cast-off greasy tatters of the denizens of the slums and wynds of our towns and cities," and this material is, it appears, made up into flocks without any preliminary purification. The rags are dried, passed over revolving rollers with prongs of teeth, which tear them down to fibrous consistence, clouds of dust flying from them and passing up chimneys, to darken the air, and cover the surface of the neighbouring land and houses.

There are, however, we believe, flocks and flocks—white flocks and black flocks, and the description we have quoted of the source of the material employed is true only of the coarser variety of black flocks. It is indeed a loathsome substance—the rags from which it is made, and often the "flocks" itself, swarming with animal life, and it is utterly unfit to be employed for stuffing any article of furniture, far less bedding. But the "white flocks" is a very different substance; the best is a pure white soft cottony material, the product, we believe, of an Indian plant. It is preferable, in fact, to the imperfectly preserved and often not inodorous feathers, which are often put into beds. The black flocks is likely to be a grave source of disease, and we agree with the correspondent whose letter we have quoted, that its use should be conditional only on absolute purification. The matter is one which deserves and should receive the immediate attention of the sanitary authorities of the districts in which flock-mills are situated. We are not surprised to learn that the manufacture is a most unhealthy one, the health of the workpeople suffering very seriously from the contamination of the atmosphere produced by the flying particles of impurity.

ST. THOMAS'S HOSPITAL.

UGLY rumours have long been abroad of the persistence of typhoid fever among the resident staff at St. Thomas's Hospital. Although some of the accounts have been exaggerated, there is a considerable element of truth in the reports. It is not, for instance, true that many of the nurses and dressers have died of typhoid fever contracted in the hospital, but there have been within the past twelve months three or four deaths from typhoid fever. Some months ago typhoid broke out in the apothecary's house, and a search showed, we believe, that there was some faulty drainage, but this has been put right. It will be remembered that a dresser died a short time ago in the hospital of typhoid fever, and we took the opportunity of calling attention to the wretched and dirty condition of the small rooms in which the dressers were expected to sleep at night and to occupy during the day. Something has been done to make these chambers more wholesome and habitable. At present typhoid seems to have attacked the nurses. The night superintendent died recently of the fever, and a sister and a nurse are now ill with what is believed to be typhoid. How this disease has been contracted is a problem which the Committee of St. Thomas's would do well to submit to its medical staff for solution.

THE TOUR OF THE PRINCE OF WALES.

ACCORDING to the latest written intelligence received by us of the Prince's tour, dated the 21st ult., His Royal Highness left Bombay on the 17th, and went to Baroda in excellent health, as were all the party. After all the ceremonies and parades of Bombay, the Prince enjoyed his cheetah hunting and black buck shooting, and has hitherto stood the heat as well as, if not better than, most English new comers. Lord Charles Beresford's accident at Poona was only a bruise, of which he soon recovered. His Royal Highness visited the European Hospital at Bombay, and it is to be hoped that some good may arise from this circumstance, as several of the defects of that institution were brought to his notice. The reports of cholera were so rife from Madras at the date of our correspondent's writing that it was deemed advisable to defer His Royal Highness's visit for a time.

UPPINGHAM SCHOOL.

THE question has arisen as to the reopening of the Uppingham School. The sanitary authority of Uppingham report that the condition of several of the school-houses is such as to necessitate material alterations in their sanitary arrangements, and they discountenance a return of the scholars until these alterations have been effected and each individual house in connexion with the school is put in a perfect sanitary condition. We agree with Mr. Rawlinson, the Government inspector, that till the plans, reports, and estimates are submitted to him for his approval, it is "premature to publish any statement relative either to the state of the town or to the state of the schools." But surely it is equally premature to allow the return of the boys before the official statement of the causes leading to the outbreak has been made public, and the assurance given that all sanitary defects have been remedied. We strongly advise parents not to allow their boys to return to the school till they have received this assurance from the report of the Government inspector, who alone has the responsibility of speaking authoritatively on this point.

THE HOSPITAL SUNDAY FUND.

THE Council of this fund met on Friday, the 10th inst., under the presidency of the Lord Mayor. It is gratifying to have to notice that the new Lord Mayor displays a personal interest in the institution of Hospital Sunday. The meeting was well attended by clergymen and laymen. The fact that the sum collected this year is less by £3000 than that collected last year, was satisfactorily explained by two simple circumstances—viz., that the day of collection was a very wet one, and that some unfavourable feeling had undoubtedly been raised by the unseemly action of the representatives of special hospitals in the beginning of the year. Now there is practical unanimity on most points, and the distribution of this year has given satisfaction, except to those institutions which used to receive more from local collections than they do from the fund. These institutions are very few in number, and their claims are comparatively slight, so that it would be an act of policy as well as justice on the part of the Council to see that they are indemnified out of the fund for the loss of local collections. The object the Council should aim at is to liberate the clergy for a great, hearty, and consentaneous appeal that should supersede the petty appeals for local medical institutions.

THE SANITARY CONDITION OF NORTHFLEET.

WITH reference to our remarks on this subject in a recent issue, we have received a communication from the Board of Guardians of North Aylesford, disclaiming all responsibility for the sanitary condition of Northfleet. It appears that subsequent to the passing of the Public Health Act of 1872, by which Northfleet was constituted a part of the rural sanitary district of North Aylesford, that parish was, in June, 1874, created a local board district. The local board of Northfleet, therefore, now constitutes the urban sanitary authority for that parish. The thirty-nine deaths registered in the parish and local board district of Northfleet during the three months ending September last were equal to an annual rate of 23 per 1000 of the population, estimated at 6874, and included ten, or 26 per cent., which were referred to the seven principal zymotic diseases, of which five resulted from whooping-cough, two from fever, two from diarrhœa, and one each from small-pox and measles. We can readily understand that the North Aylesford guardians are glad to be able to repudiate any responsibility for the present sanitary condition of Northfleet, and trust that the local board, the present sanitary authority, will be as ready to take measures to improve the health of the parish.

THE WARNING SYMPTOM OF SLEEPLESSNESS.

IT is of course premature to offer any remarks on the "Tragedy at Norwich," but there can be no objection to urging very strenuously upon hospital surgeons and practitioners generally, who are not specially familiar with the symptoms of mind and brain disease, the imperative necessity of treating "sleeplessness" as a warning symptom. A "curious patient," so described because he does not sleep, should be at once placed under proper supervision, for his own sake and the safety of those around him. Inability to sleep is one of the most significant indications of a condition of nervous irritability or mental excitement which may at any moment assume the form of uncontrollable violence. Delirium tremens, traumatic delirium, and the most dangerous forms of mania are all prone to give this warning token of their presence, and scarcely any other. Without in the least prejudging the case now *sub judice*, we venture to bespeak the attention of the profession and the public for a matter of daily importance, unfortunately impressed afresh upon the notice of everybody by this terrible lesson in blood.

THE CHAIR OF PHYSIOLOGY AT GLASGOW.

THE candidates already in the field for this important scientific appointment are Dr. McKendrick, and Dr. Eben Watson. The former gentleman is assistant to the Professor of Physiology in Edinburgh, and is well known as the author of many excellent original papers which have been published in the Transactions of the Royal Society, and which constitute permanent and important steps in the science to which he is exclusively devoting himself. Dr. McKendrick possesses unusual power of exposition as a lecturer, and his claim is at least deserving of all consideration by the Secretary of State whose duty it is to advise the Crown in these matters.

SIMLA.

COMPREHENSIVE and energetic efforts will shortly be made to improve the sanitary condition of Simla, the favourite resort for European invalids, civil and military, at the foot of the Himalayas. The system of drainage, long known to be defective, will be thoroughly revised, and water will be brought into the station from a distance of ten miles. It is estimated that the required improvements will necessitate a cost of at least £100,000; but it will be money well spent. The fever-stricken traveller from the plains, who gazes on the "Abode of Snow" as a veritable Canaan, will no longer be disquieted by reports that the water in Simla is as bad as that he has left behind, and that on rainy days the streets overflow with liquid sewage.

THE ROYAL COMMISSION ON VIVISECTION.

THE Royal Commission on Vivisection, which has sat every day this week, has now practically finished its labours. The report of the Commission cannot, of course, be made public until it has been presented to Her Majesty the Queen, and laid upon the table of the House. The standing and influence of the Commissioners, and the thoroughness with which they have fulfilled their duties, may be taken as a guarantee that the recommendations they make will prove acceptable to the medical profession, and not distasteful to the more sensible anti-vivisectionists.

FEVER AT CROYDON.

IN answer to the memorial of the inhabitants of Croydon, requesting that a Government inquiry should be held respecting the causes leading to the epidemics of enteric fever with which Croydon has been visited this year, the Local Government Board have instructed Dr. Buchanan to make the necessary investigation. Permission also has been sought to borrow the sum of £14,100 to extend the waterworks and furnish the town with a constant supply. Last week we announced that an important discovery had been made that the large overflow pipe of the cistern communicated directly with the sewers, and so permitted the sewer-gases to have direct access to the water of the cistern. Disgusting and disgraceful as this arrangement must be considered, it can hardly in itself be held sufficient to account for the epidemic, though drinking a water charged with sewer gas may be considered, no doubt, as a highly predisposing cause. The history of past epidemics has shown conclusively that the disease is spread by the *actual* presence of fæcal matter, specifically contaminated, in the water itself, so that we must continue to hold the opinion originally expressed by us, that the cause will be found to lie in a defective condition of the sewers and water-mains at one or more points; the contents of the former passing into the latter when the supply is intermittent.

IN a short memoir which Sir Thomas Watson has written of the late Dr. Peter Mere Latham, who had outlived nearly all his contemporaries, he states that his conduct throughout life was governed by an abiding and imperative sense of duty, and as a corollary of this temper of mind must be reckoned his love and habits of order and method. The letters received by him and kept were all arranged in packets, and the substance of each was noted on the envelope. He was a charming companion, full of various information, affluent in anecdote, with a keen sense of fun and humour, and with this was blended a quick susceptibility of pathetic emotion. "Ripe in years as he was, and ready in spirit for the solemn change, his death must long be the subject of tender and sacred regret among the nearest and dearest of his surviving family and friends; nor will his memory soon cease to be reverently cherished throughout a much wider circle.

'Multis ille bonis flebilis occidit,
Nulli flebilior quam mihi.'"

THE authorities of the *Cornwall* are unable to take advantage of the offer made to them by the Admiralty of H.M.S. *Clio* on account of the heavy attendant expenses. It is now arranged that the *Cornwall* shall be moved down to Gravesend as soon as possible, and be there thoroughly cleaned and refitted. The propriety of retaining the permanent moorings at Purfleet is still under consideration, and we are informed that the port medical officer has advised the *Cornwall* authorities to ask for an opinion from the medical department of the Local Government Board as to the possible evils likely to arise from the comparative proximity of the ship to the metropolitan main drainage outfalls. There is now so much difficulty in finding berths for ships of this class in the Thames that the removal of the *Cornwall* from Purfleet might possibly result in the breaking up of this School-ship Society.

DR. WHITMORE, medical officer of health for Marylebone, in his monthly report of the health of the district during November, observes that the deaths from bronchitis, pneumonia, and heart disease have increased with the advent of the cold weather, while scarlet fever still continues its ravages. Dr. Whitmore urges the adoption of a more efficient system of street cleansing than that now prevailing. This is a subject which might well be taken up by the vestries of the metropolis before we have another fall of snow, with the inevitable amount of mud and slush.

NUMEROUS complaints have been made within the last few months of the condition of the water-supply in Gibraltar, and the allegations of its impurity have been so persistent that samples were sent to London in order to be analysed. The result of the analysis proved conclusively that the water was unfit for consumption. We hope that, in consideration of the health of the troops in quarters, no less than of the inhabitants, the Sanitary Commissioners of Gibraltar will lose no time in devising means for securing an improved service of water.

At a meeting of the Council of the Poor-law Medical Officers' Association, held in October last, it was resolved that a letter, signed, on behalf of the Council, by the President, Dr. Lush, M.P., should be forwarded to every holder of a Poor-law medical appointment, inviting increased support and co-operation in the effort to ameliorate the condition of the service. This letter has now been issued under the date of December 8th. The main concessions it is hoped to secure are increased emoluments, absolute instead of permissive superannuation, the development of the dispensary system throughout the country, and the payment for sanitary work called for by local boards. The Association has already succeeded in redressing some of the more pressing grievances of Poor-law doctors; it will, we trust, achieve much more in the next Parliamentary session.

The inexactness and perversity of misapprehension of French newspapers when dealing with English manners and names are proverbial. The most astounding blunders are unfailingly made whenever the journalist is exercised on an English subject in which it is necessary to describe persons. The medical press in France cannot be congratulated on a better acquaintance with the proper names of their neighbours. Thus, we find the *Gazette Hebdomadaire* describing the late Dr. J. Hughes Bennett as *M. le Professeur Huebbenet.*

The name of Dr. W. B. Carpenter, Registrar of the University of London, occurs amongst recent recipients of the honour of the Companionship of the Order of the Bath. This somewhat tardy recognition of the high merits and attainments of Dr. Carpenter must be gratifying to the profession of which we have the honour to claim him a member, no less than to a host of scientific friends and admirers in all parts of the world.

We understand that Dr. Ulick Burke has been elected a medical member of the Local Government Board of Ireland, *vice* Mr. Macdonnell, who retires.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

HANWELL ASYLUM.

THE HOUSE AND ARRANGEMENTS.

The Middlesex County Lunatic Asylum at Hanwell offers a marked contrast to the edifice described in our last report. It is a vast straggling building, in which the characteristics of a prison, a self-advertising charitable institution, and some ambitious piece of Poor-law architecture clamour for precedence. The gates are kept by an official who is attired in a garb as nearly as possible like that of a gaoler. All the male attendants are made to display the same forbidding uniform. Whether the justices of this county are especially proud of their livery it is not for us to determine; but, in the name of common sense and humanity, we must warmly protest against the weakness of parading it perpetually before poor creatures whose only offence is their misfortune, and whose distressing malady should deter governing authorities from obtruding what is, beyond all question, a source of irritation. County asylums are now most unwisely treated as depositories for ex-criminal lunatics, and even prisoners who have become insane before the expiry of their terms of confinement. One of these morbid miscreants in a ward will make the uniform known to the ordinary inmates, and all idea of homeliness is immediately transformed to a depressing sense of imprisonment; while that large class of lunatics who are partly insane and partly vicious instantly take to prison practices, and readily become imbued with the pestilent doctrine of criminal lunacy that, being insane, they may do wrong with perfect impunity. The Committee of Visitors are doing much to improve the conditions of life at Hanwell; it is strange that so startling a mistake as the persistent use of this warder-like uniform has not long ago been remedied. We trust the justices will at once take the matter into their serious consideration. It is one of grave moment regarded from a medical and curative, and not less from an economic, point of view. A suitable uniform might surely be devised which should be sufficiently distinctive and creditable, without adopting the sombre colour and buttoned-up appearance of the conventional prison warder.

Hanwell, as a hospital for poor persons who are neither criminals nor in the ordinary sense of the epithet "paupers," is conspicuously unsuitable. Most praiseworthy efforts have been made by the committee and the medical superintendents to adapt the edifice to its requirements, and much has been accomplished, but more remains to be achieved; and we doubt whether the enterprise is not doomed to disappointment. Practically, the asylum can never be serviceable to use as a *hospital* for any class. It may be available as a place of refuge for imbecile and chronic cases of mental disease in which safe custody is the chief requirement; but the notion of sending there acute or recent, and therefore possibly curable cases, should be wholly and at once abandoned. Speaking generally, the house is five, and the number of inmates three, times as large as the space or community of a hospital for acute mental disease ought ever to be. The immediate and inevitable consequences of this fault are extremely serious. To begin with, it has been deemed necessary to appoint *two* medical superintendents. This division of the medical management has the effect of leaving the ordinary control of the institution to a third authority—the committee and its officers. The result is disastrous. It seems to be forgotten that a hospital for patients affected with mental disease has scarcely anything in common with a hospital for physical disease. In the latter, no doubt, medical and surgical treatment may be separated from the ordinary house management, because the materia medica, therapeutic agents, and methods and appliances of treatment generally, are capable of being separated from such matters as housing, feeding, clothing, and domestic *régime.* But these very matters are *themselves* the drugs and curative agents of the physician who undertakes to treat mental disease. The use of ordinary medicines, which are the principal remedies for disease of the body, are only exceptional and accidental agents in the treatment of disease of the mind. It is by domestic control, by the surroundings of a daily life, by such devices as the colouring of walls, the patterns of floorcloth, the furniture and decoration of rooms, by the influence of pictures, birds, and draperies, the judicious use of different kinds of clothing, suitable occupation and diversions, and, generally, by moulding and controlling the routine life of a lunatic, the psychologist hopes to reach, capture, and re-educate the truant mind, and perhaps re-seat the dethroned intelligent will of his patient. No lay committee can possibly be competent to interfere in these matters. It is essential that there should be only one head to an asylum, and that the whole control of the administration should be gathered up in the *medical* superintendent. Even the authority of a matron, if she be more than a housekeeper, must detract from the personal influence of the medical superintendent with his patients and embarrass his treatment. It would be just as reasonable, or unreasonable, for the lay officials of an ordinary hospital to prescribe the drugs or the instruments with which physicians and surgeons treat physical disease. We think it right to speak strongly on this point, although it is quite possible the medical superintendents at Hanwell may not be prepared to endorse our opinion. The evil apparent in this institution is one of growing magnitude elsewhere, and until justices have the moral courage to place these gigantic institutions on a proper footing, the fact that they are failing in their duty to the insane, and to the ratepayers—because the speedy cure of curable cases is the only true economy — must be brought plainly home to committees and the public. Then, again, it is manifestly impossible the 1700 or 1800 lunatics and imbeciles huddled together in an asylum like Hanwell can be properly cared for. We do not believe there are now cases improperly detained at this asylum, but the evil is quite likely to occur at an institution of such magnitude. Sane individuals may be overlooked in the crowd even by medical officers earnestly and devotedly striving to discharge their public duty. Let anyone calculate for himself how much time a medical superintendent can possibly give to 900 or 1000 patients, the larger number of whom probably stand in need of direct personal and daily assistance. To devise a system of general routine, be it ever so well-ordered, and place a mass of patients under common discipline, is practically to let them take their chance of recovery. This was the highest notion of mental treatment some twenty years ago, but it is not now. As well might the ordinary physician give general directions that all patients suffering from pneumonia should be dosed with tartar emetic, or all the victims of phthisis imbibe large quantities of cod-liver oil. Pulmonary gangrene and hæmoptysis would probably flourish in a hospital so conducted, but it would be idle to pretend that any serious or scientific attempt was made to cure diseases. Mental disease is peculiarly varied in its symptoms and nature, and its victims are remarkable for their idiosyncrasies. Individual knowledge and special treatment are indispensable. Both are impossible in places like Hanwell Asylum. If here and there a case is specially studied and treated, it must be to the neglect of others. A wise and provident Board of Justices will lay these common sense and practical considerations to heart, and carry out the reform to which they point.

Long cold corridors, huge wards, and a general aspect of cheerlessness, are the unavoidable characteristics of a building like Hanwell Asylum—an ungainly multiplication of regulation day-rooms, dormitories, and single rooms, which might be useful as a barrack, but should long ago have been discarded as a residence for the insane. Nevertheless, taking the place as it stands, it is impossible not to be struck with the effort, on the whole much more successful than might have been anticipated, which has been made to render it comfortable. The wards have been improved constructionally wherever it was possible; the walls have been painted, papered, or stincelled; the old stone floors have been replaced with wood; and the stable-like windows have been cut down. All this has been accomplished at great expense and with considerable liberality. Pictures, plants, tasteful ornaments, books, and musical instruments have been provided, and at every turn it is a labour of love to notice the ingenious contrivances for the comfort of the inmates, which have been introduced by the combined intelligence of the superintendents and the spirited humanity of the Committee of Visitors. Nothing can render the asylum a pleasant place to inhabit, or redeem its inherent ugliness. Nothing short of entire reconstruction could make its day-rooms really homely, its dormitories cheerful, or its airing-courts anything but sad and prison-like. Meanwhile what has been done in the way of improvement is very remarkable, and reflects high praise on skilful workmen labouring with defective and unworthy tools.

It is needless to describe the building in detail. Let it suffice to say, briefly, that the house, the arrangements, the general routine of checks and counter-checks, are as complete as those recorded to the credit of Brookwood, with some points to the good. For example, there is an abundant water-supply obtained by sinking an artesian well; the provisions against fire are ample, there are hydrants on all levels, and electric alarm-bells from every ward and officer's room to a common centre; details have been considered down to the placing of a small filter in each dormitory. On the other hand, there is no provision for separating special working communities, which has proved so useful a feature of the arrangements at Brookwood; and the possibilities of isolation in case of epidemic disease, except by some temporary erection, are *nil*. If the Commissioners in Lunacy would concentrate their counsel on points like this, instead of wasting power in recommendations so wonderful as that for "a separate and suitable deadhouse for *each sex*," a real need might be satisfied. As it is, we dread to contemplate what might happen if a serious outbreak of fever or small-pox occurred. There is a recreation hall, but it is much too small, and the system of entertainments is not sufficiently developed. The powerful and most salutary aid of theatrical representations, so well calculated to arrest and interest the wandering mind—perhaps more efficacious than any other instrumentality,—is practically neglected. This is a subject for great regret. The chapel is a vast and gloomy apartment, very like an overgrown meeting-house, which it must be the reverse of comforting to attend. The wise course would be to throw this and the awkward small recreation-hall into one, erect a new and improved stage and dressing-rooms, and build a commodious chapel somewhere in the grounds. At the same time, a block of residences on the cottage principle, here and there, to be used as hospitals for curable cases, or in time of need for infectious diseases, would be worth many hundreds of pounds a year to the county treasurer on the general expenses. We have already spoken of the folly of clothing the attendants in prison uniform. It would be advantageous if the attire of the inmates were more diversified in colour and material, particularly on the female side, where a little pride in dress might obviate the need of special measures to prevent the wilful destruction of clothing. The dietary is good and varied; it includes a liberal supply of vegetables and fish. The daily life of the patients is well ordered, and they appear as contented and quiet as the mistaken policy of associating large bodies of persons with unnaturally excitable temperaments in a ward will allow. The service of the attendants—always a point of the first moment, but extremely difficult to infer from appearances—would seem to be fairly satisfactory. The proportion of attendants is about one to thirteen patients, exclusive of inspectors. The system of night-watching is reported to be good, but it is hard to understand how the large dormitories and multitude of single rooms can be properly supervised. A passage in the latest report of the Medical Superintendent of the Female department bears on this point. "The question of the constant supervision of the epileptic patients by night has engaged my most earnest consideration for some time past, but I have been reluctantly compelled to come to the conclusion that in our present building it would be impossible to attain that object in its entirety; the difficulty arising from the large number of epileptics we have in the asylum—viz. 124; and of them 20, on the average, must sleep in single rooms, on account of their violent and irritable disposition." We must confess to having very little confidence in the check imposed by "telltale" clocks. Those who have had much to do with the insane will agree that it is always more difficult to watch attendants than patients. The weekly cost of inmates is 9*s.* 11*d.* per head. The sewage is utilised, and the farm productive. The drainage is generally good. The warming of a large building like this is of course a work of difficulty: open fireplaces are general and approved. The grounds are not sufficiently planted, and the airing-courts look dismal and bald: many of the seats have no backs. There is plenty of scope for the energy of reform in the provisions for recreation, both in-door and out. Notwithstanding the immensity of the asylum, there is a tendency to overcrowding, and in many of the day-rooms and dormitories both cubic atmosphere and superficial space for exercise are very deficient.

Treatment.

The general principles of treatment adopted at Hanwell are no doubt identical with those in operation at Brookwood, but the practice is in many respects essentially different. It is humane, intelligent, and, in the broad sense, moral and suasive; but it necessarily lacks individuality, and that special character which arises from dealing with a limited number of cases directly. The medical attendants do not approve the use of mechanical restraint, except for surgical purposes; but "seclusion" has been, and still is, an acknowledged remedy at Hanwell, and although it has of late been employed less frequently than in former years, it forms an integral part of the discipline. During the last ten years the records of "seclusion," summarised as completely as we can ascertain the facts, are given in the following table:—

In 1865 there were 96 cases, comprising 193 instances.
„ 1866 „ 72 „ „ 186 „
„ 1867 „ 68 „ „ 116 „
„ 1868 „ 61 „ „ 85 „
„ 1869 „ 36 „ „ 53 „
„ 1870 „ 85 „ „ 159 „
„ 1871 „ 120 „ „ 244 „
„ 1872 „ 48 „ „ 76 „
„ 1873 „ 62 „ „ 127 „
„ 1874 „ 10 „ „ 19 „
558 1258

The above is only an approximation to the actual figures; the returns of seclusion in the female division being deficient for the years 1869 and 1872. It will, however, be seen that the practice is rapidly falling into disuse; and the following remarks, which we reproduce from the Medical Report issued in January of the present year (1875), will show that this is due to change of policy rather than to any supposed variation in the type of disease. Mr. J. Peeke Richards, the medical superintendent of the females, says:—

"Three patients have been secluded on three occasions, two of them being excitable epileptics. ...... During the previous year the seclusions were as follows: 51 patients secluded on 110 occasions. ...... By this it will be seen that the seclusions have materially diminished; and this has been due, I think, in great measure, to further extending the plan that has been adopted here for some time past, and which the large size of our building and the number of our wards freely permit us to do—viz., that of removing the patient, when excited, to some other ward, thus removing her from her real or imaginary grievance or source of irritation; she then, as a rule, soon becomes quiet, and after a few hours returns to her own ward calm and tranquil."

The method thus indicated is in use elsewhere, and with the same beneficial results. Dr. Henry Rayner, medical superintendent of the male division, remarks: — "Five patients have been secluded once, one twice, and one thrice; making a total of seven persons secluded on ten occasions. ...... Six of the patients secluded were epileptics, and the seventh a general paralytic. By the experience of the last year I am strengthened in the opinion expressed in my last year's Report, that seclusion is only very exceptionally a necessity."

The shower-bath is not, we are assured, employed except for ordinary physical purposes; never as discipline. The result of a very careful inquiry into the treatment is to leave the impression that Hanwell has within the last few years emerged from a period of darkness and empiricism and entered an era of scientific progress and enlightenment. The trust to physical remedies is no less diminished than the reliance upon mechanical appliances and methods of restraint. Sedatives and stimulants are going the way of strait-waistcoats and padded rooms. In a word, the treatment is becoming more essentially moral. The difficulties which psychologists doomed to labour in a building like the asylum at Hanwell, and with attendants dressed as prison warders, must encounter and contrive to surmount, can scarcely be over-estimated, and it is only due to the medical superintendents to recognise the conditions under which they labour and the obstacles by which their daily practice is beset. The increased attention to matters of detail, relating to the more intractable and hopeless classes of cases, which recent medical Reports evince, is a satisfactory token of improvement in the general management. The care of "wet" and "dirty" cases is more efficient; the provision of suitable employment for those who can be induced to work—a task of great perplexity—is calling forth better effort, and the result is a larger proportion of patients voluntarily employed—some 60 per cent. in 1874, showing an increase of 10 per cent. on the previous year 1873. Dr. Rayner's class at the Middlesex Hospital visits the asylum for clinical instruction, and while this is a boon of considerable magnitude to the pupils, it beyond question reacts advantageously on the practice of the institution. Hospitals of all descriptions are improved by being used as schools of medicine; and, under proper restrictions—for example, the obvious one of *prohibiting students from entering the wards or showing themselves to the patients except when accompanied by one of the medical superintendents*—the attendance of pupils at an asylum for lunatics is certain to elevate and improve it. The obligations of hospital practice and the emulation of success it implies, must go far to redeem asylums from the character of mere retreats and strongholds for the subjects of madness to drag out hopeless and unhelped lives, and finally die, in.

RESULTS.

The figures in the annexed table are compiled and arranged as were those in the previous report. They speak for themselves. The cases deemed curable—by the medical superintendents for the time being to which the numbers relate—have borne a proportion of 36·76 per cent. to the total of admissions, taking the aggregates of the ten years, not the mean. The mean proportion per cent. of cures to cases "deemed curable," adding the number of such cases remaining at the close of one year to those admitted in the course of the next, has been 53·38. Our reasons for attaching more weight to this calculation than to that which compares the "recoveries" with the "admissions," without regard to the proportion of cases "deemed curable" among the latter, were stated in the last Report. The proportion per cent. of deaths on admission has been 46·27.

Middlesex County Lunatic Asylum at Hanwell.

Year.	Cases admitted.				Cases discharged.				Cases remaining on Dec. 31st.		Average number resident.	Analysis of recoveries.				Analysis of deaths.						Casualties reported.
	Total number.	Transferred from other asylums.	Readmitted.	Deemed curable.	Recovered.	Relieved.	Not improved.	Died.	Total number.	Deemed curable.		Proportion per cent. on admissions.	Proportion per cent. on cases deemed curable.*	Proportion per cent. on average number resident.	Numbr. within six months of admission.	Proportion per cent. on admissions.	Proportion per cent. on average number resident.	Immediate cause: General Paralysis.	Average age at death.	Numbr. within six months of admission.	By suicide or accident.	
1865	466	22	28	148	111	35	8	203	1693	108	1643	23·81	40·51	6·95	51	43·56	12·35	49	49	57	1	...
1866	349	11	28	100	108	22	21	168	1723	96	1708	30·94	51·92	6·32	49	48·13	9·89	37	49	47	2	...
1867	344	19	34	100	102	37	28	177	1723	79	1727	29·65	52·04	5·90	38	51·45	10·24	41	48	51	3	...
1868	265	19	18	90	95	26	74	105	1688	75	1710	35·84	56·21	5·55	37	39·62	6·14	22	49	23	2	...
1869	321	8	25	108	95	14	27	175	1698	60	1716	28·13	51·91	5·53	36	54·51	10·19	47	49	56	3	...
1870	423	32	31	194	119	16	19	182	1785	45	1776	27·31	46·85	6·70	42	43·02	10·25	48	51	45	3	...
1871	545	140	95	178	127	15	213	178	1797	61	1759	23·3	56·95	7·22	42	32·66	10·11	55	52	40	3	...
1872	301	53	28	128	112	17	18	144	1807	42	1792	37·21	59·25	6·25	41	47·84	8·03	40	50	37	2	1
1873	380	70	27	172	118	18	21	201	1829	96	1815	31·05	55·14	6·50	48	52·81	11·07	58	48	37	2	2
1874	305	37	21	142	150	14	7	150	1813	88	1825	49·18	63·02	8·20	66	49·18	8·21	36	53	40	1	2
...	3699 †	411 †	335 †	1360 †	1137 †	214 †	436 †	1683 †	...	...	1747	31·64	53·38	...	450 †	46·27	...	433 †	...	433 †	22 †	5 †

* This percentage is upon the total of cases deemed "curable" remaining on Dec. 31st of the previous year (11th col.) and those admitted during the current year (5th col.)

† These totals are the gross of the ten years, not the average.

General paralysis accounts for 433 out of the 1683 deaths, or 25·72 per cent. on the gross total of the ten years. We reserve general deductions until the close of our inquiry. To Mr. J. Peeke Richards and Dr. Henry Rayner, the able superintendents, whose difficulties are great, but whose zeal is apparent, we are indebted for much courtesy and valuable information.

[*Errata in the Report on Brookwood Asylum*, December 4th, 1875.—In the section on "Treatment," ninth line, for "daily dealings with the sane," read "daily dealings with the *in*sane." In last paragraph under same heading, fourth line, for "broodings phantasies" read "brooding phantasies." In the section on "Results," the proportion per cent. of deaths caused by general paralysis upon the total of deaths for the eight years should be 31·04 instead of 31·4.]

DR. RICHARDSON'S LECTURES ON INDUSTRIAL PATHOLOGY.

I.

THE lectures on industrial pathology now being delivered by Dr. Richardson before the Society of Arts are an instance of the anxiety which the Council of that Society feels to advance scientific inquiry on subjects of every-day life, and of practical utility to the masses of the people. In appointing Dr. Richardson to the lectureship, the Council requested him in the present course to take up that part of the subject of industrial pathology relating to those members of the community who belong to the industrial classes proper —to the classes that are engaged in the production of some article of manufacture. The lectures are consequently limited to one class, but incidentally they do, by necessity and by way of comparison, introduce many facts bearing upon other classes of the community. Our contemporary the *Daily News*, which is taking a great interest in this effort, correctly states that the inquiry now in progress is but a preliminary to the greater national inquiry which the Government of this country must undertake, when the *sanitas sanitatum* is in truth more than a party word, spoken but not fulfilled. It is, of course, impossible for any private society to carry out a Government measure, and this is not the attempt that is now being made. At the same time the attempt is not less worthy of regard. It is intended as a means for drawing public attention and interest towards one of the most important of national subjects. It is a means for educating the people so fairly that the demand for official investigation and action shall be irresistible. The plan is eminently practical, and is specially illustrative of the mode of political progress in this country. It has, moreover, an additional advantage of no mean value: it helps to educate professional teachers in the soundest practical knowledge, and thereby to train men of science to take part in the governing body of the nation if their inclinations be in that direction.

In the first or introductory lecture of the course delivered on the 3rd inst., Dr. Richardson first called attention to the previous action of the Council of the Society of Arts in respect to the subject of Industrial Pathology. He drew special attention to an able report and series of questions which had been drawn up twenty years ago by Mr. Simon, F.R.S., Dr. T. King Chambers, and Mr. Twining. Next he dwelt on certain of the detailed reports which had been drawn up by various Governments, naming the Factory Acts Commission, the Children's Employment Commission, the Sanitary Commission, and the great work which has been conducted in the Registrar-General's Office, and in which the labours of Dr. Wm. Farr play so conspicuous a part. The reports of Dr. Headlam Greenhow were also noticed as of signal value. On the whole, the lecturer held that our Governments, with all the faults that had been attributed to them, were deserving of this credit—that they had taken the lead of the Governments of all other countries in the work of sanitary science. Since the year 1802, when factory legislation commenced here, the progress of sanitary science had steadily gone on, until the best system of sanitation with the best results of action was established. In a word, England, the birthplace of true sanitary science, was still the leader. The reading of a quotation from a Belgian publicist on the credit due to England closed this section of the discourse.

Under a second head the lecturer considered the classes of the English community on which it was his duty to treat. Following the Census return of 1871, he defined the six great classes of the English community: — 1. The professional, including the governing class, the army and navy at home, and the representatives of the learned professions, literature, art, and science. 2. The domestic class, including all wives and women of the household, hotel-keepers, inn-keepers, and all who provide entertainments. 3. The commercial class—the buyers, sellers, and lenders. 4. The agricultural class—the tillers of the soil and keepers of the live stock, and of all animals that minister to the wants of man. 5. The industrial class—those who live and work to produce some useful thing. 6. The indefinite class, including (*a*) those who are truly indefinite, who have no fixed home, and no returned and recognisable labour; (*b*) those who are independent, who are *par excellence* "ladies and gentlemen," and (*c*) those who, being under fifteen years of age, are the coming England—the children, scholars, and students of our present generation.

The 22,712,266 persons who made up the whole of the last census were thus divided into classes:—The professional class made up 684,102 of these; the domestic class, 5,905,171; the commercial, 815,424; the agricultural, 1,657,138; the industrial, 5,137,725; and the indefinite non-productive class, 8,512,706. In commenting on these divisions into classes, Dr. Richardson specially dwelt on one singularly curious fact—a fact which shows what a busy beehive this country is — namely, that of the whole 22,712,266 persons who make up the population no more than 168,895 adults are returned as of independent means, and as following no occupation, as, in short, "ladies and gentlemen." The rest are all of some occupation.

Under the third head of the lecture, the 5,137,725 people who constitute the industrial class were considered specially in respect to their diseases and vital condition. It was impossible, the lecturer urged, to study the true industrial pathology of this class until certain disturbing influences, which did not rank strictly as the effects of occupation, were well understood. Five great influences were at work to reduce the life value of the industrial classes, independently of the effects of occupation, and these were: (*a*) intemperance; (*b*) heredity to disease; (*c*) errors of diet, and improper cooking of food; (*d*) moral surroundings; (*e*) uncleanliness.

In illustration of these different disturbing influences, the lecturer adduced a long series of facts. Under the head of intemperance, and the results arising from that cause, he held that, although intemperance is a source of disease and of premature death amongst the industrial classes, it is less destructive to them than it is to some other classes; so that there were occupations, which in all other respects were more favoured, in which the mortality was greater. To prove this position, Dr. Richardson compared two of the unfavourable industrial occupations with that of the publican. The industrial occupations selected were the blacksmith and the engine-driver and railway servant. Taking the mortality of these from the returns of the Registrar-General, and adding to them, in order to make the comparison more complete, the mortality of labourers and of persons of all ages, he showed that the annual death-rate per cent. of the publicans was greater than that of all the rest, at every period of life from above fifteen to seventy-eight years. The facts bearing upon this point were largely illustrated, and are condensed in the following table:—

	Years of Life.						
	15-25	25-35	35-45	45-55	55-65	65-75	75
All Classes	·739	·985	1·305	1·853	3·215	6·076	16·584
Labourers	·513	·872	1·080	1·507	2·734	6·060	18·256
Blacksmiths ...	·366	·918	1·124	1·869	3·225	7·138	19·254
Engine-drivers and Railway servants......	·712	1·121	1·497	2·151	4·059	7·092	20·543
Publicans	·957	1·449	2·044	2·859	4·303	7·465	21·792

It is seen from this table that the men who are engaged in the dispensing of alcoholic drinks, and who are, almost by necessity, led to indulgence in such drinks in small and frequently repeated libations, are from the beginning to the end of their careers specially stricken down with disease, the fruit of their intemperance. These men, in fact, stand in relation to mortality above every one of the industrial classes except one, which is exposed to other dangers of singular import. The lesson taught by the facts requires no comment.

To what extent the same trains of evil extends amongst the industrial classes was not so easily defined, but in its less definite form it was traceable through all the ranks.

The second disturbing cause leading to excess of mortality, irrespective of occupation—viz., inherited disease, was a serious influence, extending specially in those localities of the industrious where the population is densest. Pulmonary consumption is the most marked of these transmitted maladies, but others were named, such as rheumatism, and its concomitants, heart disease and paralysis. Cancer is less prevalent and less distinctly hereditary amongst the industrial than it is amongst the agricultural, the domestic, and the professional classes. A question of immense moment was here considered — whether the transmitted diseases, acquired from the occupation by some of the industrial community, could become hereditary in their offspring independently of the occupation of the offspring?—in other words, whether the original disease once induced by a purely external cause in one person could reappear in the direct line of the family of that person without exposure to the original, or any other similar exciting external, cause? Many difficulties lie in the way of obtaining a correct answer to this question, but Dr. Richardson was of opinion that the balance of testimony lies on the affirmative side.

The third disturbing element, arising from errors of diet and imperfect preparation of food, formed a striking topic in the lecture. As a rule, the industrial classes take too little nitrogenous food, while they often take also an imperfect respiratory sustenance. Absence of fresh food is a great evil, and indulgence (if such a term may be allowed) in tea by the female portion of the class is a serious cause of mischief. The food is not only badly selected as to quantity and quality, but it is so badly cooked that half its value as a sustaining and digestible substance is lost. In some exceptional localities errors of diet of a luxurious kind prevail. In Wolverhampton, during the days of the week which are devoted to "play," the miners feast on all the luxuries of the season. But these exceptions are rare; and, on the whole, one of the greatest reforms required amongst the members of the industrial community is in their diet and in their system of cooking. Peculiarities of body and mind, that are all but racial in their distinctiveness, rest on food and its preparation.

The fourth disturbing element—the moral influences which surround the workman—exert a telling effect on the vital value of the working class. The agricultural labourer may work hard, may fare badly, may be housed shamefully, but he has many advantages. He is engaged out of doors in the fresh air, he has all the beauties of the external nature to delight and refresh him. His work is varied; there is the spring-tide season, with its sheep-washing and shearing; the summer with its haytime; the autumn with its harvest; the other months of ploughing and sowing—constant roundelay of work, with varied change for the mind as well as the body. The artisan has no such pleasures of industry. He passes day by day, month by month, year by year, through the same monotonous labour, until at last his mind recognises but one scene, his hands fall to but one automatic routine. To the end of his career he sees no change, nor chance of being made independent by his skill and his industry. He therefore is naturally apt to become fretful, anxious, irritable; the victim of smouldering passions, which wear out his heart, and lessen his nervous resistance to the many external shocks to which he is daily subjected. Moreover, the limitations of his means lead to limitations in the necessary comforts of his home, and he who is in these straits is rather to be pitied than blamed when, in false measure of the deed, he seeks, ignorantly, still more sorrow in alcoholic indulgence.

The fifth disturbing influence, uncleanliness of person and of attire, was the last dwelt upon. Much of the uncleanliness in industrial work is a part of the industry, and must be accepted as a necessity. But uncleanliness begets the habit of uncleanliness, and so much more is added than need really exist, and it is common to retain the uncleanly condition during hours when work is not being carried on. Dr. Richardson showed the injurious effect of this habit by reference to those who are engaged in working lead, as dippers in the glazing of pottery, and painters. These artisans get into the habit of taking food before they have thoroughly cleansed their hands. They lift some portions of the food—bread for instance—to their mouths with their hands, and in this way they actually swallow the poisonous lead, and become affected, not as is commonly supposed, by absorption of the poison through the skin, but by absorption of it from the stomach.

The last division of the lecture treated upon the actual dangers which spring from various industrial occupations, and which are inseparable from them. It was shown in this part, from the mortality incident to industrial pursuits, that there are causes at work in many of them which, over and above the disturbing influences already quoted, lead to depreciation of vital power and existence. From a table exhibiting the annual rate of mortality in twenty-five well defined callings it was shown, that amongst the industrial callings, the earthenware manufacturers hold the worst place.

As the topics now under consideration opened, it would be discovered that many of the causes operating against industry were irremovable by science in her present condition; that others were removable if science were backed by legislation; that many were easily removable by science without any legislation if those who are most interested in such removal would permit the required improvements. Some advance of opinion among the workers has taken place within the last few years, but it will be long before all opposition to sanitary reform is withdrawn. Dr. Richardson concluded the lecture by quoting one of the "feircely pathetic" passages of the Corn-law Rhymer on this indifference of the industrial worker to the good gifts of science.

HEALTH OF THE NAVY.

The Medical Director-General, true to his word, has this year given to the public his statistical report at a much earlier period than formerly, and we have now before us the particulars on this subject for the past year, which have just been issued. Deputy Inspector-General A. E. Mackay, M.D., who is personally responsible to the Director-General for the compilation of the report, shows a very satisfactory sanitary return as compared with previous years. The total force under consideration numbered 44,530 men, who produced a total of 53,286 cases of disease and injury, which is at the ratio of 1196·6 per 1000, being a reduction compared with the preceding year equal to 3·5 per 1000. A total of 1745 men were invalided, and 422 deaths occurred, this latter number being an increase, compared with the preceding year, equal to 1·1 per 1000, which increase was caused mainly by a fatal outbreak of yellow fever on the south-east coast of North America in May and June of last year.

In summarising the specially interesting features of the Report, it is found that the advantages derived from the operation of the Contagious Diseases Acts continue to be maintained. A table is given in the Report showing the decrease in the ratio of cases of those diseases against which the Acts are more particularly directed, from the year 1864, when they came into operation, to the year 1874, as compared with the ratio of the three years preceding—namely, 1861 to 1863 inclusive. From this table it will be seen that the ratio has been reduced from 104·4 per 1000, the average which obtained from the year 1861 to 1863 inclusive, to 56 per 1000, the average ratio for the years 1866 to 1874 inclusive. In 1874, the ratio of disease was 48·6 per 1000, as compared with 104·4, the average ratio for the three years before the Acts came into force. These statistics need no comment, but may advantageously be commended to the attention of Mr. Stansfeld.

Enteric fever occurred as usual to some extent in the Mediterranean squadron, nearly all the cases originating at Malta. As, however, a general and comprehensive scheme of sewerage for the entire island has been planned, and is about to be carried out, it is very probable, as Dr. Mackay in effect observes, that these works will result in a diminution of this disease among the squadron.

The North American and West Indian squadron has been, comparatively speaking, free from yellow fever during the past year, thus causing a reduction in the death-rate of that station to the extent of no less than 7 per 1000. The fatal outbreak of this disease, however, alluded to above increased the death-rate on the South-east Coast of America station to the extent of 26·1 per 1000, the cases being almost entirely confined to the receiving ship permanently stationed at Rio de Janeiro, thus giving one among many other examples of the unwisdom of keeping vessels at permanent moorings in a tropical climate for any length of time.

The operations on the West Coast of Africa and Cape of Good Hope stations in connexion with the Ashantee campaign were, of course, productive of much invaliding, but nevertheless the ratio of cases entered on the sick-list, as well as the actual mortality, were less than in the previous year. The sanitary condition of the East Indian, China, and Australian stations does not call for special comment. Besides the usual medical and surgical reports from the surgeons of the Royal Dockyards, Naval Hospitals, and Lunatic Asylum, the Report contains Notes and Statistics relating to Boys under Training for the Royal Navy during the past year, by Staff-Surgeon Peter W. Rolston; a Report on the Physical Condition of the Royal Marine Light Infantry, by Surgeon Henry C. Woods, M.D.; some Spectroscopic Observations on certain Pathological Absorption Spectra, by Surgeon E. L. Moss, M.D.; and a most interesting and exhaustive chapter by Staff-Surgeon A. B. Messer, of H.M.S. *Pearl*, on the Physical Geography and Climatology of the Fiji Islands, an abstract of which we must reserve for a separate and prominent notice.

Correspondence.

"Audi alteram partem."

SANITARY WORK IN INDIA.

To the Editor of THE LANCET.

SIR,—Will you kindly afford me space for the following reply to Dr. Macnamara's letter in last week's LANCET on this subject:—

1. Dr. Macnamara has stated his own view that the old high death-rate of the Indian army was mainly due to field service, and doubts the conclusions arrived at by the Royal Commission on the sanitary state of the Indian army after an inquiry extending over several years, and carried on not only in England, but at every station in India, during which there was a concurrence of opinion manifested as to the causes that led the commissioners to adopt the conclusions they arrived at, and of which Dr. Macnamara's own view is not one; and all the sanitary work which has been done in India has followed from the principles laid down by the Commission. On this matter the facts must be left to speak for themselves.

2. Dr. Macnamara's estimate of the sanitary results of sending young fellows to India would, I am afraid, not be sustained by many other authorities, as these very young fellows have been claimed by statistics as among the causes of increased mortality and invaliding; moreover, they supply the chief victims for typhoid fever. Some years ago the matter came before us, in conjunction with the Army Medical Department, and we felt it to be our duty to object to young recruits.

3. Dr. Macnamara appears to place some weight on increased invaliding as a cause of lower death-rates, and cites the experience of 1868 (for Bengal?) with an invaliding rate of 67·7 per 1000, and a death-rate of 21·71 per 1000. The results for all India in 1873 may be compared with Dr. Macnamara's figures. The total invalids were under 40 per 1000, including about 600 men who recovered their health in a month's voyage, and never went to Netley. The actual invalids who went to Netley were under 30 per 1000. The final loss by discharge was 10·3 per 1000, and the total death-rate, including those who died at Netley, for the Indian army, 15·8 per 1000, to which the invalid deaths contributed 5 per 1000, leaving the deaths in India 15·3 per 1000 in that year.

4. In regard to the question of water-supply, Dr. Macnamara appears to consider that the Army Sanitary Commission should have dealt with this subject on the basis of disease poison. But, as I have already pointed out, the Commission, as a purely practical body, is bound not to interfere with doctrine, except to take practical good out of it. Besides, these views are by no means generally adopted in India, and it is scarcely our duty to decide such questions, although we by no means undervalue their teaching. We entirely concur, however, on the Mussack question, and have set our faces against this practice from the beginning. No water, however pure, can be safely carried in skins. At a number of stations metal vessels have been lately substituted. It is true, as Dr. Macnamara states, that several Bengal stations require permanent works, but it is something to have got the Presidency stations improved, and at others there has, I believe, been much good work of a temporary kind done in drainage and water-supply, and at all the conservancy has been undergoing improvement.

5. Dr. Macnamara states that the condition of the civil population of Bengal has not improved, and that in some respects it has degenerated (referring to the fatal Burdwan fever district). Now let us see what the Sanitary Commissioner for Bengal says in his report for 1874. "Very great advancement has been made in the sanitation of municipal towns during the year. The famine has largely extended, in a most practical manner, a knowledge of what is needed and how it can be done"; and he cites reports of improvements from country districts also, in cleansing, draining, filling up holes, improving the water-supply, &c., on a considerable scale. The Burdwan fever has for years been a subject of representation by the Commission with the view to improve the drainage, agriculture, and water-supply, and also the sanitary state of the villages. The difficulties were very great, but a beginning has been made. As a point of experience it may be stated that the same report mentions that in Hooghly district extensive drainage works were completed during the year, "and the result is that a large tract of the country, which was formerly the centre of much disease and mortality, has become healthy." We hope that the same result may be realised, before many years are over, for the whole region.—Your obedient servant,

London, 14th December, 1875. JOHN SUTHERLAND, M.D.

UPPINGHAM SCHOOL.

To the Editor of THE LANCET.

SIR,—I understand that the Rural Sanitary Authority at Uppingham has sent you a resolution about the school. I should be obliged if you will publish at the same time with it, or in your next issue, if it has already appeared, the letter from Mr. Robert Rawlinson, who has been appointed by the Government Board at Whitehall to decide on the whole question. Mr. Rawlinson wrote this letter on having the resolution from Uppingham put before him. I enclose a copy. Believe me, yours faithfully,

EDWARD THRING.

The School House, Uppingham, Dec. 10th, 1875.

"UPPINGHAM SCHOOL.

"Local Government Board, Whitehall,
"December 9th, 1875.

"DEAR SIR,—I have not yet seen the plans, reports, and estimates of Messrs. Rogers Field on behalf of the Rural Sanitary Authority, and of Mr. Tarbotton on behalf of the school's trustees, and until I see these, and report, it is premature to publish any statement relative either to the state of the town or the state of the school.

"I am yours truly,

"The Rev. Edward Thring." "ROBERT RAWLINSON.

⁂ We insert the above letters at the request of the Rev. Ed. Thring, the Head Master of Uppingham. The resolution referred to appeared in our columns last week: it was to discountenance a premature return of the scholars till the Sanitary Authority at Uppingham were able to report that "each individual house in connexion with the school is in a perfect sanitary condition." We do not see that these letters in any way affect the resolution in question, which seems to us, under the circumstances, both reasonable and prudent.—ED. L.

Medical News.

Royal College of Surgeons of England. — The following gentlemen, having passed the required examination, were admitted Licentiates in Midwifery at a meeting of the Board of Examiners on the 15th inst. :—

Benton, Samuel, M.R.C.S., Wakering Hall, Essex.
Blake, Andrew H., M.R.C.S., Drury-lane.
Burgess, Edward John, M.R.C.S., Brentwood, Essex.
Hosford, Thomas Stroud, M.R.C.S. Mornington-road.
Jevers, Eyre, M.D., Tonbridge, Kent.
Pickburn, Thomas John, M.D., Sydney, New South Wales.

It is stated that nearly 350 candidates have entered their names for examination in general knowledge for the Membership and Fellowship of the Royal College of Surgeons, a number quite equal to that of any previous year. The examination will commence on Tuesday next (Dec. 21st) at the University of London (Burlington-gardens).

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 9th :—

Bickford, William, Ashburton, Devon.
Carey, John Thomas, Trinity-square.
Cross, Philip Henry Eustace, Lancaster-road, Notting-hill.
Henbeck, Fredk. Emanuel, Westbourne-terrace North.

The following gentlemen passed the Primary Professional Examination on the same day :—

Henry Thomas Batchelor and Robert Godfrey White, London Hospital; John Walter Stamp, Queen's Hospital, Birmingham; Joseph Henry Marsh, St. Thomas's Hospital; Alfred Moxon Turner and Walter Henry Lawrence Welchman, Guy's Hospital.

Valentine Stone, Esq., F.R.C.S. Edin., has been appointed a Justice of the Peace for the county of Kincardine.

British Medical Defence Association.—At a general meeting of the members of the British Medical Defence Association, held on the 10th inst., Dr. B. W. Richardson was elected president for the ensuing year, Dr. Alfred Meadows and Mr. James R. Lane, F.R.C.S., were elected vice-presidents, and Mr. George Brown was elected honorary secretary. An adjourned meeting is to be held on Tuesday afternoon next at the Guildhall Tavern, Gresham-street, to elect the council and remaining officers of the association.

London Hospital Medical Society's Soiree.—The soirée of the London Hospital Medical Society was held in the Medical College on Friday, the 10th inst. By the kind permission of the council the greater part of the ground floor was in use. The Anatomical, Pathological, and Materia Medica Museums, which were used as a promenade, had numerous curiosities and objects of interest displayed in them. The Reading-room was devoted to microscopes, stereoscopes, and photographic views. In the Anatomical Theatre a good selection of glees and solos were admirably performed during the evening, and some recitations given with great success. A large number of lime-light views were shown in the Chemical Theatre, thanks to the kindness of Dr. Tidy, who placed the necessary instruments at the disposal of the committee. Refreshments were provided in the lecturers' room. The rooms were crowded, many strangers and neighbouring medical men being present, together with a large number of the members of the society, and all seemed much pleased and interested by the entertoinment, which lasted from seven o'clock to half-past ten, and the only cloud upon which was the serious indisposition, and consequent absence, of the President, Mr. Mercier.

Medical Appointments.

Baird, Mr. J., has been appointed a Midwifery Assistant at the Steevens's Hospital, Dublin.

Barnard, Mr. W. W., has been appointed a Midwifery Assistant at the Steevens's Hospital, Dublin.

Bookless, J. P., M.D., L.R.C.P.Ed., has been appointed a Physician to the Kelso Dispensary.

Browne, J. C., M.D., has been appointed a Chancery Visitor of Lunatics, vice Bucknill, resigned.

Clarke, H., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the West Riding of Yorkshire Prison, Wakefield, vice Wood, resigned.

Cross, F. R., M.R.C.S.E., has been appointed Medical Tutor and Sub-Dean at King's College, London, vice Philpot, resigned.

Devany, P. C., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Sligo Model School, and Certifying Factory Surgeon for Sligo, vice Tucker, deceased.

Donovan, Dr. J. I., has been appointed Medical Officer to the Royal Gunpowder Mills, Ballincollig, and to the Royal Irish Constabulary, vice Rountree, deceased.

Eminson, R., M.R.C.S.E., has been reappointed Medical Officer of Health for the Gainsborough Rural Sanitary District: £125 for one year.

Etheredge, G. F. E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Bromyard Union Workhouse for twelve months, vice Powell, whose appointment has expired.

Forbes, Dr. L., has been appointed Resident Obstetric Assistant to the Westminster Hospital, vice Davies, resigned.

Gibson, C., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed House-Surgeon to the Bootle Borough Hospital.

Harvey, H. F., M.R.C.S.E., has been appointed Registrar to the London Fever Hospital.

Heap, C. S., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Burnham District of the Eton Union, vice Masterman, resigned.

Johnson, J. J., L.R.C.P.L., M.R.C.S.E., has been appointed House-Physician to the Midland Counties Supplementary Hospital for Chronic and Incurable Diseases, Leamington.

Keetley, C. R. B., L.R.C.P.L., M.R.C.S.E., has been appointed Assistant Demonstrator of Anatomy at St. Bartholomew's Hospital Medical College.

Lowne, B. T., F.R.C.S.E., has been appointed Ophthalmic Surgeon to the Great Northern Hospital, vice Vernon, resigned.

Lucas, T., M.R.C.S.E., has been appointed Medical Officer to the Cambridge Police Force, vice Hough, resigned.

Mackintosh, A., M.D., L.F.P. & S. Glas., L.M., has been reappointed Medical Officer of Health for the Whittington Urban Sanitary District for twelve months from the 15th of April, 1876.

Maples, R., M.R.C.S.E., L.R.C.P.Ed., has been appointed a House-Surgeon to St. Thomas's Hospital.

Newby, C. H., M.R.C.S.E, L.R.C.P.L., has been appointed a House-Surgeon to St. Thomas's Hospital.

Nicholson, W., M.D., C.M., has been appointed Medical Officer for the Greenwich Central District of the Greenwich Union, vice Wade, resigned.

Norman, J. C., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Needham Market West District of the Bosmere and Claydon Union, Suffolk, vice Beck, resigned.

Potter, H. P., M.R.C.S.E., has been appointed House-Physician to St. Thomas's Hospital.

Rossiter, G. F., M.R.C.S.E., has been appointed Resident Accoucheur to St. Thomas's Hospital.

Sampson, H. M., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer to the Gloucester Infirmary, vice Morris, resigned.

Smith, J., M.B., C.M., has been appointed Medical Officer for No. 7 District of the Newport Pagnell Union, vice Heygate, deceased.

Turnbull, G. H., M.D., L.R.C.S.Ed., has been appointed a Physician to the Kelso Dispensary.

Wallis, F. M., M.R.C.S.E., has been appointed Medical Officer for the No. 4a District of the Hailsham Union, Sussex.

Births, Marriages, and Deaths.

BIRTHS.

Bate.—On the 2nd inst., at Bethnal-green-road, the wife of Geo. Paddock Bate, F.R.C.S.Ed., of a son.

Cunningham.—On the 9th inst., at Woolwich, the wife of J. P. Cunningham, M.D., Surgeon-Major Army Medical Department, of a son.

Hogg.—On the 8th inst., at Gunnersbury, Chiswick, the wife of Wm. B. G. Hogg, M.D., of a son.

Peacock.—On the 11th inst., at Albion House, Gloucester, the wife of H. Peacock, M.R.C.P.L., of a son.

Stephen.—On the 12th inst., at Queen's-gate-terrace, the wife of Andrew Stephen, M.D., of a son.

Woodman.—On the 8th inst., at Prospect-terrace, Ramsgate, the wife of Samuel Woodman, F.R.C.S.E., prematurely, of a son, still-born.

MARRIAGES.

Gandy—Worsley.—On the 9th inst., at St. John's, Hackney, Wm. Gandy, M.R.C.S.E., of Parkstone House, Gipsy-hill (late of the P. & O. Co.'s Service), to Julia Matilda, youngest daughter of the late Charles Worsley, Esq., of Upper Clapton.—No Cards.

M'Intyre—Stiven.—On the 9th inst., at St. Stephen's, Westbourne-park, Andrew James M'Intyre, M.B., to Mary E. M., daughter of the late W. S. Stiven, M.D.

Smith—Gardiner.—On the 8th inst., at St. George's, Hanover-square, Ernest Louis Tyler Smith, M.B., to Rose Eliza Catherine, daughter of Wm. Gardiner, Esq.

DEATHS.

Alderton.—On the 4th inst., at Heigham, Thos. Alderton, M.R.C.S.E., late of Reepham, aged 54.

Clark.—On the 10th inst., at Cecil-street, Strand, H. Clark, M.R.C.S.E., late of Southampton.

Cremen.—On the 6th inst., at Millbank-street, David Cremen, M.B., aged 47.

Desmond.—On the 10th inst., at Irvine-street, Edge-hill, Liverpool, L. E. Desmond, M.D., aged 56.

Graham.—On the 2nd inst., at Stockport, G. Y. Graham, M.R.C.S.E., aged 70.

Hassall.—On the 13th inst., at St. George's-square, R. Hassall, M.D., late of Richmond, Surrey.

Morison.—On the 9th inst., at Horton-green, Bradford, Yorkshire Andrew Morison, Surgeon R.N., seniority Nov. 12th, 1813, aged 89.

Ridlington.—On the 5th inst., at Ramsey, Huntingdonshire, Hicks Ridlington, M.R.C.S.E., aged 73.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

WANT OF HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES AT SHEFFIELD.

ALTHOUGH the general death-rate in Sheffield has recently been low, the borough has been suffering for some weeks from the prevalence of fever of a severe type, and the resources of the workhouse have been greatly taxed by the necessity for admitting cases which, strictly speaking, are not proper cases at all. This town, however, unlike most other large English towns, possesses neither a fever hospital nor any other hospital accommodation for the treatment of non-pauper cases of infectious diseases. A recent case, in which, after an accidental delay in obtaining an order from the relieving officer, a patient was admitted to the workhouse in a state of delirium from typhus fever, and died shortly after, was the subject of an inquest, at which the guardians were blamed by the jury for what appears to have been a purely accidental delay in the admission of the sufferer. The fact is, the man was very far removed from a pauper, and his friends naturally were averse to sending him to the workhouse until delirium made him unmanageable. It appears to us that the real blame rests with the Town Council, which, as the sanitary authority of the borough, has neglected to provide a borough hospital for the treatment of non-pauper cases of infectious diseases ever since sanitary authorities were empowered to establish such hospitals by the Public Health Act of 1872. Dr. Griffiths, the medical officer of health, has in each of his last two Annual Reports dwelt on the danger to the community arising from the want of this hospital accommodation. In small towns there is some excuse for objection to incur the expense of such hospital accommodation; but in a prosperous community like Sheffield such neglect or parsimony is little short of a disgrace to the town. We may also take this opportunity of saying that no report has yet reached us of any intention on the part of the medical officer of health or the Town Council of putting in force in Sheffield the provisions of the Artisans' Dwellings Act of last session.

Mr. T. Laffan.—The Act referred to applies only to England and Wales.

TREATMENT OF SHOULDER PRESENTATIONS.

To the Editor of THE LANCET.

SIR,—I have just received a letter from Dr. P. R. Maxson, of Syracuse, New York, giving an account of his "treatment of shoulder presentations," and, as it is a matter of general interest to the profession, I have concluded to send it to you for publication.

He says: "I hasten to give you in a condensed form an account of my plan of *treating shoulder presentations.* Gravity is the principle invoked; and I was led to the discovery in 1860 by placing a woman with prolapsed cord on her knees, with her head and shoulders low, as recommended by Dr. T. G. Thomas, of New York, in order to effect its reduction, and finding that while she was in this position an abnormal (abdominal) presentation was spontaneously converted into a normal one. Having reflected on this circumstance, I was induced a few weeks later, when called in consultation in a bad shoulder presentation, to try *position* as a means of rectifying it. I was very anxious in regard to the case, because the lady had lost three children already from 'turning to deliver' in shoulder presentations. Her regular attendant, Dr. G. N. Dox, of Geneva, New York, a physician of attainment and experience, happened to be the *confrère* in whose practice the case of prolapsed cord, above referred to, had occurred; and, instead of 'turning' himself, as had been so unsuccessfully attempted in the lady's previous labours, he sent for me in consultation. Remembering the fate of the other children, and finding this one very large, I suggested the feasibility of correcting this *shoulder presentation* in the same manner as I had corrected the *abdominal* in the first instance. With his consent I made the effort in the following manner:—I folded several quilts compactly, laying them one upon another to the height of about one foot, and assisted her to kneel upon the quilts, with her head and shoulders resting upon the bed, and her face forwards, so as to bring her body to an angle with the bed of nearly 90 degrees. I then pressed my hand gently against the shoulder, which readily receded, until I was enabled to clasp the vertex with my fingers, and with the assistance of the next pain to so 'engage' it, that, when the patient was placed upon her left side and the quilts removed, a perfectly natural presentation presented itself. In a few hours the labour terminated in the delivery of a healthy boy, weighing ten pounds. Only a few moments were occupied in the process, and subsequent experience convinces me that *shoulder presentations* can generally be converted in this way into *natural* ones, without a resort to 'turning,' and with no risk for the mother or the child."

I would add that this method of treatment has received much attention in America, and that no inconsiderable amount of testimony has been accumulated in support of its efficacy. Dr. Maxson also informs me that he submitted his views in this regard some years since to Sir James Simpson, and that they were cordially endorsed by that distinguished gentleman.

Yours respectfully,
Rue Caumartin, Paris, Dec. 9th, 1875. EDWARD WARREN, M.D.

BRITISH QUALIFICATIONS IN CANADA.

EVERY colonial Legislature has the power to enforce medical registration within its jurisdiction. It can require those who have been registered in Great Britain to be registered again in the colony; provided, however, that any person who has been duly registered under the Medical Act shall be entitled to be registered in any colony upon payment of the fees (if any) required for such registration, and upon proof of his registration under the said Act.

F.R.C.S. (Ireland) has omitted to enclose his card.

FEMALE QUACKS AT MISSION HALLS.

SOME time ago we pointed out the sanitary evils resulting from mistaken zeal on the part of the promoters of "missions" who regarded a little hot-bed of pestilence and poverty as their preserve. We contended that the philanthropy of these people was obstructive and mischievous, and we appealed to the common sense of the public to set aside its influence and press forward in the path of uncompromising sanitary reform. We regret that it should be necessary to take up the cudgels against an equally irrational and no less pernicious practice. It seems that the "missionaries" have taken to quackery as a new vagary. Certain lady "philanthropists" indulge the passion for meddlesome notoriety by prescribing for the poor victims of their benevolence. We cannot but deplore the feebleness of a verdict which failed to carry the charge of manslaughter home to these female triflers in the practice of medicine. The proceedings of the coroner's inquest seem to have been treated with contempt by the promoters of the Mission Hall. The medical evidence laid before the coroner showed that a case of bronchitis had been grossly misconducted and practically left without help. We fear the "surprise" expressed by the jury will not occasion the ladies of this interesting mission any great discomfort. Something more than implied censure and covert rebuke is needed to repress the pretentiousness of zeal without knowledge.

An Ulster Boy should consult a medical man.

ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—The letter on this subject in your issue of the 4th inst., as also the notice taken by the Medical Society of London, induce me once again to urge upon the profession, and, through them, on the Government, the importance of establishing institutions in Great Britain where heifer lymph can be obtained. When working at this subject in 1869, I visited Dr. Blanc's establishment in London, M. Lanoux's in Paris, and the large national institutions in St. Petersburg and Brussels, in all of which I spent much time carefully examining the whole bearings of the question. The impression I thus received was so much in favour of animal vaccination (i. e., the vaccination of children with lymph never before in contact with human blood, but which, removed from the cow as the original vaccine, has been transmitted through heifers in successive series *without intermission*) that I published my views on the subject in the *British and Foreign Medico-Chirurgical Review*, April, 1870, and also brought the matter before the British Medical Association and other Medical Societies. Since that date my experience impresses me daily more and more in favour of heifer lymph. I would not urge on our Government the establishment of institutions for the vaccination of calves, and the distribution of lymph from this source, if I regarded such merely as toys or sops to semi-ignorant and well-meaning agitators; but, after bestowing very great care in sifting the question, I feel sure we have no reliable data for stating *positively* that the transmission of vaccine through innumerable human subjects does not modify—that is, cause deterioration in the protective qualities of—vaccine, and the experience of every variolous epidemic furnishes a considerable amount of proof in favour of this supposition. I do not believe in the transmission of disease by vaccine lymph; but it has always appeared to me illogical and unphysiological to insist on the exceptional character of vaccine lymph in this respect. Any other organic fluid transmitted through innumerable animals would be regarded as modified by the process; yet, because vaccine vesicles in the 300th generation from the cow *appear* what is termed normal or Jennerian, it is concluded that the fluid they supply has been unaltered by such transmission. During the last few years I have vaccinated scores of heifers, and likewise scores of children from them, and I never expect nor find either to fail. I am as sure when vaccinating the heifer as when vaccinating the child by the arm-to-arm method of obtaining a full or nearly full complement of vesicles. During the prevalence of the last variolous epidemic in Liverpool I found the advantage of being able to vaccinate heifers, as when the supply of vaccine ran short I was able to supply my colleagues with plenty more in a few days. This employment of retro-vaccine lymph from the heifer I have tried for some years, and found most successful. The proposal I brought forward before the British Medical Association in 1869, and which I would still urge, is the establishment in four great centres (as London, Liverpool, Edinburgh, and Dublin) of the means for maintaining a sufficient succession of vaccinated heifers to afford a constant supply of this lymph. By making a moderate charge to those availing themselves of these establishments, these institutions would be made in a few years self-supporting. Moreover, such institutions need not disturb nor interfere with the existing public vaccination stations; but they would greatly increase the confidence of the public in vaccination by affording the alternative. The cost of maintaining each station would be about £200, exclusive of the vaccinator's salary. The only difficulty I have met with has been in the forwarding of such lymph to distant parts, as India or Africa. On ivory points heifer lymph will remain active almost certainly for ten days, often longer; and, if circumstances required it, no doubt here, as in France and Russia, a special form of capillary glass tube could be produced, which would enable the lymph to be preserved much longer. I have obtained heifer lymph from St. Petersburg a month after its removal from the heifer, and it was still active.

I hope you will excuse me occupying so much space in THE LANCET, but believe that I do so through a feeling of the very great importance of the subject. I am, Sir, yours faithfully,
Birkenhead, Dec. 7th, 1875. P. M. BRAIDWOOD.

AS USUAL.

SPEAKING of the recent appalling explosion in the mine of the Swaithe Maine Colliery, the *Newcastle Daily Chronicle* reporter remarks:—"Not the least pleasant feature of a day literally crowded with horrors, either for those who descended the pit or those who congregated about the shafts, was the patient and considerate manner in which several doctors waited to give their services should such assistance be needed by the exploring parties."

Mr. Macauliffe.—We fear there is no redress.

SEQUESTRATION OF RATES FOR NON-ABATEMENT OF A SEWAGE NUISANCE.

VICE-CHANCELLOR SIR JAMES BACON, on the 9th inst., ordered two writs of sequestration to be issued for non-compliance with orders of the Court for the abatement of sewage nuisances, although he ruled that in each case the writ should not be put in force until the expiration of three months, in order to give time for the execution of the works. The first case was against the Commissioners of the Improvement District of Harrogate, for evading an injunction which forbade them to foul the out-beck with the town sewage, by pouring the sewage upon some land acquired for the purpose, from which it still found its way into the beck, in the condition of which there was no improvement. The Vice-Chancellor, in ordering that the writ of sequestration should issue, made some strong but wholesome remarks upon the evident neglect of the Commissioners. A similar application was in the second case made by the Attorney-General against the Corporation of Newcastle-upon-Tyne with reference to an injunction granted so long ago as 1861, since which the Corporation have adopted the process of defecation in subsidence tanks. The Vice-Chancellor was convinced in this case also that neglect on the part of the Corporation was proved, and granted the writ of sequestration applied for. Whereas it is very satisfactory to find that local authorities are not to be allowed lightly to disregard orders of the Court with respect to the abatement of sewage nuisances, it is impossible to avoid some sympathy with the defaulting authorities on account of the all but insuperable difficulties which in so many places stand in the way of sewage disposal without creating a nuisance.

CHLORAL HYDRATE AS A HYPNOTIC.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "F.R.C.P.," who wishes to know what effects the prolonged administration of chloral hydrate has on the system, and whether it ever gives rise to gastro-enteritis, I beg to state that there are several patients in this asylum who have been taking chloral hydrate continuously—i. e., every night—for periods varying from six months to two years, and in no instance has its prolonged use been followed or accompanied by gastro-enteritis, vomiting, failure of appetite, or any symptom indicative of mischief. I generally give thirty grains for a dose, rarely more than forty grains, and in the vast majority of cases I find that it answers the purpose required—viz., to give sleep to excited and restless patients. Occasionally with a fresh patient who is considerably excited, the ordinary dose (thirty grains) does not act; but I attribute that more to the insufficiency of the dose than to the uncertainty of the medicine, as I almost invariably find that the dose of forty grains has the desired effect of procuring sleep. There is a patient here who has taken chloral regularly for over two years, and who could not do without it, and who has fair health and appetite, and no symptoms whatever of gastro-intestinal irritation. I have seen a few, though very few, patients in whom chloral produced slight headache and furred tongue, though in a much less degree than opium generally produces. Chloral hydrate is used largely and daily in this asylum, and in no single instance have I noticed alarming or dangerous symptoms in connexion with its administration. I regard it as a safe and valuable hypnotic in all cases of sleeplessness, and especially so in the excitement of acute mania.

As to whether the prolonged use of chloral hydrate produces change of disposition or perversion of the moral feelings I am unable to say, as my experience in its use has been principally amongst the insane.

I am, Sir, yours respectfully,
J. G. THORNLEY, M.D.,
Assistant Medical Officer.
Leicestershire and Rutland Lunatic Asylum, Dec. 1875.

To the Editor of THE LANCET.

SIR,—In reply to "F.R.C.P." in your last issue, I beg to inform him that I had in 1870 a female patient, who took, after a severe confinement, on several days six drachms of chloral hydrate, and on one day nine drachms (540 grains), with decided perversion of morals. It also produced a tendency to suicide—in fact, anything but sleep,—and had to be abandoned, as its good services passed off after the first few thirty-grain doses.

Yours truly,
West-Green-road, Tottenham, Dec. 8th, 1875. JAMES BUNTING.

X. Y. Z.—Dr. Fenwick's little Manual of Diagnosis, published by Churchill, would probably meet our correspondent's requirements.

THE GOODCHILD FUND.

THE following further subscriptions in aid of the widow and children of the late W. H. Goodchild have been received:—

John Adams, Esq.	£0	10	0	Dr. Andrew	£5	5	0
Alban Doran, Esq.	1	1	0	Dr. Clement Godson	1	1	0
The Misses Ellery	1	1	0	W. S. Savory, Esq.	1	1	0
Cornelius Hanbury, Esq....	1	1	0	Dr. Andrew Brown	1	1	0
Alfred Willett, Esq.	2	2	0	Jabez Gravell, Esq.	3	5	4

6, Bedford-place, Dec. 14th, 1875. F. DE HAVILLAND HALL, M.D.

Medicus.—A great many of the cases are recorded in his book, especially the second edition.

"TAPEWORMS": CORRECTION No. 2.

To the Editor of THE LANCET.

SIR,—Dr. Edwards Crisp, in correcting the notes by your reporter of the discussion on my paper on "Tapeworm," recently read to the Medical Society of London (THE LANCET, Dec. 4th, p. 803), has stated that I said "that they (tapeworms) sometimes were" introduced by eating vegetables. I never said so. What I said was that I had an idea or supposition that they might be like the germs of other parasites. I did not enter into my reasons for this idea; for the object of my paper was purely practical, and relating to treatment principally. My friend Dr. Crisp has mistaken me, and I think it right to correct the mistake.

Yours faithfully,
Euston-road, Dec. 13th, 1875. JOHN BRUNTON.

Dr. J. Birkbeck Nevins, (Liverpool.)—Our information was derived from the newspaper report of the meeting. We are unable to afford the space for our correspondent's lengthy communication. The controversy in which he has been engaged in a contemporary has already been sufficiently extended.

A Subscriber.—Appointments as surgeons to emigrants are obtained from the owners of vessels chartered for emigration purposes. Emigrant surgeons must in all cases be registered medical practitioners.

CASE OF HÆMORRHAGE AND PERITONITIS AFTER EATING CHEESE: DEATH WITHIN FOURTEEN HOURS.

To the Editor of THE LANCET.

SIR,—The following case, as illustrating the fatal effect of over-ingestion of cheese, may have an appropriate significance at the present season, when plum-pudding is in process of gestation, and the fatted ox is under sentence of execution.

About 6.30 A.M. on the 6th of this month I was called to attend M. C——, aged twenty-nine years, a moderately stout woman, married two years, no children. I found her in bed, suffering from intense pain in the abdomen, round the umbilicus. The pain was not increased by steady pressure, but pressure with the points of the fingers aggravated it. The abdomen was like a drum, hard and tympanitic all over, save in the umbilical and hypogastric regions, which were dull on percussion. She stated she was not pregnant, and had menstruated three weeks ago. Pulse slow; hands chilly; countenance sallow; tongue whitish in the centre; skin cool; intellect clear. Being questioned as to what she had last eaten, she said she had eaten some cheese to supper on Sunday night. She had been at church on the 5th, a cold, frosty day, and was apparently quite well then. Early on Monday morning she first experienced pain in the belly, with a feeling of chilliness. The pain gradually increased, and became so excruciating that she called out frequently. Her sufferings induced her friends to try their own remedies before sending for medical aid. Brandy, Cayenne pepper and other condiments were freely administered without any relief, as well as a mustard poultice applied to the abdomen, followed by wet cloths to the site of the pain, which seemed to have no other effect than wetting the patient's linen, and keeping her body in a state of cold damp. This was the treatment pursued before I saw her, and the state of the patient was by no means cheering. The pain had never intermitted from its commencement, though there were slight remissions of it. Vomiting had occurred once, but the precise nature of the vomit could not be ascertained. No cheese was, however, to be seen in it. I then gave her thirty drops of chlorodyne, applied hot flannels to the abdomen, and remained with her for half an hour, during which time she did not vomit. At 8 A.M., being nothing better, I prescribed compound colocynth pill, with one grain of extract of belladonna.—10 A.M.: Her husband called, and asked me to see her again, as she appeared to be worse. She was then doubled up in bed, fixed, as it were, by the pain, and said she felt her bowels in a lump. On examination, a distinct tumour round the umbilicus could be felt, giving one the same impression as that of the uterus when contracted after expulsion of placenta, only its contour was more undefined, and its surface more irregular. Pulse nearly imperceptible; pallor of the lips; hands icy cold. I gave her a hypodermic injection of morphia, one-quarter of a grain. She felt slightly better after this, the pain shifting and becoming more diffuse; the pulse also was easier felt, though small and thready. Having to go away to see another patient at some distance, I ordered a dessertspoonful of wine to be given in my absence, and directed that she was on no account to be left alone or unattended.—12 noon: Her attendant informed me that she had slept for about twenty minutes, had taken some wine, and vomited a quantity of cheese in pieces of about half an inch square. I then administered a mustard emetic, the pain being still very severe, though the sense of it was evidently less. She vomited the greater part of the emetic, and fell back in a faint, but rallied for a few seconds; then fainted again, this time fatally, notwithstanding brandy was given, hot bottles applied to the præcordium, and artificial respiration performed for about half an hour.

The post-mortem examination was made twenty-four hours after death by Dr. MacKenzie and myself. Rigor mortis well marked. A layer of fat, three-quarters of an inch in thickness, was cut through before reaching the linea alba. On opening the abdomen, blood escaped, and was found occupying the general peritoneal cavity. The greater part of the small intestine was of a deep claret colour. The mesentery was deeply congested, the redness being arborescent; its vessels felt varicose to the touch, and had a beaded appearance. Near the termination of the ileum was a twist of the intestine upon its own axis. The portion of intestine below this constriction was of less diameter than that above it, and as congested; but as the twist could be uncoiled, and fluid apparently forced through it, it was doubtful whether it was of ante- or post-mortem occurrence. No perforation of bowel could be discovered; but on making an artificial opening, a considerable quantity of dark fluid blood was found occupying the intestine. The stomach, liver, and colon were if a pale colour; but these viscera were not disturbed from their natural attachments. Further examination being deemed unnecessary, in deference to the wishes of the relatives, who were reluctant to grant a post-mortem, and only on condition that it should be limited to the discovery of the cause of death.

Remarks.—This was evidently a case of perforation and hæmorrhage from the bowel, induced by a fit of gluttony. That the cheese the woman ate ably assisted by its mechanical irritation in destroying life by asthenia is evident, having passed undigested from the stomach into the small bowel, and there given rise to all the morbid phenomena. That it was harmless in itself is proved by the husband of the deceased woman having eaten of the same cheese at the same time, and by his having experienced no bad effects from it. Vomiting was not at all a prominent or an early symptom, as she retained medicine and a drink of gruel. No symptom of gastritis or irritant poisoning existed. An interesting feature in the case is that of the hæmorrhage obscuring many of the symptoms, acting like a hungry leech on the general circulation, and combining with the extreme pain to stop the heart's action. The time had also arrived for the reappearance of the catamenia. Could it be that the presence of the irritant cheese determined the afflux of blood from the uterus to the intestine, and there set up fatal inflammation, the focus of the latter being some latent ulceration of which there was no history during life? The weather was also extremely cold and frosty. Whatever hypothesis is correct, the corollary is plain, that over-ingestion of food may prove as fatal as over-indulgence in drink.

I remain, Sir, yours truly,
Strone, near Greenock, Dec. 1875. R. G. M'CALMAN, M.D., C.M.

On the Relation of Syphilis to Aneurism.

To the Editor of The Lancet.

Sir,—The presence in your impression of the 4th inst. of a leading article on my paper "On Aortic Aneurism in the Army, and the conditions associated with it," leads me to ask for space in your columns in reply to your objections to my deductions.

And, first, I would wish, while generally acknowledging your accurate and full report of the comments passed upon it at the meeting, to supply an important omission—in fact, the only remarks tending in any way to corroborate my deductions. I refer to the observations of the President, Sir J. Paget, who (if I heard his words aright) said that not only was there a growing opinion among surgeons on a connexion between aneurism and syphilis, but also that, in his opinion, speaking as a surgeon, if the subclavian, iliac, femoral, and popliteal aneurisms in young subjects were carefully inquired into, the proportion with syphilis would be found to be equal to that stated in my paper as occurring among the aortic aneurisms in the army. The value of this, coming from such a source, I need not dilate upon. I would also here take the opportunity, in order not to mislead the reader of my paper, to correct the word "saturated" as it occurs in the sentence "saturated with syphilis," better substituted by "undoubtedly infected"; for my object, both in the paper itself and also in my reply, was not to overstate, but to convey the impression that 50 per cent. of the aneurismal cases, either during life or after death, illustrated more or less of lesions (which I detailed) acknowledged specific.

The relation of syphilis to aneurism as a direct cause leading to a distinct change in the inner coat of the aorta.—I need not travel over again the remarks in my paper supporting such a deduction. Suffice it to say that the change in the walls of the vessel is an unquestionable tissue growth, and as such there must be an agency to originate and support it. That this agency is in a certain number of cases syphilis, I consider substantiated by the statistics brought forward by me in the aneurismal, syphilitic, and non-syphilitic cases, as well as by the nature of the growth itself—not to be distinguished in its ultimate elements and phases from the growth, acknowledged specific, occurring on the bones; but whether possible of differentiation from that associated with rheumatism and alcoholism cannot at present be decided beyond doubt. In the opinion of some this does seem possible; for in one of the latest works on Surgery (Holmes, p. 488) I find that "one of the forms of atheroma is preceded by thickness of the internal and middle coat," and from this the aneurism is traced; as causes, atheroma is considered as "indubitably due to alcohol, and by *many* [the italics are mine] pathologists to be a frequent result of syphilis," "the deposit in the syphilitic variety of atheroma being of a fibroid texture." But if the agencies I mentioned be not the originators of the aortic disease, can "undue vascular tension" supply the place of an exciting cause? Now, it is quite true that the most frequent site of the aortic disease is that where the heart's impulse may be considered at a maximum in the arterial system—the ascending aorta. But what then is to be said of those not at all uncommon instances where the disease is in the descending thoracic or abdominal region, or in the cerebral vessels?—for unquestionably a similar lesion is found in the latter vessels, and under similar constitutional infection to the aortic disease. Surely, too, under these conditions, we ought to expect unfaltering evidence in all cases in the heart itself, both in the aneurismal cases and also in the aortic disease cases; but it is not so. Surely, also, it is more than mere coincidence that the aneurisms and aortic disease so closely connect themselves with the syphilitic cases, and avoid the non-syphilitic, while all are exposed to the same vascular tension from dress, accoutrements, &c. On mere mechanical grounds it is easy to understand how extra internal pressure in an elastic tube would lead to dilatation; but we have to do with an actual thickening, diminishing the calibre of the vessel. There is also another point by which the specific origin of the aortic disease is sought to be negatived, and that is the infrequency of associated specific disease in the heart, by which I suppose gummatous growths in its substance are meant. There are grounds of divergency of structure &c. which might be raised against such a suggestion; but I would only say that, as far as I have been able to extend the inquiry, such disease of the heart is decidedly rare, and, if allowed, would equally negative the specific origin of many lesions acknowledged syphilitic.

"*Undue vascular tension as the chief cause of aortic aneurism.*"—Prior to the appearance of your article I must admit that my inquiries into the subject had not shown me that "hammermen and smiths" suffered more in proportion from aneurism than other classes. I had obtained the impression that, to use the words of a writer on Medicine, "the causes of aortic aneurism were decidedly obscure"; and, in the words of a lecturer on Surgery, "that aneurism is seldom met with among those of the lower classes who labour hard and uninterruptedly." If the statistics of aneurism among the different classes of the community, male and female, in civil life show a clear relation to the arterial tension from occupation, then the point must be conceded; but as far as the army is concerned the dispersion of aortic aneurism throughout its components does not appear to me to bear out such a conclusion. The statistics show it to be generally dispersed, but little range being observed between those in one climate and another or occupation. The infantry man in England with his pack suffers no more than does the cavalry man; the special uniform for India and the Mediterranean, and the relief from many accoutrements, make little, if any, diminution in the aortic aneurismal returns; and Mr. Lawson has shown that there is a marked variation in regiments under the same conditions of dress, exercise, &c. The Russian and German armies are certainly worse off than our own in dress, accoutrements, &c.; but I have been personally informed by several of their surgeons that aortic aneurism is rarely seen among the men. It is true that the three-years' system may somewhat account for this, though on this point we must remember that, as seen in our own army, less than three years suffice to exemplify undue vascular tension from chest constriction in the production, not of vessel lesion, but of derangement of the pumping apparatus, the heart; but a more probable explanation of this rarity of aneurismal disease in these foreign armies is the comparative absence of severe syphilitic infection from rigid carrying out of preventive measures, the severe syphilitic lesions in the museum at Netley striking these surgeons equally with the number of aortic aneurisms there displayed.

Did space permit, it would not be difficult to explain the preponderance of aneurisms in the male sex on other grounds than undue vascular tension as a chief cause, and much also might be said upon the excess in the army as compared with civil life; but as you have brought the latter statement especially against my deduction I cannot quite pass it over in silence. Let it be remembered that we are considering the causation of aortic aneurisms in the first half of life, between twenty and thirty-eight years of age; and for the purpose of making a right comparison it is necessary to have clear and undoubted facts on the frequency and severity (for this is a most important point) of syphilis in civil and military life between these ages, and also on the aneurismal prevalence. Have we these data? Do we in the army, in spite of our comparatively accurate statistics, know the extent of syphilitic infection, and how far do the civil returns conform to this requirement? Again, as regards the aneurisms, it is quite clear that in the army we have only become fully cognisant of their great prevalence by all but invariable post-mortem examinations during late years, and is the same evidence forthcoming from the civil side? The argument against accurate comparison, as opposing a pathological deduction, seems conclusive; but, granting an excess of aneurism in the army, there is sufficient in the pathology of aortic disease to explain this without bringing in as a primary agency an ascribed causation not supported by collateral evidence.

It seems to me that the balance of evidence is decidedly in favour of transferring "undue vascular tension" to a subordinate part in the production of aneurism, powerful only after deterioration of the vessel walls has been brought about by internal agencies. Such a theory rationally explains those cases of aneurism gradually arising, without the possibility of linking them with any external or accidental cause; equally as those cases where sudden arterial tension so acts on the weakened patch of disease as to render the sufferer aware of "something having given way."

The chief deduction of my paper is, that the major number of aortic aneurisms in the army is preceded by a nodular disease of the arterial wall, originated by syphilis, rheumatism, and alcoholism, and that the reason why this sequel (aneurism) of the aortic disease is so frequently met with in army life is due to the secondary fostering influence of sudden extra arterial lesion from accoutrements, exercises, &c. How far this deduction is applicable to the early aneurisms of civil life must be tested by the comparative prevalence of the above mentioned or other exciting agencies of the aortic lesion, supplemented by the degree of vascular tension from occupation to which the deteriorated vessel is subjected.

We have the statement of Sir James Paget, that the opinion among civil surgeons of a connexion of aneurism in early life with syphilis is a growing one. The opponents of my deduction are legion, and hence a corroboration of my paper must be sought in time and future experience, and it is to be hoped that the evidence will be guided by the judicious rules you lay down as necessary to the inquiry. I am, Sir, yours &c.,

Netley, Dec. 9th, 1875. Francis H. Welch, F.R.C.S.

Sanitary Improvement in the Black Country.

The Lower Sedgley Local Board at a recent meeting resolved to adopt the majority of the recommendations made by Dr. Ballard after inspecting part of the Black Country last year, when the sanitary condition of the two Local Board districts into which the parish of Sedgley is divided was of such a notorious description. It has been decided that in Lower Sedgley the duties of the medical officer of health shall be precisely those prescribed by the Local Government Board. Hospital accommodation for infectious diseases is being provided. Inspectors of nuisances are henceforward placed under the direction of the medical officer of health. Measures have been adopted to reform the scandalous deficiency of privy accommodation disclosed at the inspection, and to improve the system of sewage removal. Moreover, the Board express their intention to provide a supply of good water and adequate drainage for their district. Indeed, the intentions of the Board appear to be almost everything that could be desired; but good intentions alone will never cleanse the Augean stable that Dr. Ballard found existing in Sedgley. Let us hope that at last the Local Board in Lower Sedgley are in earnest about sanitary reform, and that the Local Board of Upper Sedgley, the larger part of Sedgley parish, will be stimulated to go and do likewise.

Dr. H. K. Oliver, (Boston.)—He has occupied a high position in his time, but is now very far advanced in the "sere and yellow leaf," and quite beyond work.

Attendance on Medical Men's Families.

To the Editor of The Lancet.

Sir,—In your next issue kindly say whether it is illegal for a medical practitioner to attend his wife in her confinement, or to attend any member of his family in a serious illness, and oblige, Yours truly,

Queen's College, Birmingham, Dec. 1875. J. N. Spiller.

⁎ There is nothing illegal in a medical practitioner attending his wife in her confinement, or any member of his own family in a serious illness. It would be very absurd if it were otherwise. The objections to a medical man attending any serious case in his own family are not at all of a legal character. They have their basis in a very natural feeling in the minds of medical men against seeing patients of their own kin. The judgment almost refuses to act in such cases, and the mind seeks relief from responsibility. Of course we are speaking of cases of some gravity, and not with reference to those numerous minor ailments for which a parent or a husband has many advantages as an adviser. The reluctance to give advice within the domestic circle varies in degree in different men; but, in all, it becomes strong in grave cases, and he is the wisest medical man who errs on the side of readiness to consult a friend as to the case of any one dear to him; and the friend so consulted should always be well chosen, and one for whose judgment respect is felt. For although a medical man may transfer responsibility, he cannot lay aside his opinions; and it is of all situations the most delicate in which, after consulting a medical brother, you have difficulty in assenting to the course he recommends.—Ed. L.

PROF. DITTEL'S OPINION OF OBSTINATE STRICTURE.

AT a meeting of the Medical Society of Vienna on Nov. 5th, 1875, Prof. Dittel exhibited a patient on whom he had performed hypogastric tapping for a retention which had lasted six days (?). The professor had an apparatus constructed for this patient, very similar to that we use in this country. Dr. Dittel (in the *Allg. Wien. Med. Zeitung*) broadly expresses the opinion that when patients are suffering from catarrh of the bladder and enlarged prostate, they would do well to have their bladder punctured at the hypogastrium; and, in order to live long, to wear an apparatus for life, which allows the urine to be received in a receptacle placed under the clothes. This is rather a severe measure for a remediable complaint.

L. J. E., (Cambridgetown.)—Croup is a disease of childhood. It is possible that the attacks may be of an asthmatic character or of nervous origin. At any rate we would suggest that our correspondent should consult some physician, and be guided by his advice.

THE paper of *Dr. James Middleton* (Stow) shall be published.

Dr. McLeod, (Calcutta.)—An article on the subject has been for some time in type, but has been deferred owing to the pressure of other matter.

P. R. S.—Certainly not.

Dr. Crutchley.—We cannot afford the required information, except by saying that the same principle, with an important improvement, is being carried out by a Ventilating Company at 115, Victoria-street, S.W.

POST-MORTEM EXAMINATION OF THE REMAINS OF HARRIET LANE.

IN consequence of the great pressure on our space this week, we are compelled to postpone the publication of the concluding portion of Mr. T. Bond's Clinical Lecture on the Remains of Harriet Lane.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Marshall, London; Mr. Bryant, London; Dr. Southey, London; Mr. Hutchinson, London; Sir Dominic Corrigan, London; Dr. Handfield Jones, London; Prof. Stokes, Dublin; Dr. Headlam Greenhow, London; Mr. T. Holmes, London; Dr. Owen Rees, London; Dr. Murchison, London; Dr. Basham, London; Mr. Lawson, London; Mr. Rivington, London; Mr. Gamgee; Mr. J. Lane, London; Dr. Andrew Clark; Dr. B. W. Richardson, London; Dr. Broadbent, London; Mr. Waterer, London; Mr. Francis Hird, London; Mr. G. Cowell, London; Dr. Pitman, London; Mr. Bartleet, Birmingham; Dr. Crichton Browne; Mr. G. Howse, London; Dr. Porter, Dublin; Dr. D. Stone, London; Dr. Hall, Sheffield; Dr. Swyer, Birmingham; Dr. G. Buchanan; Dr. D. Powell, London; Mr. West; Dr. Puzey, Liverpool; Mr. Heaton, Leeds; Dr. Sutton, London; Dr. J. Johnson, Birmingham; Dr. H. Crutchley, Alsagar; Mr. F. Jordan, Birmingham; Dr. Thos. Wilson; Dr. Graham; Mr. Rossiter, London; Dr. M'Calman, Greenock; Mr. Harris, Otago, New Zealand; Dr. Stark; Dr. G. Warren, Paris; Mr. Macauliffe, Dublin; Mr. Ryley; Dr. Reginald Thompson, London; Mr. Seelie, London; Dr. Ross, London; Dr. Brunton, London; Dr. Bodine, Trenton, U.S.; Mr. Clouting; Mr. Job, London; Dr. Fergus, Marlborough; Mr. Milburn, Banbury; Mr. E. Dowdney, Newcastle, New South Wales; Captain Mercier, London; Mr. Davidson, Birkenhead; Mr. Speller, Birmingham; Mr. Baker, North Aylesford; Dr. Hall, London; Mr. Coulton, Birmingham; Mr. Welch, Netley; Dr. Flowers, Market Rasen; Dr. Nevins, Liverpool; Mr. Brench, Aston Upthorpe; Dr. Oliver, Boston, U.S.; Mr. B. Hill, London; Mr. Thring, Uppingham; Messrs. Barry, Forest Hill; Dr. Laffan, Cashel; Dr. Mackintosh, Chesterfield; Mr. Stevenson, London; Mr. Gibson, London; Mr. P. Hewett, London; Dr. Nicolson, London; Mr. Williams, Abertillery; Mr. Knight, Hackney; Mr. Hitchcock, London; Mrs. Baines, London; Mr. Hueston, London; Dr. Fenwick, London; Dr. H. Thompson, London; Mr. Baker, London; Mr. Gibson, Tynemouth; Mr. Hull, Manchester; Dr. Fox, Bristol; Dr. Andrew, London; Dr. GreatRex, Lawton; Mr. Custance, London; Dr. Thornley, Newry; Mr. Long, Liverpool; Mr. R. Harrison, Liverpool; Dr. Gill, Folkestone; Mr. Wilders, Birmingham; Mr. J. Clay, Birmingham; Dr. Maclaren, Glasgow; Mr. Hodgkins, Oxford; Mr. Gray, London; Dr. Mackenzie, London; Dr. Blake, London; Dr. Dunglison, Philadelphia; Mr. Cresswell, Dowlais; Mr. Gentles, Derby; Dr. Edis, London; Mr. Brown, London; Mr. Clark, Whitchurch; Mr. Willmore, Stockbridge; Mr. Royd, Rochdale; Mr. Stone, Laurencekirk; Mr. Napier, London; Dr. Jackson, Sheffield; Dr. J. Middleton, Stow, N.B.; Alpha; The Registrar-General of Edinburgh; K. Mc.; Medicus; P. R. S.; M.D.; C. G., Nicaragua; R. D.; Dum Spiro Spero; F.R.C.S., Ireland; A. B. C., Wandsworth; L. E.; L.R.C.P., Barrow; Union Medical Officer; L. J. E.; Z., Wrexham; C. K. W.; A Subscriber; L.R.C.P. Lond.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Parrott, Sheffield; Messrs. Munton and Stockton, Banbury; Mr. Bate, London; Messrs. Brown and Co., Aberdeen; Mr. Walker, Corwen; Dr. Hastings, Brixton; Dr. Freer, Rugeley; Messrs. Goodall and Co., Leeds; Mr. Hall, Liverpool; Messrs. M'Gee and Co., Belfast; Mr. T. Watson, London; Mr. Bell, London; Dr. Philpot, Peckham-rye; Mr. Marshall, Moulton; Mr. Morgan; Mr. Henderson, Portobello; Mr. Haviland, Northampton; F. M. R., London; Medicus, Gateshead; R. S.; M.D., Barnsley; C. M.; A. B.; Douceur; M. M.; F. R. S.; H. B.; A. S.; A. Z.; J. M., Seaforth; E. V. E.

Western Morning News, Folkestone Chronicle, Sussex Daily News, Birmingham Morning News, Newcastle Chronicle, Surrey Advertiser, Metropolitan, East London Observer, Huddersfield Chronicle, Manchester Guardian, New Zealand Mail, Isle of Man Times, Cork Constitution, Liverpool Post, and *Croydon Advertiser* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, DEC. 16TH, 1875.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Dec. 10	39·38	N.W.	34	35	...	42	31	...	Foggy
" 11	30·11	N.W.	40	42	...	45	35	...	Foggy
" 12	30·12	N.W.	41	43	...	47	41	...	Overcast
" 13	30·23	W.	37	39	...	46	37	...	Foggy
" 14	30·17	W.	34	35	...	40	32	...	Foggy
" 15	30·17	S.W.	35	36	...	40	34	...	Overcast
" 16	30·18	S.W.	35	36	...	37	35	...	Overcast

Medical Diary for the ensuing Week.

Monday, Dec. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8½ P.M. Discussion on Mr. Maunder's Case of "Excision of the Elbow-joint."—Dr. Lauder Brunton, "On the Physiological Action of Alcohol."

Tuesday, Dec. 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Hæmorrhagic Periostitis; Fatty Tumour of Spinal Cord; Injury to Radius from Fracture; Deformity from Rheumatic Gout; Recurrent Epithelioma; Cancer of Heart and of Supra-renal Capsules; Cancer of both Breasts and of Right Ovary; Tumour of Clavicle; Aneurism of Aorta; Arrest of Development of both Forearms; Report of Sequel to Dr. Walker's Case of Recurrent Sarcoma of Leg; Embolic Infarct in Heart Muscle; Aneurism of Heart; Aneurism of Mitral Valve; Displaced Kidney; Epithelioma of Chin (living specimen); Epithelioma of Tongue; Sarcoma of Sciatic Nerve; Cancer of both Breasts and of Ovaries; &c. &c.

Wednesday, Dec. 22.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Dec. 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1¼ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 25.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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A Clinical Lecture

ON

THE PULSE: ITS DIAGNOSTIC, PROGNOSTIC, AND THERAPEUTIC INDICATIONS.

Being Lecture III. delivered at St. Mary's Hospital in the Summer Session of 1875,

By W. H. BROADBENT, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL.

Gentlemen,—I come now to Renal Disease as a cause of high arterial tension. This condition is most marked in connexion with contracted granular kidney, but is present in a greater or less degree in all affections of the kidneys, except, perhaps, in amyloid disease, when, unless there is desquamative nephritis as a complication, or general arterial degeneration, the tension may not be great. In tubercular or scrofulous disease of the kidneys there appear to be differences; for I have sometimes found the arterial tension high, sometimes not.

It is with respect to the state of the vessels in contracted granular disease of the kidneys that there has been a controversy between Dr. George Johnson and Sir Wm. Gull and Dr. Sutton. Dr. Johnson, in his original investigations which first gave us precise knowledge of the different forms of kidney disease, noted the thickening of the minute arteries of the kidney in this affection. More recently he found that not only were the branches of the renal artery thickened, but that a similar condition of the minute arteries existed throughout the body—in the meninges of the brain, in the skin, in the gastro-intestinal mucous membrane, and elsewhere; he found, moreover, that the thickening consisted primarily and chiefly of hypertrophy of the muscular coat. These were no barren discoveries in his hands, but became the basis of a theory which linked together by a consistent physiological or pathological explanation the previously isolated phenomena of this form of disease. According to this the kidneys, from gradual loss of the secreting epithelium, fail to remove effectually the urinary constituents, leaving the blood contaminated thereby. The arterioles, to protect the tissues from blood thus rendered impure, resist its passage by contracting, while the heart, meeting with unwonted resistance, puts forth increasing energy; and the result of this contest between the heart, on the one hand, and the minute arteries, on the other, is hypertrophy of the muscular tissues of both.

My way of describing the mode of causation of this hypertrophy is a very imperfect representation of Dr. Johnson's views, and is open to objection on various grounds, as involving unproven theory, and as teleological, assuming that a process *is* because it is useful, or that a process is useful because it *is*; but I have had to sacrifice exactness of expression and completeness of exposition to brevity. It seems, again, a *reductio ad absurdum* to represent the heart and arteries as engaged in this contest, which is damaging to both alike, in the interests of the system generally; but the high arterial tension thus generated, though ultimately tending to shorten life, is, after all, conservative, for by increasing the flow of urine and producing the diuresis which accompanies this disease it postpones the catastrophe of uræmia which would otherwise speedily overtake the patient.

The rival theory of Sir W. Gull has a clinical basis. At a certain time of life it is very common for men to begin gradually to lose flesh, colour, and strength; they suffer from indigestion, the appetite fails, and the bowels act sluggishly; they become apathetic or irritable, disinclined for exertion and incapable of it; the muscles waste; the skin is thin, loose, and dry; some remains of colour persist perhaps in the cheeks from enlarged capillaries, but the temples and the rest of the face acquire a somewhat sallow hue, and the lower eyelids are more or less puffy; often the mucous membrane of the mouth is more anæmic than might be expected from the colour of the face, and there is a deficiency of buccal fluid and a slightly furred tongue. All this time the urine is abundant and clear—perhaps a subject of self-gratulation to the patient; but it will be pale and have a low specific gravity; there may for a long time be no albumen in it, or a trace may come and go from time to time, but eventually albumen is habitually present, and the case resolves itself into well-characterised Bright's disease.

Sir W. Gull and Dr. Sutton, like Dr. Johnson, find in a case of this kind the arterioles thickened, but, say they, the thickening is not hypertrophy, but degeneration. The change in the arterioles they describe as hyaline-fibroid, the disease they name arterio-capillary fibrosis, and the sequence of events they consider to be primarily arterio-capillary degeneration, and secondarily a general fibroid change, in which the kidneys share, so that the kidney disease is not the cause, but the consequence, of the condition of the vessels.

Now of the truth of this clinical history, with the comparatively late appearance of albuminura in many cases of chronic Bright's disease, there can be no doubt; but I agree with Dr. Johnson in disputing the inference drawn from it. First as to the fundamental fact—the nature of the change in the arterial walls as revealed by the microscope after death: is it hypertrophy, or is it degeneration? On the one hand, Dr. Johnson shows an increase in number, size, and distinctness of the nuclei of the muscular fibre-cells, which cannot be mistaken for anything else, and cannot be manufactured by any mode of preparation; on the other, he shows that the swollen, translucent, structureless, or finely fibrillar appearance which Sir W. Gull and Dr. Sutton exhibit as hyaline-fibroid degeneration is, to say the least, producible by the methods of preparation they adopted, and is probably the result of obliteration of the structural characters of the arterial coats. We are asked to suspend our judgment pending the production of further evidence; but I do not see how the unequivocal demonstration of increased muscular tissue can be explained away. With the muscular tissue there will also inevitably be increase of fibrous tissue, which may swell up and obscure the muscular fibres under the use of certain reagents; but this does not prevent the hypertrophy of muscular structure from being real.

But the question does not rest simply on microscopic evidence. If the change in the arterioles were degenerative, the usual physiological and pathological contraction and relaxation of their muscular fibres could not possibly occur, and there could be no changes in the diameter of the vessels or variations of the arterial tension so caused. Now it is certain that the arterial tension is subject to modifications even in advanced Bright's disease. My attention was first forcibly called to this fact in an interesting case which was the subject of a clinical lecture in the winter session of 1871-72[*] The patient was a woman, six months pregnant, under treatment for albuminuria, who died shortly afterwards of apoplexy, and was found to have contracted granular disease of the kidneys. She presented the phenomena of extreme arterial tension, and I was in the habit of demonstrating in her case the characters of the pulse attending this condition. One day, after telling my class as we approached the bed what to expect, I found, on placing my hand on the wrist, that all the indications of high tension had vanished. This was because she was suffering from a smart attack of pyrexia, with the subsidence of which the tension returned, ultimately, as I said, proving fatal by giving rise to apoplexy. I have repeatedly made similar observations since, and when the subject of arterio-capillary fibrosis was coming on for discussion at the Medico-Chirurgical Society, these cases suggested to me an experiment which was entirely confirmatory. This was to administer nitrite of amyl in a case of well-marked chronic Bright's disease, and note the effects on the pulse. Pulse tracings taken before and after the inhalation demonstrated unequivocally the relaxation of the arterioles.

The truth is, or, I ought rather to say, my firm conviction is, that the clinical history, traced by Sir William Gull as that of arterio-capillary fibrosis, which I have just imperfectly reproduced, is a history, not of arterial degeneration, but of arterial tension. From the first the pulse is small, long, and hard, and the cardiac signs of arterial tension first interpreted by Dr. Sibson are present; the

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[*] The Lancet, Feb. 1872.

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first sound is reduplicated over the interventricular septum, and at the right second space the first sound is muffled, the second (aortic) intensified or accentuated. But the abnormal state of the circulation can be reversed, and that not only by pyrexia, but by treatment. Allowed to continue long enough, it may give rise to arterial degeneration, and this degeneration becomes the great source of danger, but the degeneration is not primary, and can be prevented. One of the cases I related in my last lecture is a typical illustration of the clinical history under consideration.

The kidney disease, then, is not a result of vascular degeneration. But there is another point to be considered—Is it the result of arterial tension? The arterial tension is antecedent in point of time to the renal disease. Does it stand in a causal relation to it? or are the two conditions—the arterial tension and the structural change in the kidneys—concomitant results of a common cause? The interesting facts adduced by Dr. Mahomed in his paper on the pre-albuminuric stage of acute Bright's disease—that after scarlet fever there is, with rising intravascular pressure, first escape of blood-crystalloids, and then of blood-albumen—would seem to point in the direction of a causal relation between the two; but I have come to the conclusion that an impure state of the blood is the cause both of the resistance in the capillaries and arterioles which gives rise to high arterial tension, and of the morbid change in the kidneys.

A subordinate question is whether the resistance to the circulation of contaminated blood is primarily in the capillaries or arterioles — whether, that is, there is first obstruction in the capillaries, the contraction of the arterioles being secondary, or whether the narrowing of the minute arteries is the sole cause of the obstruction. Of course this brings up the entire subject of the capillary circulation, how far the mutual attraction of the blood and tissues operates to facilitate or hinder the passage of the blood, and this is not to be discussed within the limits of a clinical lecture; but I may say that I have come to believe that, while as a rule the action of the arterioles is direct, and not merely secondary to resistance in the capillaries, there are cases in which the resistance is capillary, the arteries yielding to the pressure of the blood within them.

I shall not occupy you long by illustrations of the association of high arterial tension with disease of the kidneys. The subject is one which I have considered here before, but it is strictly within the scope of this lecture to refer to cases in which the pulse has at once given the clue to the kidney disease. Most of you will remember the case I have already mentioned of a man, Henry C——, aged thirty-three, who applied for admission suffering from pain in the head, vomiting, and impairment of vision; he reeled and staggered also, exactly like a drunken man, and could not walk without support; his speech, again, was thick. He presented a complete picture of cerebellar disease. I sent him to the ward at once, with the remark that there was apparently disease of the cerebellum, probably, from his age and appearance, syphilitic, postponing examination till we could go into the case fully. When I came to his bedside, however, expecting the symptoms and history of an intracranial affection, I had scarcely placed my hand upon the pulse when my first-sight diagnosis fell to the ground. I saw I had to deal with renal disease; the urine was examined and found to be albuminous, the ophthalmoscope showed us albuminuric retinitis, instead of optic neuritis or ischæmia; the headache, the vomiting, the loss of vision were uræmic, and ultimately we had post-mortem demonstration of contracted granular kidneys.

In November, 1873, a former student of this hospital, one of our very best men, sent a clergyman to consult me on account of headache, attacks of giddiness, and impaired sight. Prepossessed with the idea of cerebral mischief, he had overlooked the contingency of renal disease, and had never examined the urine. Here, again, the pulse, long and hard, the artery standing out among the surrounding structures, at once suggested the diagnosis of kidney disease, which was confirmed by the presence of retinal hæmorrhages, a clouded disc, and the familiar white spots round the disc and yellow spot. The diagnosis thus made was verified by the state of the urine, in which, however, at this time there was the merest trace of albumen. Later the symptoms of Bright's disease became more marked, obstinate vomiting being prominent among them, and the patient died a short time ago.

I am reminded of another case in which I was called in consultation to a case of periodic vomiting in an old lady. Her pulse, small and weak, but with all the characters of tension, suggested an examination of the urine, which, as I had anticipated, was found to be albuminous. The vomiting was uræmic.

The examination of the urine is almost a matter of routine, but in both these cases it happened to be omitted. You are aware, however, that albumen is not always present in the urine in contracted granular disease of the kidneys; in the early stages it comes and goes, and later may occasionally disappear. You will see, therefore, the importance of having so clear an indication in the state of the pulse.

Gout and allied conditions of system as a cause of arterial tension.—The term "suppressed gout" is a convenient refuge for ignorance and uncertainty; it is accepted by the public as a sufficient explanation of any chronic or recurrent ailment, or, indeed, of anything and everything, and accordingly it is freely used by medical men. The expression, often spoken of contemptuously, has, however, considerable vitality, because it carries a certain amount of truth. Originally it embodied a conclusion formed from profound clinical observation, and, if it were not abused by indiscriminate application to all kinds of complaints, would be very useful and valuable. In gout, as you are aware, the oxidation of nitrogenised waste, instead of going on to the formation of urea, has stopped short at uric acid, which accumulates in the blood and constitutes a poison to which the attacks of gouty inflammation are due. This, at any rate, is the theory which, if not demonstrably true in every point, is an excellent working hypothesis. But the destructive metamorphosis may fall short even of uric acid, and the blood may be contaminated by a variety of imperfectly oxidised matters. The presence of these impurities in the blood gives rise to the most varied consequences: frank acute gout, chronic gout with the formation of gouty concretions in the joints, on the ears, in the conjunctiva; the less honest forms of gout, pains in the toe, the heel, the loins, the head; attacks of vertigo, irritability of temper, loss of the faculty of attention, palpitation of the heart, cough and shortness of breath, dyspepsia, gravel or stone, inflammation or irritability of the bladder, eczema, and other skin affections. Besides these there are the so-called attacks of gout in the stomach or head, and sudden and extensive congestion of the lungs. After this list you will no longer wonder that everything is referred to suppressed gout. There is one feature, however, common to the whole range of these affections—high arterial tension. Nitrogenised waste, at whatever stage of arrested oxidation, appears to provoke resistance to the passage of the blood through the capillaries and minute arteries, and this affords us the clue which guides us through the maze and gives precision to our ideas.

We are now dealing, as you will see, with the main cause of the two serious forms of disease we have already considered—degeneration of arteries and chronic granular contraction of the kidneys; and what makes it more important is, that at this stage we have the opportunity, not for palliative only, but for remedial treatment. The arterial degeneration is a direct result of the strain upon the walls of the vessels by excessively high tension. As to the renal disease, we cannot, as I have already said, speak so positively; we cannot say definitely whether it is produced by the state of the blood acting injuriously on the epithelium of the tubules, or whether it also is a consequence of high arterial tension.

The following are some of the cases I have seen which may serve to illustrate different phases and stages of suppressed or spurious gout.

I was called in March, 1873, to see a gentleman aged about sixty-four, who was suffering from cough. He held a high position in the Colonial Service, and had spent a great part of his life in hot climates. He was supposed, on that account, to be susceptible to cold. He was stout, good-looking, and of very dignified appearance, but singularly stolid, dull, and uncommunicative. I permitted myself, indeed, to make certain mental reflections on the kind of King Log sent out to administer our colonies. His symptoms, however, were not fully accounted for by the slight bronchial catarrh which was all I found on examination of the chest. More particularly my attention was arrested by a high degree of arterial tension, shown by the long, hard, labouring pulse of 84, and by the vessel remaining full between the beats. There were also the cardiac signs of high tension, a reduplicated first sound near the apex, and an accentuated aortic second sound. By pushing my inquiries, I gradually learnt that my patient had for some little time been more easily fatigued than usual, had been often greatly flushed after dinner, unaccountably irascible, with lapses of memory at times, and, finally, it came out that in a letter written shortly before my visit there had been the most extraordinary anomalies of spelling, many words having been spelt backwards. Nothing could have been more significant than this train of symptoms associated with arterial tension; they were the premonitions of impending apoplexy; and apoplexy, as I learnt later, was the natural mode of death in his family at about his age. The urine had a specific gravity of 1014, but had a good deep colour, and contained no albumen. The object to be attained, in order to escape the threatened danger, was to bring down the arterial tension. I gave calomel (three grains), with colocynth and colchicum, followed by a saline draught as a purgative, and iodide and citrate of potash with taraxacum; reduced the proportion of meat in the diet, substituting milk and fish, and for a time made dinner a midday meal; no restrictions were needed with regard to stimulants, the patient's habits being almost abstemious. This line of treatment was continued for some little time with the effect of removing all the unpleasant symptoms, and I found I had done my patient's mental power and social qualifications great injustice. I saw little of him till Feb., 1874, when I was urgently called one evening, and found that, after similar warnings, he had partially lost power in his left limbs; the left side of the face was slightly paralysed, and the speech very thick and indistinct; there had been some mental confusion, but no loss of consciousness. A similar line of treatment was adopted, and now the dinner hour was permanently established at 2 P.M. Improvement again followed, but it was long before the face recovered itself, and, indeed, a slight inequality is still to be detected. In Feb., 1875, my patient lost all appetite, and the tongue was much furred; there was a certain degree of tension in the pulse, but not so much in my judgment at the time as to warrant the free purgation I had previously employed. I gave aperients and bitter tonics without much effect. My patient fasted strictly through Lent, and lost considerably in weight. After Easter I was asked to see him on account of slight bronchial catarrh. While recovering from this he was seized with severe influenza; and just as he seemed to have shaken off this, and before he left his bedroom, a sudden and violent attack of congestion of the lungs supervened, which nearly proved fatal within twenty-four hours. My treatment of the last complication was dictated by my previous knowledge of the case, and was of a kind I should not have ventured to adopt without it. The congestion of the lungs was simply another consequence of the blood-contamination, of which the arterial tension had formerly afforded evidence; but the tension had lately been less manifest in consequence of weakness—had, in fact, been disguised. Recognising this, I resorted as before to very free purgation, and relief came when this was obtained. Here we reach one of the most interesting points in the case. The convalescence was not satisfactory; the temperature subsided, there was free and loose expectoration of rusty muco-purulent matter, but the appetite did not return, the tongue did not clean, the pulse was weak but long, and there was no recovery of strength till one day there was pain in the ball of the great toe. A mustard poultice was applied, and the patient had his first attack of gout, which was perfectly characteristic, and, considering the circumstances, remarkably severe. After this he was well almost at once, and remains well up to the present time. Here residence in a hot climate, a vegetable diet, and abstinence from the heavier wines, had prevented the full development of gout in a constitution strongly predisposed by hereditary tendency; but a return to this country and to English habits of life, the consumption of more animal food, and the diminished cutaneous excretion, had speedily led to the accumulation in the blood of imperfectly oxidised nitrogenised waste and its consequences. The truth of the inferences I had drawn as to the danger arising from the arterial tension, and as to the cause of this tension, was fully established by the course of events. The occurrence of a first attack of gout after the treatment pursued was remarkable, and indicated, in my opinion, that the metamorphosis of nitrogenised matter had stopped short of the formation of uric acid.

I have had another interesting case under observation recently, which I may briefly relate. A medical man in the country returned home one day last April, about 2 P.M., from an unusually long and cold ride. He took some soup and a glass of sherry, and found, as he thought, that the wine got into his head, for he felt giddy and had to lie down; his speech was thick; he was violently sick; and it was some little time before he could proceed to the remainder of his day's work; and when he tried to walk it was noticed that his left limbs had lost power in some degree; they felt numb, also, at first, and later were in a state of hyperæsthesia. One medical friend said it was "biliousness"; another thought more seriously of his condition, and he came to town to consult me a week after the attack. He was the youngest of a healthy family of sixteen—healthy, that is, except as to a strong gouty tendency. He had a large country practice, was of active habits, worked very hard, was abstemious both as to food and alcoholic drinks; but notwithstanding this he had become decidedly stout, and had from time to time had gouty symptoms. The vertigo and sickness might, of course, have been due to gastric or hepatic derangement, had they been the only symptoms; but the loss of power and sensibility and subsequent hyperæsthesia, and the thickness of speech, remains of which existed when I saw him, were significant of some cerebral mischief; and the pulse gave evidence of very high arterial tension, being hard, long, and rather small. Here, rest from worry, mercurial purgatives, potash salts, a farinaceous and fish diet, with weak spirit-and-water, or water only, as drink, have resulted in an effectual lowering of the vascular tension, loss of redundant fat, and removal of the symptoms. A too rigorous application of the principles laid down, indeed, led to attacks of giddiness from imperfect supply of blood to the brain; and I found it necessary to recommend citrate of quinine and iron for a time, with iodide of potassium.

In the following case, I have no special reason for saying that there was gout, but the patient was, I believe, on the verge of apoplexy. He was seventy-seven years of age, but remarkably hale and vigorous, and would have passed well for sixty. He had been suffering for six weeks from sleeplessness and a feeling of extreme restlessness; naturally, also, he felt weak and worn in consequence. Tonics had been prescribed, but had not suited him; and he had taken chloral and bromide of potassium, obtaining by their means an occasional night's rest, but no efficient relief. His appetite was good and the bowels regular—indeed he rather prided himself on his management of the bowels; he complained a little, however, of indigestion. I found in the pulse evidences of an extraordinary degree of tension, together with senile change in the vessels, though less than might have been expected; the artery large, cord-like, slightly uneven, firm, capable of being rolled under the fingers, and it could be followed half-way up the forearm, the pulsation being long and strong. Nothing could be more full of danger than this condition at the time of life. I gave, therefore, purgatives more freely than usual. After three or four doses the evacuations became so frequent and free that I feared I had carried the treatment too far. I found, however, that they were not liquid, but simply extremely copious, soft, dark stools; there had evidently been great fæcal accumulation, notwithstanding my patient's assiduity in his attention to his bowels. It was some little time before his system regained its equilibrium; but the tension was quickly reduced, and the restlessness passed off. I attributed the sleeplessness to the high blood-pressure, which overcame the tonic contraction of the cerebral arteries, by which the anæmic condition of the brain essential to sleep is secured. Persistence of this degree of pressure must, I think, have resulted in rupture.

But apoplexy is not the only danger to which the arterial tension of retained nitrogenised waste gives rise. The heart may cease to be equal to the struggle against the increased resistance and become dilated, especially if there be degeneration of its structure. You know the usual consequences of this condition: breathlessness on exertion, then cough, with paroxysmal and habitual dyspnœa, œdema, general dropsy and all its miseries. In an early stage, with shortness of breath and cough, it is not uncommon for dyspnœa to come on at 3 or 4 A.M., compelling the patient to sit up, and perhaps pass the remainder of the night in this position. This speedily leads up to further symptoms; but when it depends on arterial tension, as is often the case, it may be relieved by treatment which removes this condition. I have now under observation a gentleman, aged seventy-eight, who, notwithstanding his years, is gradually recovering (has now, September, quite recovered) from severe nocturnal dyspnœa. He is crippled by chronic gout, has a well-characterised senile pulse, and a weak heart. The treatment has been a free resort to aperients and a cautious administration of digitalis and iron. In the case of a lady aged sixty-four, first seen in January of this year, who suffered greatly from this form of dyspnœa, together with harassing cough, complete relief was afforded by the removal of arterial tension by similar means. These cases are worthy of relation in detail had I the time, and I have notes of many others equally worthy of your attention: one, for example, in which I have in the course of six or eight years watched the gradual development of disease of the aortic valves under the influence of strain from arterial tension in a gentleman, the subject of gout. In another case, sent to me from the country in May, the patient had suddenly become liable to dyspnœa, attended with lividity of face on the slightest exertion; the mode of life and clinical history having been exactly that of imperfect nitrogenised elimination and arterial tension. This gentleman had been seriously injured by Bantingism. I can only mention these few illustrations; but I may put in a few words the lesson to be learnt from them. It is, that when the heart shows signs of weakness, and especially when there is reason to believe that there is dilatation of its cavities and degeneration of its muscular walls, if there is any degree of arterial tension, the most effectual relief you can afford is to diminish the peripheral resistance. This can best be done by aperients, and by none so well as by pills containing one or other of the mercurial preparations; afterwards iodide and citrate of potash, or iron and digitalis, or tonics may be given. There is often a degree of debility which seems to contra-indicate purgatives altogether; but it will be found that the powers are oppressed rather than depressed, and that the weakness is apparent rather than real. Tonics in these cases only do harm until after the action of purgatives and other eliminants, when also digitalis may find its opportunity; but frequently, when you cannot strengthen the weak heart, you can give it less to do, and so make it equal to its work.

I proceed to illustrate other effects of retained nitrogenised effete matters with peripheral resistance to the circulation and high arterial tension.

A barrister, thirty-five years of age, consulted me in November, 1874. He was beginning to succeed in his profession, but his prospects were threatened by his state of health. After any heavy work, or an appearance in Court, he had palpitation of the heart and throbbing in the neck and head, with a feeling as if he were about to faint, rendering it necessary to take some stimulant; he would also be entirely sleepless at night. This had been attributed to weakness, and he had been taking meat three times a day rather largely at each meal, with a liberal allowance of sherry. Notwithstanding this his symptoms increased upon him. His appetite was good, his bowels regular, but the tongue was white and indented. I found the pulse full, long, and hard, and the aortic second sound unduly loud, and took these as my indications for treatment. I gave him a gentle aperient pill for four nights in succession, and afterwards every second night. In addition, I ordered phosphate and carbonate of soda, with tincture of ginger in infusion of calumba, and revolutionised his diet, allowing meat and wine (claret) only once a day; breakfast and lunch to consist of milk and farinaceous food. He got well at once.

In the last case there were no specially gouty family antecedents, and the choking of the blood with nitrogenised waste was a direct result of the mode of life. When there is hereditary tendency to gout, imperfect metamorphosis and elimination of nitrogenised matters occur much more readily, and sedentary habits, without any mistaken system of diet, or very moderate indulgence in beer or the stronger wines, with a liberal, but not excessive, amount of flesh meat, will, in spite of an active out-door life, result in the development of a gouty or pseudo-gouty state of system. I have been astonished to see how early in life arterial tension is met with in the children of a gouty parent. I have found it well marked at twenty-one, and seen prominent and tortuous temporal arteries at twenty-four, associated with unaccountable feelings of weakness, weariness, and depression, headaches, loss of application and of interest in the ordinary pursuits and enjoyment of life, and other like symptoms. I will not give these cases in detail, but, instead of them, the following, which illustrates the same point.

A young surgical friend, about thirty-two years of age, consulted me on account of lassitude, inaptitude for work, loss of energy, headache, and other vague symptoms. I gave him the advice we always give each other—that is, to take a holiday. He took one, and was better. By-and-by he came back again with the same story, and he was now uneasy about his heart and lungs, had morning cough, and was sooner out of breath than usual. He could not always be going away on holiday, and I went more carefully into his case. He was remarkably strong physically, but had not quite the colour he ought to have had, took less exercise perhaps than formerly, but still played cricket. His appetite was good and bowels regular. There was nothing particularly wrong that I could see till I placed my fingers on the pulse, when I found a largish cord-like artery standing out among the other structures, and traceable far up the forearm, the pulsation of course long. It instantly flashed upon me that his father was the subject of old-standing gout; the cause of his ailments was clear, fortunately the cure also. I recommended the treatment with which you must now be sufficiently familiar, and forbade my young friend his beer. In a week his arterial tension was reduced, and the symptoms were gone. Upon my happening to remark that beer would at once send up the tension again he volunteered with great alacrity to make the experiment, but to this I did not give my sanction, and he confesses that he is amply compensated by his improved health for the sacrifice I imposed on him.

It is time now that I should say something more definite of the treatment you have seen me so often recommend, and give my reasons for adopting it. The aperient pills are sometimes the ordinary calomel and colocynth, or blue pill and colocynth or rhubarb pills, with perhaps hyoscyamus; sometimes colchicum or ipecacuanha is added. One or two pills will be taken nightly for two, three, or four consecutive nights, or on alternate nights, or twice a week, followed in the morning by a saline draught—sulphate or phosphate of soda, a Seidlitz powder, a dose of some aperient mineral water or of white mixture. The strength of the purgative and the frequency of its repetition will depend on the urgency of the symptoms, the degree of constipation, and many other circumstances. At the same time, I have generally given a mixture containing potash salts; the iodide, two to five grains; and citrate, fifteen to twenty-five grains, with spirit of ammonia and some vegetable bitter, as taraxacum, calumba, hop, gentian, or the like; or, instead of potash, soda salts, the carbonate or phosphate in a similar vehicle. The object in view is the reduction of the arterial tension, and this is effected to some extent by purgation as such, which withdraws a certain amount of fluid from the blood, and relaxes the vascular system of the gastro-intestinal mucous membrane. But while any purgative will do so much, the effect will be imperfect and temporary unless the nitrogenised waste, which is the cause of the obstruction in the capillaries and arterioles, is eliminated. Now the liver is the great organ and instrument of metamorphosis; urea and uric acid are believed to be formed here, and on the efficiency of its functional action certainly depends the due elimination in the urine of the products of the disintegration of nitrogenised compounds. Mercury has long been supposed to act specially on the liver, and though experiments on animals have appeared to negative this idea, it is matter of observatian that mercurial purgatives bring away darker and more bilious stools; it is also matter of observation that they produce a more marked and lasting effect on undue tension in the arterial circulation. I was taught as a student that other purgatives would do all the good which could be obtained from blue-pill and calomel without the risks said to attend the administration of mercury, and for a long time I was altogether sceptical when people who called themselves bilious insisted on the superiority of their favourite blue-pill. After a time, however, I was compelled to admit that the mercurial purgatives afforded a relief which no others did, but I only understood it when I began to observe that they had a greater effect on arterial tension. At present we must take our stand simply on the clinical fact that purgatives containing some preparation of mercury have this effect of lowering arterial tension. The explanation—namely, that this is produced through the influence of the metal on the liver conducing to a more perfect metamorphosis of nitrogenised matters—we hold less firmly. We may, if we prefer it, trace the good results to removal of bile from the upper part of the small intestine, which would otherwise have been resorbed and again separated from the portal blood by the liver. The potash salts are given as eliminants, their effects in this respect having been abundantly demonstrated. Diet is of the greatest importance. Meat should be consumed sparingly, its place in supplying nitrogenised food being to a great extent taken by milk and fish. Soups are forbidden. Little alcohol should be taken, and only in the form of the light wines or freely diluted spirit. Water, free from lime salts, should be drunk in large amount.

We have by no means exhausted the subject of gout, pseudo-gout, suppressed gout, and allied conditions. I have mentioned lead-poisoning as a cause of arterial tension—it is in effect a cause of real subacute or chronic gout, with all its attendant evils: chalk-stones, deformity of the hands and feet, contracted granular kidney, heart disease, arterial tension and degeneration of the large and small blood-vessels, apoplexy, &c. It is of course among hospital patients, painters, and other workers in lead, that gout from lead-poisoning is met with, and they have furnished some of the most terrible examples of gouty disease I have met with. There is a "gout pill" which these artisan classes obtain from chemists, which appears to be most effectual in suppressing gouty paroxysms and pain; there is not, therefore, the check on habits tending to produce gout which the paroxysms would impose, while the poison, never eliminated or destroyed by attacks of acute gout, accumulates in the system in an extraordinary degree. I have seen several cases of gangrene of the lungs in individuals saturated in this way with gout, and believe the lung affection to have been due to this condition of system, in which there is apparently a tendency to thrombosis in the pulmonary vessels. It is interesting and suggestive to note that in the case of gangrene of the lungs recently under my care in the hospital we found high arterial tension. The patient, an ostler, was only thirty-eight years of age, had enjoyed good health, said he had been temperate, had not had gout or rheumatism, and was not the subject of lead-poisoning. He died on June 5th, the day after his admission, and the gangrene was found to be due to thrombosis in the pulmonary artery. It would thus appear that the state of blood which leads to thrombosis gives rise to high tension.

I have not time to enter at all fully upon the subject of high arterial tension in pregnancy. It has been well worked out by Dr. Mahomed (to whose paper I would refer you) and by Dr. Galabin. The illustration afforded by pregnancy of the relation between a condition of the blood and arterial tension, and between this latter and kidney disease, convulsions, thrombosis, &c., is, however, too important and too instructive to be passed over. You are aware that during pregnancy the blood of the mother has to carry nutrient material to the rapidly growing fœtus, and to convey away the effete products of its active tissue changes; it is therefore more highly charged both with raw material and waste, and a high tension prevails in the arterial system. You know also that albuminuria is not uncommon in pregnancy; not only is this the case, but contracted granular kidney is sometimes met with in women, for which no cause but pregnancy can be assigned. These are exactly the results we have seen to arise from retained nitrogenised waste. But the parallel can be continued much further. Puerperal convulsions, if not uræmic, are closely allied to uræmic convulsions, and in the production of both, high arterial tension is an important factor. Puerperal thrombosis, again, whether cardiac, giving rise to sudden death &c., or in the iliac veins, producing phlegmasia dolens, is the precise equivalent of the thrombosis we have just been speaking of in the pulmonary artery. You will understand from what I have just been saying that the old practice of bleeding pregnant women was not always injurious; to some it must have been of immense benefit.

One or two other illustrations of the therapeutic indications given by high arterial tension, and we have done with this part of our subject. I have already mentioned the case of a courier now in hospital, who came in with a history of Roman fever, which was not apparently, as we generally find, a euphemism for typhoid fever contracted at Rome. He complained of extreme weakness and depression, and this, with the probably malarial origin of his fever, induced me to give quinine. He did not improve, however; and after a time I determined to take the state of the pulse as my guide, marked high tension having been observed from the first. I gave accordingly aperients and iodide of potassium, with very good effect.

Another case is that of a gentleman, advanced in life, who was hemiplegic from cerebral hæmorrhage, whose helpless condition was made worse by extreme despondency and most distressing delusions. The arterial tension was very high, and, notwithstanding a state of great weakness, I recommended free purgation and iodide of potassium, with small doses of belladonna. His mental and emotional condition improved greatly, and for some time he was much better. After a time, however, he had a series of severe epileptiform attacks, traceable to, or at any rate associated with, a return of high arterial tension. Treatment of the same kind directed to the removal of the tension was followed by cessation of the convulsions, which up to this time had been increasingly frequent and severe.

Affections of the nervous system as a cause of arterial tension. I have left myself scanty time for the consideration of this part of my subject, and yet it is of considerable importance. In the early stages of acute affections of the brain, and throughout chronic affections, there may be very great arterial tension, due to the influence of the nervous system on the arterioles; it has been very remarkable in some cases of cerebral tumour which I have observed. The arterial tension resulting from the disease of the brain may be taken for arterial degeneration, the cause of the disease. More than once I have seen this mistake made, and there is an instance in a foot-note to p. 457 of vol. ii. of Reynolds's System of Medicine. Occasionally unilateral arteriole spasm is found in hemiplegia on the paralysed side; the tension is not, as a rule, very great, and of course cannot be higher on one side than on the other, but the artery at the wrist will be smaller and the sphygmographic tracing different.

In many so-called functional nervous affections there is fugitive or persistent contraction of the minute arteries, and consequent tension. In the hysteric paroxysm the arterial spasm is remarkable, and it is the cause of the pale, limpid, watery urine which is secreted during an attack. In locomotor ataxy the general condition of the minute arteries is one of contraction, which, during the paroxysms of pain to which such cases are liable, amounts to spasm. I have met with this condition of the vessels in what was apparently incipient insanity, in a lady, as shown by jealous delusions, unfounded general suspicions, and violent and eccentric conduct. Here, treatment suggested by the state of the arteries (Calabar bean, iodide of potassium with arsenic, and cod-liver oil) was followed by restoration of the mental equilibrium. I have seen it again in a lady subject to epileptoid paroxysms attended with mental confusion, but not by loss of consciousness. In most cases of nervous breakdown from overwork there is arteriole contraction and high tension, which, however, often fluctuate greatly; in one case lately under my care, that of a distinguished Oxford undergraduate, the fluctuations were remarkable, and were associated with equally striking variations in his nervous symptoms. Where, in cases of this kind, the vascular tension is persistent, I have not found the treatment by purgatives and eliminants successful. I have before me notes of cases in which high arterial tension was associated, in a gentleman aged forty-three, with giddiness and staggering, emotional weakness, loss of the power of attention, and occasional attacks of vertigo, followed by vomiting and stupor; in another gentleman, aged fifty-two, of remarkable natural energy and activity, with loss of vigour and endurance, excitability and giddiness. On one occasion he passed urine in my consulting-room which had a specific gravity of only 1002. The specific gravity of his urine at other times was found to be 1025 and 1018. It contained neither albumen nor sugar. Other notes relate to a youth of eighteen who, for nearly twelve months, suffered from continuous headache with exacerbations; the cardiac and arterial signs of tension were very marked; he had no vomiting, but at one time I thought optic neuritis was setting in. He ultimately recovered.

My experience would lead me to say that while nervous breakdown from overwork is attended with arterial tension, when it is brought on by anxiety, grief, or worry, this is not the case. I do not, however, speak positively on this point.

I must not forget to mention a fact to which Dr. Mahomed called my attention, and which I have verified—namely, that excitement or agitation sends up the arterial tension at once. I think it is simply from the increased frequency and force of the heart's action, which drives blood into the arterial system faster than it can run off by the capillaries at the normal pressure.

Arterial relaxation and low tension.—I have still to consider the conditions of system associated with an unnatural degree of relaxation of the minute arteries and an absence of the normal tension in the arterial system. For the production of tension in the bloodvessels, *vis a tergo*—that is, a certain degree of vigour in the action of the heart—is required; and when the pulse is weak, it is not always easy to say whether this is due to the heart or to the arteries, more especially as the heart loses strength when the arterial tension is habitually low, both because it has less work to do on account of the abnormally diminished resistance to the blood in the capillaries and arterioles, and because its nutrition must directly suffer from the imperfect supply of blood it will receive when the general arterial tension is low. You will remember that we have low arterial tension in most febrile conditions, but we exclude these from the consideration. The characteristic feature of the pulse of arterial relaxation and low tension is its shortness or quickness. In the intervals the vessel cannot be felt at all; it allows itself to be flattened and obliterated and lost among the structures, without offering any appreciable resistance; and when the pulsation comes, the artery seems to start into existence for a fraction of a second, and is gone again. I am speaking now, of course, of cases in which the arteries are not kept full by frequent and powerful action of the heart, as in pyrexia &c. The pulsation may be more or less strong when it comes, and the artery may vary in size, but the distinctive character is the quick or short unsustained tidal wave. In describing the pulse of arterial relaxation, I said it was large, but when the heart is acting so feebly that it does not fill out the vessels it will feel small. A pulse having the characters produced by a combination of a weak heart and relaxed arteries is no doubt what is meant when a pulse is called "shabby."

I cannot speak so definitely of the diagnostic, prognostic, and therapeutic indications of arterial relaxation, as of tension; but one thing I have learnt respecting the cases in which this condition exists is, that they are most unsatisfactory cases to have to treat. It has appeared to me that undue relaxation of the small arteries is sometimes a cause of weakness and nervous depression by permitting undue loss of heat. It is the duty of the arterioles to shut off the blood from the surface of the body on exposure to cold, and so to protect it from being cooled down. When this function is imperfectly performed, the skin and the extremities may be warm, in spite of very low external temperature, but the body must lose heat rapidly from exposure to cold of successive portions of blood sent to the skin, and either the temperature will fall or increased oxidation will be required to keep it up. In either case there is a heavier tax on the system, and only a very vigorous constitution can support it with impunity. A sufferer from depression so produced will exhibit his warm hands and skin as proofs of his excellent circulation. I had some years ago under my care for several successive winters a melancholy giant, almost the very tallest man I ever saw, and proportionately stout. During the summer he was well; no day was too hot for him, and he was capable of considerable and sustained exertion; but in cold weather he was depressed, miserable, incapable of giving his attention to his duties, and continually under the necessity of resorting to stimulants. All this time he was unconscious of external cold, and did not take cold, never wore an overcoat, and his hands were always comfortably warm. He could not understand that this very warmth was a cause and a mark of weakness, and refused to seek the protection from cold which he did not feel to need.

A clergyman, aged fifty-one, having a small country parish, consulted me in October, 1874. He was formerly robust, and had been a boating man at college, but he had been ailing for ten or twelve years, complaining chiefly of indigestion, with low spirits, sleeplessness, and a variety of symptoms and sensations about the head and heart, of which I should fail to convey to you any idea. The appetite was good, and the bowels acted regularly but inefficiently, the motions being pellety; urine apparently normal, but decomposing quickly. He looked thin, pale, and haggard, and his tissues were excessively lax. Pulse 90, soft, short, weak, and with no tension at all.

I could not find any cause for the break-down in my patient's health. He was not overworked, lived wholesomely, and was not unduly sedentary in his habits.

I may tell you what I recommended, but little impression was made on his symptoms. I obtained a better action of the bowels by means of a mild aloetic pill, and this having no good effect, tried blue pill, ipecacuanha, and rhubarb. I gave at different times iron, arsenic, digitalis, phosphorus, cod-liver oil, bromide of potassium, sulphate of zinc and extract of hop pills, securing also from time to time sleep by chloral, &c. You will trace the ideas which dictated this treatment; they were to improve the nutrition of the nerve-centres, and of the body generally, to raise the tone of the heart and minute arteries, to remove or quell nervous irritability, and to give rest. The diet was of course regulated. I should add that he could not take stimulants. He gave himself a holiday also, while under my care, but with only temporary benefit.

Another case, essentially similar, came under my observation about the same time. The patient, aged forty-five, had been complaining for three years of a dull pain in the head, which set in at 11 A.M., and went on through the day; with it was a kind of pain in the right leg, and, when worse than usual, also in the right arm. He did not sleep well, and was full of apprehensions; was emotional, and cried while describing his sufferings. Appetite good; bowels not open; pulse frequent, very weak, soft, short, and shabby. I only saw him twice, and do not think he was any the better for the treatment I ordered.

These cases would come under the term hypochondriasis, but there were fewer fancied ailments and more deterioration of health than usual. Hypochondriacs go about from one physician to another with their cardiac, hepatic, intestinal, or sexual woes, and one comes to take less note of states of pulse, urine, &c., than one would if they were expected to remain under observation; but I am always glad when I find a pulse of high tension in such cases, as I think there is a better chance of doing good.

I must not leave you under the impression that want of tone in the arteries is always accompanied with pallor and leanness. I have noted it in stout, pale, flabby people, with a soft and inelastic, or a firm brawny skin. I have met with it also in individuals not only decidedly stout, but of an unnaturally high colour, associated with a number and variety of nervous sufferings and nervous symptoms, of which I could give you no idea. No patients are to be more commiserated than some of these, who, looking to the uninstructed eye the picture of health, are the victims of miseries from which actual pain would be an agreeable distraction. What makes it worse is, that so little can be done for their relief. These cases are in special danger from alcohol.

One of the most marked cases of arterial relaxation I ever saw was in a gentleman who a few weeks later became insane. He was then in an extremely nervous condition, apprehensive of sudden death, and often thinking he was dying, causing great alarm and excitement to his family, unwilling for his wife to be a moment out of sight, but irritable, tyrannical, and unkind in his behaviour towards her. He had lost all energy, slept badly, was weak, and soon fatigued. He was tall and well built, looked strong, but his voice was weak, toneless, and monotonous, and his articulation careless or slovenly. His pulse was small, weak, short, and shabby, to an extraordinary degree, and his hands were damp and clammy. He had lived a fast life when young. Accounts as to his recent habits with regard to alcohol were contradictory. I only saw him once, and the next news I had of him was that he was suffering from unmistakable melancholia.

In acute dementia, again, the pulse has been, in the cases

I have seen, exceedingly weak, soft, and short, and the action of the heart frequent and irregular, indicating an entire absence of tone in the vascular system. I have found a marked deficiency of arterial tension in many cases of epilepsy, and have at present two cases under observation in which it is very striking. The pulse is very soft and short, but large and fairly strong, the blood seeming to shoot through the small arteries and capillaries without resistance. Another noteworthy point is that a deep breath or a change of position has an unusually great effect on the heart's action, which is hurried for a few beats, while, if the patient stoops, the face is flushed immediately, as if the arterioles were incapable of resisting the greater pressure due to the lowering of the head, and allowed the capillaries to be flooded with blood. It is difficult to say whether these patients are epileptic by reason of the relaxation of the arterioles or of the absence of the normal cohesion between the blood and tissues, or have this deficient vascular tone because of the condition of the nervous system which gives rise to the epileptic attacks; but, however this may be, I consider that the pulse affords an indication for treatment. Whatever is found to effect permanent improvement in the tone of the arteries and to raise the vascular tension may be expected to do good. If the epilepsy is an effect of the want of arterial tone, the restoration of this may cure the epilepsy; if it is the epileptic condition of the nerve centres which is the cause of the want of tone, a remedy which removes the effect will probably have a favourable influence on the cause. May we not have here some explanation of the good effect of bromide of potassium which has been found experimentally to cause contraction of arterioles? Also of Trousseau's favourite remedy, belladonna? My attention has not been drawn sufficiently long to the connexion between epilepsy and low arterial tension to enable me to bring forward evidence as to the effects in epilepsy of remedies which improve the arterial tone. Years of careful observation will be needed for this. Nor do I find much assistance from looking over my notes of cases of epilepsy. I may refer here to the interesting case of ——, who has just left the hospital. He has worked in lead, and has the blue line on his gums, but has had no colic or other saturnine diseases. He came into the hospital because on stooping, and especially to lift any weight, he became giddy and confused, and almost lost consciousness; and we at once saw, on causing him to bend down, that his bald head, face, and ears became crimson. He was liable also to heat and flushing of the head and face without this exciting cause, and at these times we have found the lobules of the ears of a deep purple colour, and very hot. In this patient the fluctuations of the arterial tension were most remarkable; and our notes, taken at different times, record observations absolutely contradictory. What makes the case more interesting is the fact, discovered accidentally while the experiment was being made with another object, that pressure on the carotids, or on one only, almost immediately induced an epileptoid attack; the face flushed (even when the pressure was applied to the common carotid, which was remarkable), and the features were drawn into a peculiar smile; the patient looked confused, lost consciousness, staggered, and fell back upon his bed with slight general convulsive movements. A few moments later he looked round with a puzzled expression, wondering what had happened. There was no marked change in the size of the pupils at any period. He slowly improved while taking iodide of potassium and tincture of nux vomica; the lead-line disappeared, the flushing and vertigo in stooping were less marked, and the epileptoid attacks were less easily induced. Naturally, we did not repeat this experiment often. The combination in this case of fluctuation in the arterial tension, weakness of the vessels of the head and face permitting of the flushing described on stooping, with liability to artificial epilepsy, is peculiarly interesting as a parallel to the combination associated with true epilepsy. Taking lead to have been the cause of the condition, its action was no doubt primarily on the (sympathetic?) nervous system; and to the state of the nervous system was due the instability of the vascular system. But it is, in my own mind, an open question whether the liability to epileptoid attacks was not in turn an effect of the vascular instability and want of tone.

To make the account of arterial relaxation complete, I ought to consider exophthalmic goitre and aortic pulsation, of which diseases it constitutes a feature, but I must pass them over with a simple mention.

My observations on low arterial tension have been discouraging, and I have as yet had little success to report from treatment, but it sometimes affords an indication which is of service. Many weak nervous women suffering from leucorrhœa or menorrhagia, or worn out by repeated pregnancies or prolonged suckling, or overwhelmed by domestic duties and responsibilities, have with anæmia and debility the pulse of arterial relaxation, and in these cases the addition of digitalis to the iron and other tonics often makes a great difference in the effect. My friend Dr. Fothergill gives these patients bromide of potassium and digitalis, and later quinine and iron with bromhydric acid. I saw them by scores in the out-patient department, but they are almost excluded from the wards by more urgent cases, and I have not yet tried his plan of treatment.

I must bring this lecture to a close. I have been, I fear, diffuse and sketchy, but I have been tempted to take up the subject, perhaps prematurely, by the interest some of you have manifested in it. I have seen you with extreme pleasure acquire thoroughly the art of discriminating between the different kinds of pulse and recognise the indications they afford, and I wish to put you in possession of whatever knowledge I have which may make your skill useful to yourselves and your patients.

ON GELSEMINUM SEMPERVIRENS.

By SYDNEY RINGER, M.D.,
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AND
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THIS powerful drug has long been employed in America, and a few years ago was introduced into this country as a remedy for neuralgia by Dr. Wickham Legg. His statements have been amply verified by Dr. Sawyer, Dr. Mackey, Dr. Spencer Thompson, and others. It is said to be especially useful in non-inflammatory toothache and in neuralgia in the nerves supplying the teeth and the alveolar processes of the jaw. In large doses it produces general paralysis. Several cases of poisoning are recorded, some ending fatally.

We extract from the Proceedings of the American Pharmaceutical Association (vol. xxi., 1873) the following account of the effects resulting from a toxic dose:—"The symptoms by which its effects manifest themselves in the animal economy seem to indicate that its energy is primarily exerted on the cerebro-spinal centres, and secondarily on the respiratory apparatus and the heart, the functions of the former ceasing before those of the latter. The motor nerves of the eye are attacked first; objects cannot be fixed, dodging their position; the eyelids become paralysed, drop down, and cannot be raised voluntarily; the pupils largely dilate; there is a feeling of lightness in the tongue; it ascends gradually to the roof of the mouth; pronunciation becomes slurred; then the extremities refuse to support the body, and erect motion without support becomes impossible; the pulse gradually becomes more frequent, rises to 120 to 130 and more beats per minute, is small but regular; respiration then becomes laboured, the mind remaining clear, however. This state will set in about an hour and a half after the ingestion of an overdose of the drug. ...... All the symptoms will disappear after about two hours, leaving no unpleasant effect or derangement of the organism." In many cases of poisoning the patients have complained of double vision, and dimness, even loss, of sight, and the breathing is slow and sometimes irregular and shallow.

In the *Practitioner* for October, 1870, Dr. Roberts Bartholow published an account of some experiments made on frogs, pigeons, and cats. He concludes that gelseminum (*a*) acts chiefly on the motor portion of the cord; (*b*) its paralysing effect is due to its action on the motor centre, and not to an action on the peripheral nerve-fibres; (*c*) it acts also on the sensory portion of the cord, producing at last complete anæsthesia, but this effect in warm-blooded animals and in man is toxic only, and follows the paralysis of the motor functions.

As this drug is now attracting considerable attention in this country, and has been largely used in America for fevers, including ague and influenza, hemicrania, spermatorrhœa, dysmenorrhœa, &c, we were induced to make these investigations, which will be seen in many respects to corroborate the conclusions of Dr. Roberts Bartholow. At first we used the liquid extract prepared in America, which contains some spirit, but afterwards the alkaloid dissolved in water, extracted by Mr. Gerrard, teacher of Pharmacy at University College.

We now proceed to give a short general account of the effects produced by the drug on a frog.

A medium-sized German frog was injected with the drug in the neighbourhood of the posterior lymph hearts. In this, as in all our experiments in which injections were given, special precautions were taken to ensure cleanliness of the apparatus, and freedom from contamination by other drugs. Soon after the administration of the drug the animal became extremely apathetic, and it was found that there was considerable impairment both of voluntary power and reflex action. When placed on its back the frog made no attempt to resume its normal position for a minute or two, and then slowly turned over, often, however, stopping half-way and lying motionless on its side. On touching the eyes they were closed, but some minutes elapsed before they were again opened, and even then the movement was performed with abnormal slowness. The loss of voluntary power and reflex action gradually increased, and the animal soon became perfectly motionless. When placed on its back no attempt was made to turn over. The whole body was limp and flaccid, and the limbs remained in any position in which they were placed, either flexed or extended. On pinching firmly any part of the body, a very feeble and ineffectual attempt to escape was made, the animal, in its unavailing efforts, falling over on its back or sides. The application of the poles of the battery to the limbs excited, in addition to the muscular contraction, faint reflex movements. *Pari passu* with these changes in the nervous system, the breathing became hurried and superficial, and as the paralysis increased, the respiratory movements became more and more shallow, and, finally, with the total abolition of voluntary power and reflex action, entirely ceased. The heart continued beating for a considerable time after the cessation of the respiratory movements.

The rapidity with which these symptoms presented themselves, and the ultimate termination of the cases, varied with the dose administered. Thus twelve minims of the liquid extract injected under the skin of a large frog produced such an impairment of voluntary power that in three minutes the animal was unable to turn over, and in two and a half hours death ensued. In doses of five minims or less, some hours usually elapsed before the establishment of complete paralysis, and the animals frequently remained alive, but perfectly helpless for many days. In one instance, in which a five-minim dose had been given, life was prolonged until the tenth day. Towards the close of this period there was considerable improvement both in voluntary power and reflex action; the effects of the drug appeared to be passing off, and hopes were at one time entertained of the ultimate recovery of the animal. A five-minim dose of the 1 in 20 solution of the alkaloid gave rise to decided symptoms of poisoning in four minutes, and in five minutes later the full effects of the drug were exhibited.

With some frogs there occurred for a short time a peculiar mixed state. Thus, soon after voluntary and reflex power was completely abolished, on irritating one of the limbs, the hind extremities were sometimes shot out, and all their muscles, with those of the back, contracted. This happened only occasionally. Thus, generally, on applying the electrodes to an extremity, only the muscle touched contracted, and none others; but sometimes there ensued the tetanoid condition just described; in a few minutes this ceased. With other frogs there occurred only a slight tremor of some of the muscles of the legs, chiefly those of the thigh. This tremor was at once excited by moving or jerking the body. It was apparently caused by the successive contraction of the muscles of the limb, giving rise to a peculiar flickering, which was readily perceived through the skin. Supposing these phenomena to be due to the influence of the drug, they must be caused by its action on the spinal cord, for they occurred in the posterior extremities after ligature of the abdominal aorta.

Another circumstance also attracted our attention. When the electrodes are applied over the lower part of the spine of a live healthy frog, the hind legs are shot out much in the manner before described. Now it appeared to us that after poisoning by gelseminum the posterior extremities were more forcibly extended, and remained so for a longer time.

We then performed the following experiments to ascertain whether gelseminum paralyses by its effect on the brain, the cord, the motor or sensory nerves, or the muscles.

The paralysis of reflex and voluntary power is certainly not due to the action of the drug on the muscles; for after poisoning, on galvanic stimulation the muscles contracted as energetically as those of an unpoisoned animal; moreover, on several occasions we tied the abdominal aorta or the femoral artery and vein, and twice we severed the thigh, leaving the leg attached to the trunk only by the nerve, and then poisoned the animal, and we found that the muscles subjected to the action of the gelseminum contracted as energetically and retained their contractility as long as the muscles protected from the poison by ligature or section of the vessels.

Neither is the paralysis due to the action of gelseminum on the motor nerves. This, indeed, is proved by the experiments just mentioned, which we now proceed to describe more fully. We tied the femoral vessels on several occasions, and twice we cut through all the structures of the thigh, except the nerve, which alone connected the severed leg with the trunk, and then poisoned the animal by injecting the drug under the skin of the back, in the neighbourhood of the lymph sacs. The paralysis occurred as soon, progressed as rapidly, and became as complete in the limb protected by ligature or section from the action of the poisoned blood as in other parts subjected to the influence of the poison. After complete paralysis we found that the nerves unprotected from the action of the poison conducted as freely as those protected by ligature or section. These experiments show that the poison does not act by its effects on the ends of the motor nerves; but the trunks of the nerves in the abdomen, and above the ligature in the thigh might be affected, and the paralysis produced in this way. We therefore on three occasions ligatured the abdominal aorta, just above its bifurcation, and then poisoned the animal in the manner described, and we found the paralysis progressed in the hind protected limbs as in the anterior, and as in the case of frogs whose hind limbs are unprotected by ligature of the aorta.

There remain, then, to consider the brain, cord, and the afferent nerves. We shall treat of the loss of reflex power separately from that of voluntary power. It is obvious that the destruction of reflex power cannot be due to the effect of the poison on the brain, and as it is not due to the paralysis of the motor nerves or muscles, it must depend on paralysis either of the afferent nerves or the cord. It is not due to paralysis of the afferent nerves, for after tying the abdominal aorta before administering the poison, and thus protecting the hind extremities from its effects, we could not excite reflex action by galvanic stimulation of the hind legs. It therefore appears that gelseminum abolishes reflex action by its effect on the cord.

Does it thus affect the reflex function by its direct action on the cord, or indirectly by stimulating the inhibitory centre for reflex movements? It does not act through Setschenow's inhibitory centre; for, firstly, the abolition of reflex function is too complete to be produced in this way, and, secondly, after producing complete loss of reflex action, we beheaded the frog, and so divided the cord below the inhibitory centre, which is situated in the neighbourhood of the optic lobes, and yet the loss of reflex power remained as complete as before. We therefore conclude *that gelseminum destroys reflex power by its direct action on the spinal cord.*

We have next to explain how the loss of voluntary power is produced. We have shown that the paralysis is not due to the effect of the drug on the muscles and motor nerves, and it is obvious that the loss of voluntary power cannot be produced by paralysis of the sensory nerves. It must therefore be due to the action of the gelseminum either on the brain or the motor tract of the spinal cord. We have no experiments to decide this question, but we offer the following reasons in favour of the view that it acts through its influence on the cord:—(*a*) The loss of voluntary and reflex power proceed *pari passu*. (*b*) The abolition of reflex power being due to the effect on the cord renders it to some extent probable that the loss of voluntary power also depends on affection of the cord. (*c*) In the cases of accidental poisoning where the voluntary power was so complete that the patients could not move a muscle, could not even raise the eyelids, it is recorded that on recovery they asserted that their consciousness was not at all affected. It may be said that if the loss of voluntary power is due to paralysis of the motor tract of the spinal cord, it should not conduct electric impressions. But we may remark that a great difference of opinion exists among physiologists respecting the conducting power of the cord of electric irritation, and it appeared to us therefore unnecessary to perform this experiment.

We have seen that the afferent reflex nerves are paralysed. Are the sensory nerves affected? If the sensory nerves are also the afferent reflex nerves (the view generally held by physiologists), the question of course is answered in the negative. Still we suppose that though some afferent nerves may have this double function, yet there are others which are simply sensory. Are these paralysed, or are the sensory perceptive centres paralysed? In other words, does gelseminum destroy sensation as some writers have supposed, and if so, does it act on the sensory nerves or the sensory tracts of the cord, or on the sensory perceptive centre? These experiments do not enable us to answer these questions, but we may state that as long as voluntary movement remained, the frog seemed to feel pinching and galvanic stimulation, for on the application of either kind of irritation, the animal made voluntary efforts to escape, though after paralysis was marked it required considerable pinching to induce voluntary movement. Was this due to defective feeling or from the paralysis requiring a greater effort to cause movement? We shall return to the effect of gelseminum on sensation, when we treat of its effects on man.

The foregoing experiments prove that gelseminum abolishes reflex, and probably voluntary, movement by its influence on the spinal cord. It may, however, in addition, to a slighter extent, and late in the poisoning, affect the motor nerves. This is the case with Calabar bean, which paralyses the spinal cord, but also slightly the motor nerves. To learn whether gelseminum in any way depresses the motor nerves, we performed the following experiments on three frogs. We tied the iliac artery, and then poisoned the animal; and, after the loss of reflex and voluntary power, we tested at frequent intervals the conductivity of the sciatic nerves to electric stimulation, and we found that the gradual loss of the power of conduction was equal in the two nerves, but that after some time the nerve protected from the action of the poison required a rather stronger current than the unprotected nerve, due, perhaps, to diminished nutrition from arrest of the circulation. Hence we conclude that probably (for our experiments are not numerous enough to settle absolutely this question) gelseminum exerts no influence on the motor nerves.

We may here state that in each experiment in which an artery was tied we ascertained by a post-mortem examination that the operation had been successfully performed.

ON DILATATION OF THE FEMALE URETHRA.

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THE clinical essay of Mr. Teale, the remarkable case cited by Mr. Hewetson in THE LANCET of December 4th, and the experience of Mr. Heath, recorded in THE LANCET of December 11th, encourage me to publish the notes of two cases that may possibly prove of interest to the profession, as illustrating the necessity of caution in adopting this expedient and also the importance of excluding other possible causes of irritable bladder before resorting empirically to forcible dilatation of the urethra. I have notes of a large number in my case-book, but select the following as illustrative of many others. The conditions most frequently producing irritation at the neck of the bladder, with painful or frequent micturition, apart from any alteration in the quality or quantity of the urine itself, are chiefly vascular growths in the urethra, cystitis, stone in the bladder, passage of small renal calculi, pressure upon the neck of the bladder from an anteflexed fundus uteri, dragging down of the posterior wall of the vagina (as in cases of prolapsus uteri), fissures or cracks in the urethra, extension of malignant disease from the uterus, or malignant degeneration of the bladder itself.

CASE 1.—M. D——, aged forty-two, married, sterile, first consulted me in December, 1872, for irritability of the bladder. Micturition was frequent and attended by scalding. The symptoms had come on gradually during the last month or six weeks, and had lately much increased in severity, the patient being obliged to get up several times during the night to pass water.

Examination of the urine detected nothing abnormal beyond the presence of lithates. On examining per vaginam, there was no evidence of any unusual discharge. The vagina was moist and cool; no vascularity of the urethra was apparent; the uterus was normal in bulk and position. No local lesion likely to account for the symptoms was found. On exploring the bladder by means of a sound, no calculus was felt. The only unusual symptom was soreness of the urethral passage, but, as the patient was very nervous, it was thought at the time to be nothing calling for further attention.

Saline aperients with diuretics and restriction of the diet were enjoined, and the patient urged to resist the desire to micturate so frequently.

As the irritability of the bladder and soreness on micturition persisted, a pair of leeching forceps, about the size of an ordinary quill, was inserted, and the blades forcibly dilated so as to distend the urethra. The little finger being then passed, roughness of the posterior wall of the urethra was detected, but as the operation caused much pain nothing further was done. Later on in the day I received an urgent summons to visit the patient, and found her very weak and faint, lying in a pool of blood and urine. On making a local investigation a distinct jet of bright blood was seen after removing some clots and employing the catheter.

A No. 10 elastic catheter was inserted and left *in situ*, pressure being applied along the course of the urethra by means of cotton wool inserted per vaginam. This arrested the hæmorrhage for the time, but on removing the catheter the following morning, the bleeding recurred. A sound coated with cotton wool and saturated with solution of perchloride of iron was passed per urethram, which again arrested the hæmorrhage for a time, but it was not until a No. 12 elastic catheter covered with cotton wool steeped in tincture of matico was passed and retained *in situ* for twelve hours that the hæmorrhage was finally arrested.

The case caused me much trouble and anxiety, and impressed me forcibly with the risk incurred in resorting to forcible dilatation of the urethra.

The patient convalesced rapidly, regained perfect control of the sphincter within the course of a few days, and had no further symptoms of irritation.

CASE 2.—E. H——, aged eighteen, single, servant, presented herself as an out-patient, complaining of frequency of micturition. During the day she stated that she could only hold her water for about half an hour, and was obliged to get up at least five or six times during the night to empty the bladder. This condition had been gradually coming on during the last two years, and was always worse about the time of her periods, but had been much worse the last six months. Iron, belladonna, bromide of potassium, chloral, ergot, strychnia, and every other likely drug were given at different times, without more than the most temporary benefit. As the condition remained unaltered, she was admitted as an in-patient at the Hospital for Women.

A careful vaginal examination showed that the uterus was anteflexed, though not to a very marked degree. Buchu, uva ursi, triticum repens, alkalies, and acids gave no relief. Confinement to bed, restriction in the amount of fluids, blisters to the suprapubic region, the adjustment of an india-rubber ball inflated with air per vaginam so as to compress the urethra, injection of two-grain doses of morphia into the bladder, and every other available expedient was tried without avail. At this time Mr. Heath saw her in consultation, and suggested rapid dilatation of the urethra. Chloroform was administered and the operation performed; the neck of the bladder being brushed over with a strong solution of nitrate of silver. The symptoms remained unchanged. The urine was passed between five-and-thirty and forty times during the twenty-four hours (as ascertained by the patient pricking a card with a pin every time she made water).

The case now seemed hopeless. The patient's condition was most deplorable. The frequent necessity for getting up during the cold winter nights, the discomfort from constantly wetting her linen, and the offensive ammoniacal odour produced rendered her existence almost unbearable.

Every method of relieving the bladder having been tried in vain, I thought, before discharging her as incurable, it would be well to try the effect of an intra-uterine stem. After some preliminary passing of the uterine sound, a small vulcanite stem was inserted, but was extruded within a few hours. Having made one with a bulbous extremity, this was inserted and was retained *in situ*. Within a few days she had perfect control over her bladder, and before leaving the hospital, some ten days after the insertion of the stem, she could pass the whole night without getting up, and only micturated four or five times in place of forty during the twenty-four hours. She took a place and remained perfectly well, until one day, hurrying to catch a train, the stem came out, when all the old symptoms recurred. She was obliged to come up to town and have it reinserted, and has done so twice during the last two years. During the present month she has written to say how very grateful she is for the relief, and that she remains quite well.

Wimpole-street, W.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

At the meeting on December 1st, 1875 (W. O. Priestley, M.D., F.R.C.P., President, in the chair), the following gentlemen were elected fellows of the Society:—G. R. Cundell, M.R.C.S.; J. F. Eyeley, M.R.C.S.; J. J. Gawith, M.R.C.S.; A. J. Miles, M.D.; J. Musgrave, M.R.C.S.; A. H. Orpen, A.B., L.R.C.P.; and Tyler Smith, M.B. (Hounslow).

Mr. **Oliver Barber** (of Sheffield) exhibited a specimen of Anencephalic Fœtus where the calvaria was altogether absent, and the base of the skull formed simply by the basilar portion of the occipital bone. The laminæ and spines of the upper cervical vertebræ were undeveloped, leaving the spinal canal open. There was no appearance of any spinal cord on dissection, the canal itself being lined by a thin fibrous membrane. There was an enormous quantity of liquor amnii present; the open spinal canal closely simulated the anal aperture.

Dr. **Godson** exhibited a drawing of the Breasts of a Girl, aged eighteen, pregnant seven months, affected with chorea. The inner half of the areola of each nipple was entirely free from pigmentation, that of the outer portions being unusually dark and crescentic in form. The girl was present for the Fellows to inspect.—Dr. **Barnes** said the case was extremely interesting. The symmetrical defect of pigment might be explained by like areas of nerve-distribution. In all probability the altered nervous condition of pregnancy had much to do with pigmentation. Respecting the chorea he (Dr. Barnes) had long since called attention to the fact that under the exalted nervous tension wrought by pregnancy, aided probably by some change in the constitution of the blood, any pre-existing disposition to chorea or other nervous disorder was apt to be evoked. Thus, pregnancy was an exciting cause of chorea.—The **President** inquired whether there was any history of injury from a scald or burn. The case presented the usual characters of some skin eruptions, in that it was symmetrical.—Dr. **Wiltshire** thought the case peculiar and interesting, and worth preserving in the Transactions of the Society, if Dr. Godson would give the coloured drawing.—Dr. **Godson** stated that there was no hereditary tendency to such a condition. The mother had two nipples on one breast.—Dr. **Hayes** thought the fact of chorea and pregnancy existing together was one of much interest. He had seen 100 cases of chorea, and had noted the very marked relation between chorea and rheumatism.

Dr. **Edis** exhibited a specimen of Epithelioma of the Cervix Uteri in Pregnancy, removed post mortem from a patient. She was thirty-three years old, married six years, two children, youngest three years, which she nursed for one year and nine months. Dr. March, of New Wandsworth, had sent the case up to Dr. Edis, at the Middlesex Hospital, in the latter end of June. She was then found to be the subject of epithelioma of the cervix uteri, and was, as near as could be judged, between seven and eight months pregnant. She had had frequent floodings, and a more or less continuous offensive watery discharge. As the patient could not be admitted at the time, the nature of the case and the difficulty likely to occur when labour set in were explained to her, and she was desired to report herself further on. On August 7th she presented herself, stating she was in labour. The disease extended in a crescentic manner round two-thirds of the os uteri. The remaining healthy portion seemed disposed to dilate, and as the pelvis was roomy, it was thought the risks to the mother and child would not be greater than if Cæsarean section, which had previously been contemplated, should be resorted to. Dilatation of the cervix was facilitated by means of Barnes's bags, and at 10 A.M. on August 8th, the cervix having dilated sufficiently, chloroform was administered and the long forceps applied, a female living child (weighing six pounds and a half) being extracted. With the exception of some diarrhœa, the patient progressed fairly well for the first week, when the temperature rose to 105° F., and the patient died on the 21st, a fortnight from the date of delivery.—Dr. **Routh** thought that Cæsarean section ought to be more often performed in these cases; it gave the best chance of life to the child. Where labour was allowed to take place naturally, the death of the mother usually resulted from puerperal fever and sloughing.—Dr. **Barnes** could not assent to the conclusion that the Cæsarean section should be resorted to in every case of cancer of the uterus. The cases cited by Dr. Routh occurred in the Vienna Hospital, where many other causes of puerperal fever were rife. He himself had seen women survive labour complicated with cancer. One woman had been delivered twice. It was not advisable to lay down a general rule.—Dr. **Meadows** stated that his experience entirely corroborated that of Dr. Routh, that the risk to the mother in cases of extensive cancerous disease of the cervix was so great that the Cæsarean section was preferable to any other mode of delivery. He had seen four cases of this kind, and all ended fatally to the mother, while only one child was saved. In one craniotomy had been performed, in two premature labour was induced. He believed that the Cæsarean section gave a better chance to both mother and child in cases where the disease was so far advanced that an operation of some kind was necessary for delivery.—The **President** thought this statement should be qualified by the extent of the disease. He inquired if Dr. Meadows really meant that he would perform Cæsarean section in *all* cases of labour complicated with malignant disease of the cervix uteri, for if so, he believed this was an opinion which most practitioners would think required some qualification. While not doubting the propriety of this operation in cases where the passages were much obstructed by morbid growth, or where serious laceration of the parts must ensue if delivery was effected through the natural passages, he could not concur in regarding it as necessary in all cases where disease was less advanced, and he was sure the Society would be glad to hear the opinions of men with such practical experience as Dr. Barnes and Dr. Routh.—Dr. **Aveling** thought that the operation of Cæsarean section would not be justifiable if only one lip of the uterus were involved.—Dr. **Rogers** stated that in thirty-five years only two cases of this nature had occurred. The question of Cæsarean section was one of much importance.—Dr. **Barnes**, in reference to Dr. Meadows's assumption, that if all the cases were analysed, it would be found that the results would be as in those observed by himself, replied that this analysis had not been made, and it was not safe to frame a general law upon an assumption. The best plan at present was to consider each case as it came before us on its individual merits. In cases where the disease was of small extent it might be safer to let delivery take place in the ordinary way. Speaking from memory, he thought Dr. Oldham had published in the Guy's Reports cases which showed that it was better to take this course—i.e., not to induce labour, but to let pregnancy go on to term, and then to act according to indications.—Dr. Routh stated that in the cases he had seen it was impossible to deliver except by craniotomy.—Dr. Edis explained that he brought forward the present case, not with the view of advocating similar treatment in all cases—each case required to be treated on its own merits,—but as an instance of delivery *per vias naturales* where the disease was very extensive. Nature herself took the initiative, and seemed to indicate that delivery was possible, and for this reason Cæsarean section was not resorted to.

Dr. Alfred Meadows read a note "On the Post-mortem Diagnosis of a Nulliparous Uterus." Referring to the now celebrated trial of the brothers Wainwright for murder, he remarked on the extreme importance of being able to diagnose post mortem whether or not a uterus had ever borne a child, and on this point he invited the opinion and experience of the Society. In the case referred to he thought it was probably not too much to say that, if any absolute test existed whereby a positive opinion in the negative could have been given, the whole case for the prosecution must have failed on the first indictment, for it was well known that the person alleged to have been murdered had borne children. He, however, knew of no such test, nor did he think it could be affirmed, on the contrary, that this uterus had ever been gravid so far as appearances went. The thinness of the uterine walls, which in this case barely exceeded a quarter of an inch, and the distinctly convex shape of the internal aspect of the uterine walls, urged him to the opinion that this was a nulliparous uterus. Accordingly, the evidence which he gave at the recent trial was to the following effect—first, that, as a general rule, no absolutely certain opinion can be given by post-mortem examination only, even under the most favourable circumstances, on the question whether or not a woman had borne a child; secondly, that, on the question of probability, some reliance may be placed on the internal appearance of the uterine walls, especially with reference to their convexity; thirdly, that, so far as this particular uterus was concerned, there was certainly no proof that it had borne a child, but that, on the contrary, the evidence, doubtful and unreliable as it was, tended rather in the opposite direction, and justified an expression of opinion to that effect. The author then referred to a very delicate question of a medico-ethical character—viz., as to whether a scientific witness is at liberty to allow his private judgment on the general merits of a case to influence his opinion on a purely scientific question. Upon this point also he invited the opinion of the Society.—Dr. Edis inquired whether any notice had been taken of the condition of the ovaries. He thought some inference might have been drawn from their appearance.—Dr. Palfrey wished the discussion to be postponed, as he was collecting statistics bearing upon the subject. He had taught and been taught that the condition of the cervix was some guide as to previous pregnancy or not, but he was rather inclined to believe that the condition of the os was not so clear in deciding the question. It was far too important a matter to be discussed in a few minutes. He therefore proposed an adjournment.—Dr. Aveling suggested that the presence of a large polypus or other morbid growth in the uterus would modify the condition of the cervix.—Dr. Barnes seconded the proposal to adjourn the discussion upon the scientific question as to the evidences of pregnancy, but he wished to express his satisfaction at the course taken by Dr. Meadows in laying a formal statement of his views before his professional brethren, in a form that would be understood and appreciated, instead of trusting to the garbled reports of newspapers, and the distortions to which scientific evidence is liable under the manipulation of counsel.

The discussion was then adjourned to a future meeting.

Dr. Heywood Smith narrated the particulars of a case of Premature Labour at the seventh month, where rupture occurred, and the patient recovered. The case was complicated by placenta previa, and turning was resorted to. In similar cases he thought it important to keep the patient lying in such a position as that the uterus should be above the seat of the rupture, and to administer opium for the first forty-eight hours.

Dr. Wiltshire also narrated a case of Spontaneous Rupture of the Vagina with recovery. The promontory of the sacrum projected more than usual. The head, with the right leg, right arm, and funis, presented. The laceration was transverse at the junction of the vagina with the cervix uteri, and extended into the peritoneal cavity. Intestines were felt, but none prolapsed. Delivery was safely effected by turning, and the patient made an excellent recovery. The paper concluded with remarks on the nature, causation, and treatment of the accident.—Dr. Barnes wished to state his objection to accept in its absolute sense the doctrine that the uterus never ruptured unless its tissue was diseased. He himself had seen cases where no disease could be detected. He might distrust his own competency as an observer, but he had submitted specimens of one case to examination by Drs. Bristowe and Montgomery, who confirmed his observation. The conditions under which the uterus sometimes burst were quite compatible with the hypothesis of normal structure. Sudden violent contraction of the uterus upon fluid contents would, as in the case of the Florentine experiment of hydrostatic pressure inside a golden globe, cause rupture, unless the fluid escaped by a natural opening.—Dr. Palfrey had met with cases. He objected to the use of the syringe in these cases. In one instance immediate collapse had occurred in consequence; nothing would induce him to sanction it again. The irrigator answered every purpose where it was necessary to wash out the vagina. If the rupture favoured prolapse of the intestine he advocated sutures.—Dr. Edis referred to a case where turning and attempt at extraction had been resorted to in a primipara, the antero-posterior diameter of the pelvis being less than two inches. After prolonged efforts the body was extracted, the head being left behind. When Dr. Edis examined the patient, the hand passed readily through a large rupture in the upper part of the vagina and neck of the uterus into the peritoneal cavity, the head of the fœtus lying close under the liver. The patient died. He mentioned the case as illustrating the necessity of carefully determining, on first examination, the exact condition of the pelvis.—Dr. Barnes inquired if, in Dr. Wiltshire's case, the child was dead before rupture took place, because death of a child was often a cause of rupture.—Dr. Wiltshire replied that the funis had ceased to pulsate before the rupture. The patient had been kept on her back to prevent the descent of intestine.

Dr. J. W. J. Oswald communicated the particulars of a case of Cæsarean Section, where the pelvis was very deformed from rickets. The patient died on the fourth day. The antero-posterior diameter of the pelvis was only three-quarters of an inch.

West Kent Medico-Chirurgical Society.—The third meeting of the Society was held on Friday, Dec. 3rd, at the Royal Kent Dispensary, Greenwich-road, Dr. Prior Purvis (in the unavoidable absence of the President, Mr. J. N. Miller) in the chair. Dr. Tilbury Fox's paper on Ringworm was, in his absence, postponed until Friday, Feb. 4th, 1876. Mr. E. J. B. Burroughs, jun., Secretary, brought before the Members a very typical case of Congenital Syphilis treated by Mercurial Inunction. Mr. J. B. Saundry showed a very fine specimen of Gelatinous Polypus removed from the right nares of a woman during the week. The remainder of the evening was spent in a discussion on Syphilis and its Treatment, in which most of the members took part, illustrating their remarks by appropriate cases. Dr. Peacock will read a paper on Friday, Jan. 7th, 1876. Dr. J. C. Thorowgood was balloted for and unanimously elected an honorary member of the Society.

Bequests, &c., to Medical Charities.—Mr. James Houghton bequeathed £5000 to the Royal Southern Hospital, £500 to the Royal Infirmary, £250 to the North and South Dispensaries, and £100 to the Medical Mission, all at Liverpool. Sir Charles Pressley, K.C.B., has given £1000, Mr. Henry Thompson £500, and Mr. William Gue £163, towards the building fund of the proposed Cottage Infirmary at Andover.

POST-MORTEM EXAMINATION OF THE REMAINS OF HARRIET LANE.

A Clinical Lecture, delivered at Westminster Hospital,

BY THOMAS BOND, F.R.C.S., B.S. LOND.,
ASSISTANT-SURGEON TO THE HOSPITAL AND LECTURER ON FORENSIC MEDICINE.

(*Concluded from p.* 842.)

HAVING given you, gentlemen, all the details connected with the post-mortem, I now proceed to comment on them.

The remains were those of a woman, for the reasons I have already given. I was able to state she had been dead for many months, because of the great dryness and mummification of certain parts, and from the decay and decomposition of other parts, also by the formation of adipocere. On the other hand, I was able to state with certainty that she had not been dead for years, because the muscular tissue was well preserved, the cut portions being moist, flaccid, and pale-red. The articular ends of the bones also were covered with cartilage in perfect preservation, and the cancellous tissue of the bones was still moist and of a reddish colour. I therefore stated confidently that the appearances were consistent with what I should expect to find in a body that had been buried twelve months; but I could not say that the remains of this particular body had not been buried six months less or six months more than that period.

Next comes the important inquiry, What was the cause of death? Could it have been from natural causes? Yes, it might be possible, but only on the supposition that two bullets were fired into the brain so quickly after death that bleeding to a very considerable extent ensued. Now, it is very difficult to say how much blood may escape after death, and after what period it will flow. Of course it mainly depends on the nature of the wound and the part injured. A cut throat might bleed a good deal after a period of death at which a bullet-wound would not bleed at all. It is, however, absurd to imagine that a woman would be shot so immediately after natural death that infiltration of blood into the tissues might occur; so I came to the conclusion readily that one of the pistol-shots had caused death. I am of opinion that the first shot described was the fatal one, because in the track of that bullet I found blood inside the skull, and infiltrated under the scalp, although no large vessel was injured. I may here observe that whenever I speak of having found blood I am not merely guessing that it was so. I examined each portion I suspected to be blood with the microscope, and invariably succeeded in finding well-marked blood-corpuscles. I did not succeed in crystallising hæmin, although during the process I constantly found that the edges of the acetate of soda crystals, which are formed in the process, were tinged dark-red, exactly the colour of hæmin. I tried the colour tests, but did not get any result, nor is it to be wondered at, considering how much the blood was mixed with lime and grease. Indeed I did not expect to find such characteristic blood-corpuscles, but there is no doubt they were found, as Mr. Larkin's observations, made independently of mine, were confirmatory. My colleague, Dr. Dupré, also confirmed my observations.

Having satisfied myself that death was caused by the pistol-shots, it was next incumbent on me to say whether they were suicidal or homicidal. You may observe that in speaking of the cause of death I have left out the question of the cut throat altogether. My reason you have already heard—viz., because I could not say positively when that cut was made. My evidence went to prove, however, that it was not suicidal—firstly, because of the depth, the cut going nearly through the body and transverse process of the third cervical vertebra; secondly, because of the direction, from the front upwards and backwards, commencing superficially and then going deeply under the angle of the jaw on the left side. The defence set up the theory of suicide by pistol-shots, and assumed that the cut in the throat was done during dismemberment. It has been stated that the counsel for the defence urged "that it might be possible for a person with two bullets in the brain to inflict a suicidal wound in the throat." This is an error. In my opinion the learned judge also erred in saying "the concussion of the third bullet which lodged in the pad was probably sufficient to produce insensibility." It is very improbable that a small body like a bullet, weighing a little over a drachm, when stopped by an elastic and bulky medium like a pad and hairpins, would communicate its force directly through to the parts underneath. The example of a man being able to bear without inconvenience a large stone on his chest while it is being broken by a hammer, is a proof of the contrary. Mr. Larkin was asked a most pertinent question—viz., "What would be the state of the sensibility after firing one of the bullets into the brain?" He answered that he had not sufficient experience of gunshot wounds to say. I would have given a different answer—viz., that immediately the first bullet entered the head all co-ordinate action would be lost, rendering it impossible to fire another well-directed shot at the head. This fact and the further evidence that the third bullet was fired from behind into the pad, would render the theory of suicide absolutely untenable. Thus, there was no doubt that a murder had been committed.

The next point was the question of identity. This was to be determined by two sets of facts: first, the identity of ornaments and portions of wearing apparel found in the grave with those known to be Harriet Lane's; secondly, the anatomical observations and their correspondence with the description of Harriet Lane. The latter only concerned me, and of them the scar played the most important part.

I will now enumerate the separate points of identity and treat them in detail.

1. *Height.*—Harriet Lane was known to be about 5 ft. ½ in. tall. The measurement of the remains, carried out as I have described, was 4 ft. 11½ in., so there was exactly an inch discrepancy. This, considering the difficulty of fitting the parts accurately together, appeared to me very unimportant, but the counsel thought a good deal of it. It struck me at once that it might be due to shrinking of the intervertebral cartilages. I remembered dissecting the spine of an Egyptian mummy while a prosector at the College of Surgeons, and noticing the dried and shrunken intervertebral discs. I therefore cut out one of the intervertebral cartilages from the remains, and found it perceptibly harder and drier than in a recent subject. Again, the scalp and the skin and fat covering the heels were exceedingly dry and shrunken, so that it was quite possible to account for the discrepancy between the two measurements.

2. *Age.*—Harriet Lane's age was twenty-four, and from my previous description you will see at once that such an age was perfectly compatible with the appearances of the remains. The articular cartilages were thick, the cancellous tissue in the bones abundant, and the epiphyses about the shoulder, thigh, and knee joints were all united. The facts were communicated to the Treasury solicitor, but no questions on these points were asked, and it is not a wise plan to volunteer evidence during examination which is not of a conclusive character, as it might be used either way; the evidence would have proved the woman to be over twenty, but it would equally have proved her to be over thirty. The counsel for the prosecution very wisely was content to bring prominently forward the most obvious and reliable reason for my opinion that the age was from twenty to twenty-five—viz., that the wisdom tooth of the left upper jaw was uncut, while all the rest had come through.

3. *General shape.*—Harriet Lane was known to be thin and slender. The hands and feet of the remains were remarkably thin, much more so than could be accounted for by any drying of the tissues; the bones were likewise light and small, and the whole frame was of slender build.

4. *Teeth.*—It was proved that Harriet Lane had the first bicuspid tooth in the left upper jaw decayed, but that all the rest were sound and good, also that the two front teeth were slightly prominent. Mr. Aubin noticed the prominence of the teeth before he heard the evidence. There was likewise found the decayed tooth, as described by the witnesses who had no means of knowing what I had found. Some of the teeth had dropped out. It had evidently occurred after death, as they fitted perfectly and were all put back except the right upper and left lower central incisors.

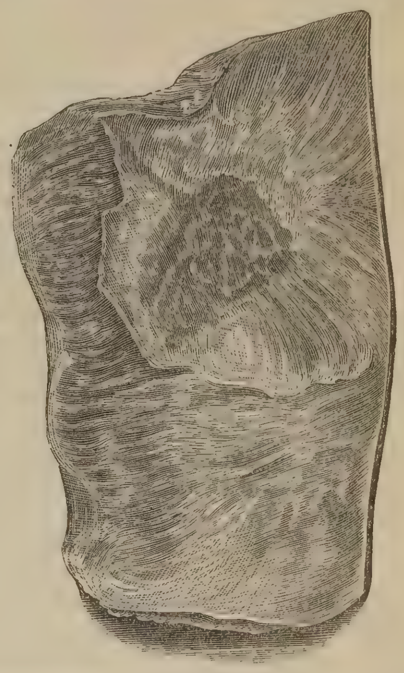
5. *Hair.*—The hair of Harriet Lane was of a light auburn colour. It was curled and tied with a piece of velvet, and fixed at the back to a peculiar pad with a quantity of

hairpins. The pad was found and recognised. The hairpins and velvet were also found attached. The hair was found to be generally light auburn, and in some parts curly. Where it was in contact with the hairpins it was dark-red, probably from oxidation of the iron in contact with it. The hair was very fine. Under the microscope it was seen to be coated freely with granular material; the cortical substance was transparent, the medullary portion was broken up into irregular granular masses. It was very brittle and broke easily; the fractured ends could be seen sharply defined under the microscope. All the hair I examined—namely, that taken from the grave, the spade, the hatchet, and the body—corresponded perfectly in size, colour, texture, dryness, and granular covering. The question as to the effect of chloride of lime on the hair was asked of each medical witness, but we none of us could give any very definite opinions. I believe it could have had very little effect, as it is not a very easy matter to bleach even dark hair with chlorine, the hair having to be prepared, and the washing with chlorine having to be constantly repeated to be effectual.

6. *Feet and fingers.*—A boot of Harriet Lane's was produced which had evidently been worn on a rather long and slender foot. The boot measured nine inches extreme length, the feet on the remains measured eight inches and a half, and could undoubtedly be got inside the boot. The fingers would easily go into the rings which were found, but there were no marks on the ring finger. It was proved that Harriet Lane seldom wore the rings, as they were generally in pawn.

7. *The uterus.*—The condition of this organ was made much more of than its importance deserved. It is quite impossible to state with certainty that a uterus has been impregnated, as certain diseases in the virgin uterus might cause the post-mortem appearances to resemble in every respect that of an impregnated uterus. In this case it was found much decomposed and shrunken, as I have described to you. After soaking in spirit-and-water it enlarged to three times its former size; the texture became tougher, but the walls remained exceedingly relaxed and flaccid. It was both longer and broader than a virgin uterus is usually found. The os was transverse, and the neck protruded very little into the vagina. The walls were thin compared with the size of the cavity. In shape it was somewhat triangular, but was altogether in such a flaccid condition that very little reliance could be placed on its form. The strongest evidence I could give was, that my opinion inclined to the view that it had borne children, but it was quite sufficient for me to prove that the appearances were not inconsistent with child-bearing, and no one could controvert this.*

8. *The scar.*—This was the last and most important link in the chain of evidence supporting identification. I only found it while present with Mr. Aubin, who was examining the remains in the interests of the prisoner. I made one examination and one report only to the Treasury; the three subsequent examinations were made by request of and by appointment with Mr. Aubin. It had been stated by Mr. Lane that his daughter had a scar on one of her legs, but he could not recollect the position, or on which one. I therefore scraped away very carefully the chloride of lime and earth which thickly covered most of the body. I first examined the left leg, but discovered nothing excepting the dried patches on the skin which I have previously described, and one of which Mr. Aubin cut out subsequently, under the impression that it was a scar. On scraping the right leg, I found a scar exactly over the fibula, about four inches below the point of the knee. Mr. T. Allchin, a brother of my colleague, Dr. Allchin, has executed a most faithful drawing of the scar, which shows its character perfectly. The central portion was about the size of a shilling, rather elongated downwards and backwards. It was hard and fibrous, and one-eighth of an inch in depth. In front the skin was healthy, but much puckered; at the back it was white and smooth, similar to the appearance caused by the scar of a burn or scald, and extended nearly an inch beyond the fibrous portion. On finding this scar, Mr. Aubin, Mr. Larkin, and I agreed to inform no one of its position or character. The counsel for the prosecution was informed only that there was a scar, and he cross-examined all the witnesses separately, in perfect ignorance himself as to its locality or character. Each of the witnesses described in detail the appearances and exact position of the scar as I found it. This, gentlemen, I consider, would of itself have gone far to prove the identity of the remains with the body of Harriet Lane; but taken in conjunction with the other anatomical similarities, it makes one of the best-established cases on record of identity proved by medical evidence.



ROYAL COLLEGE OF PHYSICIANS.

AT a meeting of the College of Physicians held on Monday, Dr. Risdon Bennett was appointed to represent the College in conjunction with Dr. Pitman, and in place of Sir George Burrows, the President, prevented by illness from so doing, at the conference appointed to be held, at the request of the College of Surgeons, in reference to certain proposed alterations in the "Conjoint Scheme" for an examining board for England.

A report was brought up from the Leprosy Committee as a reply to a communication received from Lord Carnarvon, in which the College was requested to state whether the facts recently cited in a paper on Leprosy published in the *British and Foreign Medico-Chirurgical Review* were such as to incline the College to modify its already expressed opinion in reference to the contagiousness of the disease. The College, adopting the report, declared, notwithstanding the facts brought forward by the writer, that its opinion remained unaltered.

A report was also received from the Committee appointed to inquire into the Regulations of the College on the use of the title of "Doctor" by persons not being graduates in Medicine of a University. The discussion of this report was deferred till the next College meeting. The gist of the report was a recommendation that the present bye-law on the subject should be abrogated—that no fellow, member, or licentiate should be allowed to append M.D., or any initial letters signifying the same, unless he has obtained the degree from a body qualified to confer it; but that in all official documents or communications all fellows and members *might* be styled by the courtesy title of "Doctor." The report is likely to give rise to much discussion.

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* Mr. Larkin soaked portions of the abdominal walls, and found distinct traces of the lineæ albicantes.

THE LANCET.

LONDON: SATURDAY, DECEMBER 25, 1875.

It is difficult to confine within reasonable limits a summary of the history of Medicine even for a year. It includes, or may be made to include, so much. From a new result of the action of phosphorus to a new consequence of the action of passion; from the journey of a Prince through India to the procession of a group of hardy discoverers to the regions of the North Pole,—almost everything that happens nowadays may be shown to have medical interest. Medicine being no longer a mere curative art and "mystery" contemplating the recovery of a "few sick folk," but a science—taking cognisance of all the influences that conserve human life and health, severe in its methods, stern in its conclusions, inviting the criticism of men of science, and compelling the attention of statesmen,—it covers a field of inquiry of great variety and extent. It turns up everywhere—in laboratories and law courts, in State departments and in the hovels of the poor, in universities and in schools. In its larger scope it involves questions in sociology, in engineering, in meteorology, in legislation. It is the most human of all the sciences. It respects the epidemic that constitutes a national disaster, and the individual illness that gives anxiety to a family. The history of Medicine in the year that is now closing amply justifies the description we have given, as will appear in our summary. Briefly, the year may be said to have been remarkable, and not very friendly to life. The cold of the early part of it, and of the closing weeks of the previous year, affected very unfavourably the public health. In the week ending the 9th of January no less than 2296 deaths were registered. A long frost disappeared on Friday, Jan. 21st, after twenty-four days with an average temperature of 31° F., or 7·9 below the average for the corresponding week in fifty years. The cold continued to prevail far into the year, delaying the advent of summer. One of the most remarkable features of the year has been the floods which have occurred in this country and in various countries of the Continent, especially France, entailing direct loss of life, enormous inconvenience, and ulterior medical consequences which have yet to be described. It is probable that the mortality of the year, taken as a whole, will compare unfavourably with that of most years. As a consequence, medical practice has been arduous and laborious.

There has been no lack of interest taken, or diminution of activity displayed, in the proceedings of the Medical Societies during the past year. Their meetings have been most numerously attended; and the quantity of material provided has been, in most cases, more than sufficient to supply the wants of the meeting. The customary debate at the Pathological Society took place in the spring, when many nights were devoted to the question of the Germ Theory of Disease. The discussion was opened by Dr. Bastian in an exhaustive review of the whole subject, with the object of showing that the germ theory was inadequate to account for facts of contagious and epidemic diseases. He was immediately followed by Dr. Sanderson, who, however, did not enter into controversy, but contented himself with deprecating any discussion as premature. On the whole, the outcome of the debate was unsatisfactory; for the chief upholders of the theory attacked by Dr. Bastian were either timorously reticent or indifferent in the cause they had at heart. The example set by the Pathological Society was followed at the Obstetrical Society, where the subject of Puerperal Fever was debated for many months. The subject was introduced by Mr. Spencer Wells, who preferred to lay before the meeting a series of questions to be answered, rather than to commit himself to any dogmatic statements; and although the debate was enriched by the utterances of such leaders in the obstetrical world as Drs. Fordyce Barker, Arthur Farre, Barnes, and Braxton Hicks, the questions still remained open when the discussion closed. The growing tendency to discuss at length matters of pathological and therapeutical import has shown itself since the summer recess both in the Royal Medical and Chirurgical Society and in the Clinical Society. In the former, a historical review of Croup and Diphtheria, by Dr. Semple—with the object of showing the identity of the two affections,—led to a brief but instructive debate, in which Sir William Jenner, Dr. West, and Dr. Dickinson took part; with the result that a recommendation was forwarded to the Council of the Society to consider the expediency of appointing a committee to investigate this question. It will be remembered that the subject was brought to the front in our columns at the commencement of the year, and also debated at the Clinical Society on the occasion of a paper read by Mr. R. W. Parker, on a case of Scald of the Glottis. At the last-named Society, also, a brief and incomplete discussion on Antiseptic Surgery occupied one of the first meetings after the recess; a debate, however, which only served to show a want of sufficient appreciation of Mr. Lister's method and the desirability of its being more fully discussed. Turning now to the various papers read before these bodies, we may note many that will have a permanent value, and which show a distinct advance in medicine and surgery. At the Royal Medical and Chirurgical Society one of the largest meetings of the year was held on the occasion of the reading of a paper by the late Mr. Acton, on the Prevalence and Severity of Syphilis in the Army, with especial reference to the operation of the Contagious Diseases Acts; the opponents of these measures being represented by Drs. Birkbeck Nevins and Drysdale. Mr. Rivington communicated a remarkable case of Pulsating Tumour of the Orbit; Dr. Dickinson, a valuable contribution to the Pathology of Chorea, based on no fewer than seven post-mortem examinations. More recent, and still fresh in the memory of our readers, have been the papers on Aortic Aneurism in the Army, by Mr. F. J. Welch; and on Abdominal Section for Intussusception, by Mr. Marsh, Dr. Fagge and Mr. Howse, and Mr. Hutchinson, to whom indeed is due the credit of having been the first to draw attention to the feasibility of the operation. The Clinical Society was fortunate in hearing from its newly-elected President, Sir Wm. Jenner, an able address, dealing chiefly with the Etiology of Typhoid Fever; and among the notable papers of the year may be included one by Dr. Vivian Poore, on a case of Palsy of the Serratus Magnus; one on an unprecedented case of High Temperature following Injury to the Spine, by Mr. J. Teale; a report on Hydroa, by Mr. Hutchinson; and a case of Lymphadenoma, by Mr. W. Haward. At the Pathological Society a very large number of specimens have been exhibited, many of great interest and importance, which it would be impossible to enumerate here. Mr. Hutchinson's contribution on the kind of Teeth usually met with in Zonular Cataract deserves, however, special notice, as an illustration of careful clinical observation. At the Medical Society the Lettsomian Lectures were delivered by Mr. Maunder, who chose for his subject the Surgery of the Arteries. These lectures were fully reported in our columns, and proved a valuable contribution to surgical literature. Beyond the debate on Puerperal Fever, there has been nothing very worthy of note at the Obstetrical Society, which continues to be one of the most popular and practical of these assemblies. The institution of a course of lectures to be annually delivered before the Harveian Society will mark the year of Dr. Broadbent's presidency, and serve to indicate a growing activity in this body. The lecturer for this year was Dr. Sibson, who gave a full account of his observations upon Arterial Tension in Bright's Disease, with especial reference to the treatment of that disorder. On the whole, the past year has been a prosperous one with the Societies; and the amount of good work done by them shows that they still maintain the traditions of the past, as it is an earnest of what may be expected from them in the future.

The College of Physicians has passed through a somewhat uneventful year. Sir George Burrows was honoured by re-election for the fifth time to the chair of the College, on which occasion he delivered an animated address on Conjoint Schemes, physicians' fees, &c. The lectures of the College were very able. The Croonian Lectures by Dr. E. Headlam Greenhow constitute perhaps the most perfect statement extant of the state of our knowledge of Addison's disease. In the Gulstonian Lectures Dr. R. J. Lee discussed the urgent questions involved in puerperal fever. In the Lumleian Lectures Dr. Lionel Beale vindicated with characteristic earnestness his well-known views as to the absolute difference between vital action and action in non-living matter. According to a Return from the College to the General Medical Council, the number which passed its final examination for the licence last year was eighty-five. The licence is a double qualification, the only double qualification granted by a single body.

A review of the transactions of the Council of the Royal College of Surgeons of England during the past year affords satisfactory evidence that that body has been aroused to a sense of the duty it owes to the profession at large, and to its own fellows and members in particular. Since the close of last year many sound and radical reforms have been introduced. An Act of Parliament has been obtained to enable the College to join with other licensing bodies in conducting what is known as the "Conjoint Examination"—the one-portal into the ranks of the medical profession; and within the last few weeks the President of the College has issued an invitation to all the co-operating bodies to a conference to discuss the scheme. This conference has been held, but no final decision has been come to. What will be the ultimate issue of this last attempt to organise the Conjoint Scheme we cannot yet say; but the fact that the matter has been taken in hand by Sir James Paget, the present President, is very good evidence that it will be seriously considered, and not lightly laid on one side. If this endeavour prove unsuccessful, all hope of voluntary and amicable co-operation of the licensing bodies may be looked upon as lost. But although the College may find itself unable or unwilling to yield to the demands made upon it by the other co-operating bodies, the events of the past year are sufficient to show that the College may rise to a high and honourable career, and command the confidence and respect of all. It has at last been resolved to separate the examiners in Anatomy and Physiology from those in Surgery and Surgical Pathology; and this week the special examiners in Anatomy were appointed, and they will commence their duties at the January examinations. It is needless to observe that if the selection of the candidates for the post of examiners has been wisely made, and we think it has, the examinational tests at the College will in future possess a higher value and a more uniform character than they have hitherto had. Several things yet remain to be done to make the anatomical and physiological examinations at the College all that it is desirable they should be. The time devoted to examining the candidates should be extended, the system of marking should be altered, and what is of equal importance is that special examiners in Physiology should be appointed, and a special examination held. Respecting the anatomical examinations of the College, it is worthy of remark that Mr. John Marshall lately laid before the Council a scheme to institute a compulsory elementary examination in Anatomy at the end of the first year. Although this proposal appeared at first sight highly commendable, we felt bound, in the interests of medical education, to oppose it for reasons which we gave at length a few weeks ago. The changes that have been made in the constitution of the Court of Examiners will make themselves felt as much at the Pass Examination as at the Primary. During the year the Court of Examiners has been strengthened by the appointment of two surgeons of high repute and standing. Early in the year, Mr. John Cooper Forster, of Guy's Hospital, was elected an examiner in place of Mr. Hilton; and more recently, at the request of many influential members of the Council, Mr. Erichsen, of University College, accepted an examinership, on the distinct understanding that the separation of examiners should be at once effected, and that he should not be called upon to examine in anything but Surgery. It is scarcely possible to exaggerate the influence that these appointments will have on the value of the College diplomas. The Court of Examiners, with one or two exceptions, is now therefore made up of the very best surgeons in London, most of whom have enjoyed unusually large opportunities as teachers and examiners. The election of members to the Council was a spirited one, and attended with the happiest results. The three retiring candidates were Mr. Prescott Hewett, Mr. Birkett, and Mr. Spencer

Smith. All were candidates for re-election; but Mr. Cooper Forster successfully contested the election with Mr. Smith, who was defeated by a large number of votes, although he had polled an unusually large proportion of "plumpers." Two other important matters have occurred this year. In accordance with a proposition of Mr. Marshall, Mr. Le Gros Clark, the President at the time, presented to the Fellows of the College the first annual report of the transactions of the Council for the year. Lastly, Mr. Brudenell Carter, ophthalmic surgeon to St. George's Hospital, was appointed Hunterian Professor of Surgery, with the understanding that he should deliver a course of lectures on ophthalmological subjects. This appointment met with the approval of the Council, although the two Hunterian professors immediately preceding Mr. Carter were also surgeons at St. George's Hospital.

In the region of Medical Therapeutics it is not easy to give precise statements of the progress that is undoubtedly made from year to year. The reduction of dangerously high temperatures by cold water, variously used, continues to receive illustration. Our own columns have been the medium through which several cases of the kind have been made public; and in various articles we have expounded the success of continental physicians; particularly, in a recent number, we have directed attention to Professor Liebermeister's article on Typhoid Fever in the Cyclopædia of Medicine. The efficacy of ergot in cases of hæmoptysis was recently shown in a paper by Dr. James Williamson, of the Hospital for Consumption, Ventnor, detailing its effects in fifty cases. Dr. Wilson Fox reported in our columns, in July, the remarkable cure of a case of leukhæmia splenica by phosphorus; following, in this successful treatment, the example of Dr. Broadbent in a case reported in the January number of the *Practitioner*. Two cases of strychnine poisoning have been successfully treated, one with chloral and the other with chloroform. In the Radcliffe Infirmary, Oxford, under the care of Dr. Acland, a case of unilateral convulsions in a child was successfully treated by chloral, after the failure of iodide of potassium, belladonna, and other remedies. The chloride of ammonium was found very successful in the treatment of hæmatinuria, by Dr. Warburton Begbie. Dr. Johnston, of Shanghai, speaks very highly of the subcutaneous injection of atropine in opium-poisoning, in which his experience has been very large. We may note the experience of Dr. Spencer Thomson on the efficacy of Gelseminum sempervirens, or yellow jasmine, for the rapid relief of neuralgic pain; and that of Surgeon-Major Watson of boracic acid, as an application in ringworm.

It is with great pleasure that we hear the Physiological School of Cambridge, under the master-hand of Dr. Foster, one of the most able and energetic of the younger generation of physiologists, and who has thrown himself heart and soul into the good work, is thriving exceedingly. The teaching in practical physiology is here so good that it will soon be no longer necessary for a student to seek such instruction on the Continent, and we may hope, indeed, that some day the tide will turn, and French and Germans alike be attracted to our ancient universities for the best and most advanced physiological instruction.

The report of the Vivisection Committee has not as yet been published, but there is every reason to believe that it will result in the establishment of vivisection as a necessary means for the advancement of knowledge, when undertaken by competent men for definite objects, and with the avoidance of all unnecessary pain.

Although no startling discoveries have been announced during the year in the domain of Surgery, a retrospect of the literature of the period affords sufficient evidence that many investigators have been diligently pursuing their labours, and making important additions to the stores of surgical knowledge. Much valuable work has been done in the surgery of the vascular system. We may refer especially to Mr. Holmes's elaborate lectures on Popliteal Aneurism, and Mr. Maunder's Lettsomian Lectures on the Surgery of the Arteries, both of which were reported at length in our columns. Mr. Annandale, of Edinburgh, has successfully treated a case of traumatic popliteal aneurism by tying the popliteal artery and vein, and Staff-surgeon Walter Reid cured a case of popliteal aneurism by the application of Esmarch's bandage for fifty minutes. Mr. Frederick Ensor, of South Africa, ligatured simultaneously the right common carotid and subclavian artery for aneurism of the aorta and innominate artery. The patient did well for many weeks, but caught a severe cold by sitting in a cold room with only a night-shirt on him. Pleurisy supervened, and the patient died comatose on the sixty-fifth day after operation. Mr. John Gay has recorded a case of aneurism of the dorsum of the tongue, and a rare case of aneurismal tumour in the pharynx was recently recorded by Mr. John J. Barnes. Early in the year Mr. Marshall, of University College Hospital, published an interesting case of varicose veins cured by the removal of the trunk of the vein by dissection. In this case Esmarch's bandage was used to facilitate the operation, and the wound was subsequently dressed antiseptically. Mr. Callender effectually cured persistent neuralgia in a stump by dissecting out the end of the nerve, and stretching it. Mr. James F. West, of Birmingham, has had under his care a remarkable case of meningocele with spina bifida, and Mr. J. W. Dove has put upon record a case in which an iron staple weighing four drachms five grains was fixed in the œsophagus for more than six weeks. A valuable essay by Mr. Teale appeared in our columns insisting on the advantages of exploring the abdominal cavity in extreme cases of obstruction of the bowel in which the seat of obstruction is unknown. Mr. Hutchinson successfully performed abdominal section for intussusception in a child two years of age. Sir Henry Thompson has made some important and valuable contributions to our knowledge of stone in the bladder and of the value of lithotrity as a means of removing vesical calculus. In the early part of the year Sir Henry published the results of one hundred consecutive cases of stone in the bladder, the majority of which were treated by the crushing operation; and later on, in answer to a suggestion from Mr. Thomas Smith, he recorded the results of his inquiry into the condition of fifty-one of these cases of lithotrity in elderly adults, at periods varying from one to two years after operation. This careful and painstaking inquiry furnished overwhelming evidence of the great value of lithotrity in properly selected cases, and set at rest the doubts that had been very widely entertained respecting the ultimate value of the operation and of its advantages over lithotomy. It is interesting in this connexion to mention a series of thirteen consecutive cases of lithotomy, extending over twenty months, all ending in cure, by Mr. GEORGE HEATH, of Newcastle-on-Tyne, reported in our columns in June. Quite recently we have published some lectures delivered by Sir HENRY THOMPSON at University College Hospital, on urinary diseases. In these lectures a vigorous and well-timed onslaught was made on the purely mechanical treatment of urethral strictures, a treatment which Sir HENRY has shown to be founded on erroneous notions respecting the structure and calibre of the urethra. It is needless to say that within the limits of this condemnation the much-vaunted plan of OTIS was comprised. Mr. HENRY SMITH has recorded his later experience, which continues as favourable as ever, of the treatment of hæmorrhoids and prolapsus of the rectum by the clamp and cautery. The antiseptic system has come in for a large share of attention. Through the valuable papers published by Mr. LISTER in our columns, on the recent improvement in the details of this system, and through Mr. LISTER's demonstration of his method at the British Medical Association and at the Clinical Society, the subject has been brought very prominently forward. Bearing on the question of treating wounds, Mr. JONATHAN HUTCHINSON has described what he terms an antiphlogistic method of dressing operation wounds. This consists of applying over the wound a lotion composed of solution of lead with rectified spirits and water. Mr. HUTCHINSON speaks very favourably of this method, as tending to promote union by first intention.

We have been at no small pains to maintain the character of the "Mirror of Hospital Practice" as a repertory of interesting medical and surgical experience, special care having been taken to ensure accuracy of the records. It would be ungracious if we did not take this opportunity of expressing our indebtedness to the courtesy of the physicians and surgeons at the various metropolitan and provincial hospitals who have allowed us free access to their wards and cases, and have furnished us with material, and to the patience and co-operation of those clerks and dressers who have supplied us with facts concerning the history and progress of the cases. In the "Mirror" we have endeavoured to lay before our readers the mode of practice adopted at the various medical schools, and to set forth the doctrines and opinions held by those who are entrusted with the education of students, and into whose hands the maintenance of the honour and dignity of the science and art of medicine and surgery has been largely confided. Every department of practical medicine and surgery has been represented, and in those cases that seemed to call for it, an attempt has been made to enhance the value of the records by prefixing or appending short comments or clinical remarks. A brief summary will suffice to show the nature of the reports. A long and carefully prepared series of cases of coxitis was recorded from the practice of Mr. HULKE, of Middlesex Hospital, illustrating the mode of treatment of this disease in its various stages, the great advantage of early treatment by fixing the joint and exercising traction on the thigh being particularly referred to. Last week we published a remarkable case of dry gangrene of both legs that is at present under the care of the same gentleman. A case of suppurating synovitis treated by aspiration, in which recovery took place with a movable joint was recorded from the practice of Mr. JONATHAN HUTCHINSON at the London Hospital. Two cases have also been recorded in which loose bodies were removed by free incision antiseptically from the knee-joint. In both cases—one under the care of Mr. JOSEPH BELL, of Edinburgh, the other under Dr. WILLIAMS, of Middlesborough—the patients recovered with perfectly movable joints. From University College Hospital we recorded a case under the care of Mr. MARSHALL, in which death took place nine days after a fracture of the atlas; and from Mr. HUTCHINSON's practice a remarkable case of fracture of the spinal column at the fifth cervical vertebra, in which the temperature fifteen hours after the accident was 92°, but which went up to 106·3° just before death, thirty-eight hours after the infliction of the injury. A remarkable case was published from St. George's Hospital. A man sixty-four years of age was admitted with a large chronic ulcer of the leg. Mr. PRESCOTT HEWETT planted six skin-grafts on the base of the ulcer. All the plants took well, and rapidly grew, until they became about the size of a shilling, when a very curious phenomenon was observed. Each of the grafts softened in the centre, which became slowly absorbed, until only six whitish rings were left. Notwithstanding this central absorption, the rings extended peripherally until they met, and gradually extended to the sides of the ulcer, where they were lost. The same result took place in a second set of grafts which were derived from another person. From the Bristol Royal Infirmary Mr. CHARLES STEELE sent the notes of a case of hydrocele situated in the abdomen caused by an undescended testicle. Dr. MACKEY, of the Children's Hospital, Birmingham, supplied us with the notes of a case of intussusception of the bowel in a child. Although the case terminated fatally, and no operation was performed on account of the child being actually moribund when admitted into the hospital, the post-mortem examination showed that if the abdomen had been opened during life there would have been no difficulty in reducing the intussusception, as there was scarcely any inflammation, and the strangulation was not tight. From Mr. SYDNEY JONES's practice at St. Thomas's we published the notes of a case in which gastrostomy had been performed for cancerous stricture of the œsophagus. Unfortunately, the patient died on the fortieth day after the operation from bronchitis. The following are a few of the more interesting medical cases recorded in the "Mirror":—Acute Rheumatism, with carditis; administration of large quantities of alcohol (twenty-four ounces in twenty-four hours); recovery; under the care of Dr. WILSON FOX. Exophthalmic Goitre, associated with diabetes, under the care of Dr. WILKS; and a remarkable case of Iodism, in which tracheotomy was performed, under the care of Dr. FENWICK, of the London Hospital. Hæmorrhage into the Pons Varolii, under the care of Dr. CRICHTON BROWNE, of the West Riding Asylum. Lastly, notes on the Treatment of Syphilitic Headache and

Insomnia by small and frequently-repeated doses of Calomel, by Dr. Peter, of Paris.

In our Review columns we have striven to indicate what we considered the best sources of information, whether English, Continental, or American, to keep our readers *au courant* with the progress of scientific and literary work, giving the most prominent place to medical and surgical books. Without restricting ourselves exclusively to these, we have been enabled to introduce some variety into this branch of journalism. A considerable number of new works or of new editions of old works on anatomy and physiology have been published in the course of the year. Amongst the more important of these is the translation by Dr. Gamgee of the Elements of Human Physiology by Prof. Hermann, a work that is well adapted to form a text-book for advanced students, or as a foundation for lectures, but it is somewhat too condensed in style for beginners. It is, however, a thoroughly reliable book. Dr. A. E. Barker has done good service in rendering into very readable English the important work of Frey on the Histology and Histo-Chemistry of Man, a work containing much original research, and enriched with many illustrations. The same may be said of Messrs. Bennett and Thiselton Dyer's translation of Julius Sach's Text-book of Botany, the finest work that has appeared in this department of biology for many years past, and one that contains a large amount of material not readily accessible even to the professed botanist, arranged in excellent form. Dr. Amory has translated a small work on Physiology, by Küss, the talented Professor of Strasburg, too early lost to science, which, with some faults in the perspective of the subject, possesses much originality in its treatment. New editions have been published of the larger Human Physiology of Dr. Carpenter and of Dr. Dalton, both of which appear to be well worked up to the present state of physiological knowledge. Dr. Flint has completed his valuable Treatise on Physiology by the publication of the fifth volume. The eighth edition of Quain and Sharpey's Anatomy has been brought out under the editorship of Dr. Schafer. Amongst foreign works on this subject we may mention Brücke's Vorlesungen, or Lectures on Physiology, which proves somewhat disappointing, considering the high renown of the author as a teacher; Beauni's Nouveaux Elémens de Physiologie Humaine and Budge's Compendium de Physiologie Humaine, from a perusal of which those of our junior readers who may not happen to be very familiar with French, or who may be desirous of keeping up their knowledge of that language, will derive both pleasure and profit. The vigorous though heretical treatise of Ernest Haeckel, entitled the History of Creation, for some of the statements in which the book assuredly, and probably the author, would have been burnt a few centuries ago, has been translated by a lady and revised by Dr. Ray Lankester. In connexion with this may be mentioned, as having a similar tendency, the Doctrine of Descent and Darwinism, by Oscar Schmidt, which has been published in the semi-popular international series of Henry King. Both authors accept without the smallest reservation Darwin's views; Haeckel, indeed, regards him as the Newton of biology, everywhere speaking of him with the most profound reverence. A rather large work on Heredity, by Ribot, is, as is almost every work bearing, however remotely, on biology, strongly tinctured with, and perhaps it may be said, is even based on, the doctrine of Descent with modifications. Amongst the works devoted to special branches of biology we may refer to Dr. Klein's valuable investigations on the Lymphatic System and the histological characters of Sheep-pox, the last-named memoir furnishing sufficient evidence of how large a field is open to practised microscopists in supplying definite information on the etiology and pathology of ordinary processes of disease. Dr. Balfour has followed up the excellent work on Embryology he wrote in conjunction with Dr. Michael Foster by further researches on the Embryology of the Sharks, which contain the record of facts he has observed that have an important bearing on the mode of origin of the several tissues. Vulpian has published an excellent series of lectures on the Vaso-motor Apparatus. Some valuable memoirs on Anatomy and Comparative Anatomy have appeared in the three volumes of the "Encyclopædia Britannica" just issued, by Professors Huxley, Turner, M'Intosh, and others. A useful treatise on Elementary Biology has been issued by Professor Huxley and Dr. Martin of Cambridge, and a serviceable work on Practical Histology by Professor Rutherford, the object in both instances being to show how easy it is to follow in practice what appears at first sight difficult and unintelligible. Murchison's Functional Derangements of the Liver, Balthazar Foster's Clinical Medicine, Dr. Loomis's Lectures on Diseases of the Respiratory Organs, Heart, and Kidneys; the West Riding Lunatic Asylum Reports, edited by Dr. Crichton Brown; several important works, some of them Dictionaries, German and French, on Practical Medicine and Therapeutics; Dr. Dickinson's first part of Diseases of the Kidney and Urinary Derangements; Dr. Hayden's Diseases of the Heart and Aorta; Greenhow's Croonian Lectures on Addison's Disease; and last, but probably first in point of importance and utility, an English translation of Dr. H. von Ziemssen's Cyclopædia of Practical Medicine. In addition to several foreign encyclopædias and works on surgical subjects, Sir James Paget has given to the surgical world his experience in the shape of Clinical Lectures and Essays, Mr. Erichsen his experience on Concussion of the Spine and other obscure injuries of the Nervous System, and Surgeon-Major Porter his prize essay on the Best Treatment of Wounded in War. In Pathology and Morbid Anatomy we have had new editions of Dr. Wilks's admirable Lectures on Pathological Anatomy, edited by Dr. Walter Moxon; Jones and Sieveking's Manual, edited by Dr. Payne, and a third edition of Dr. T. Henry Green's capital little Introduction to the same subject. In Diseases of Women and Children the year saw the appearance of the fourth edition of Dr. Gaillard Thomas's very practical treatise, and the sixth edition of Dr. Churchill's work on the same subject; and, among other works on Midwifery, a second edition of Leishman's System has but recently appeared. In Ophthalmology, we would mention Mr. R. Brudenell Carter's Practical Treatise on Diseases of the Eye as a book written with a refreshing clearness of expression and directness of aim; and Macnamara's Manual has been translated into Bengali. ATTFIELD'S Chemistry, WATTS'S Dictionary of Chemistry and the Allied Branches, BRANDE'S Dictionary of Science, Literature, and Art, with some others of a similar character, have appeared; BROWN'S Manual of Botany, PERERIA'S Elements of Materia Medica and Therapeutics, abridged by BENTLEY and REDWOOD; the parts already published of Medicinal Plants by BENTLEY and TRIMEN; CAMERON'S Manual of Hygiene, and WEINHOLD'S very admirable Introduction to Experimental Physics have been favourably noticed in our columns. LUBBOCK'S Origin of Civilisation has reached a third edition; FRANCIS GALTON'S work on English Men of Science, their Nature and Nurture, is an interesting, very difficult, but, on the whole, disappointing study as elaborated by its author. Dr. TILBURY FOX has brought out several parts of an Illustrated Atlas of Skin Diseases, which promises to be of much general utility; and —— but it would be impossible to extend our notice, already beyond our limits, or proceed further with the list of books more or less noteworthy that have appeared in 1875.

Dr. MAUDSLEY has placed upon record a remarkable instance of a lunatic, who, upon two separate occasions, was apprehended and imprisoned for robbery. The unfortunate man was known to be the victim of general paralysis, and had been ordered to the seaside to be under the care of his wife. He escaped from her custody, and committed robbery in a railway carriage, and, being tried at Doncaster, was, in spite of the testimony of Dr. MAUDSLEY, Dr. CRICHTON BROWNE, and others, sentenced to imprisonment. On the urgent representation of his friends, however, he was liberated, but, owing to a strange laxity on the part of the authorities, he was not placed in safe custody, and within a few months he again escaped from his friends, again committed robbery, and again was apprehended by the police. He was then removed to the county asylum, and has since died.

The Judge of the Marylebone County Court, in the case of a disputed charge for medical attendance, has decided that three guineas per diem is not an excessive charge in cases where the attendance (by a general practitioner) is constant. The case in dispute was that of a child upon whom tracheotomy had been performed, and the practitioner was proved to have scarcely left his patient for 130 hours. The child recovered, mainly, as it was proved, through the unremitting attention of the practitioner, and a charge of seventeen guineas was made and readily allowed by the Judge.

There has been no remarkable case of poisoning during the year; but the death of Mrs. CHILDERS from an overdose of chloroform, which she administered to herself, has directed attention to the growing custom among sufferers of all kinds of indulging to a dangerous extent in the use of narcotic medicines. Chloral, chloroform, morphia, and hypodermic syringes seem to be about to take a recognised position on the toilet-table—a condition of things which cannot but become a source of much misery to those who are unable to bear up against a little pain or annoyances of other kinds.

Drunkenness, too, has occupied a good deal of the attention of the profession, and Mr. CARSTEN HOLTHOUSE has done good service in directing attention to the necessity of providing suitable homes and asylums for those who are the victims of dipsomania.

Mr. SEYMOUR HADEN, by a series of eloquent letters in *The Times*, has drawn public attention to the subject of burial. He proposes to do away with the expensive barbaric pomp which is even now still observable at many funerals, and to bury the dead immediately in the earth, without the intervention of impermeable coffins, which merely serve, as he justly points out, to retard the inevitable decomposition which must ensue.

An attempt has been made this year by the Government to redeem the pledge made to the country that sanitary legislation should be made one of its first objects. We say an attempt has been made because none of the measures brought forward have appeared to be earnest endeavours towards remedying the many evils against which they were specially directed. Still an advance has been made, and, thankful for small mercies, we must be glad that the steps taken have not been retrogressive. The boast, made by Mr. CROSS, that the sanitary work of the Government would be conceived and furthered with due regard to its gravity and complexity, is sadly at variance with his later utterance, that nearly all that can be done in the way of sanitary reform is to remove legal obstacles, and help the masses to help themselves. We need hardly remark that the passing of Acts of Parliament to facilitate the mere ordering of public and social affairs is not legislation. The most prominent, and, taken altogether, the most important measure of the Session was Mr. CROSS'S Bill for the improvement of artisans' dwellings. It is to be regretted that the Bill only took cognisance of towns—that is, towns of 25,000 inhabitants and upwards, while in rural districts landlords are still allowed to build houses, if they choose, in defiance of all the laws of hygiene. And, as the law at present stands, it is possible that, in the case of rapidly increasing towns, all buildings might be so badly constructed that when the number of inhabitants reached 25,000 the urban sanitary authority might be obliged to step in and order the destruction of the whole place. The Pollution of Rivers Bill, introduced by the Marquis of SALISBURY, met with such determined opposition in Committee that the Government resolved to withdraw it. This measure was altogether unsatisfactory, unjust, and mischievous: unsatisfactory because a larger and more comprehensive measure was expected; unjust because it dealt unequally with individual interests; and mischievous because it discouraged sanitary authorities from attempting to solve for themselves the problem of sewage disposal. The Sale of Food and Drugs Bill, introduced by Mr. SCLATER-BOOTH, was weakened by the number of exemptions introduced, which rendered the chances of escape of a fraudulent tradesman by no means few. Indeed, the fifth and sixth sections seem specially framed to enable the vendor to wriggle out of a conviction.

The preparation and successful carriage through Parliament of the Public Health Act, 1875, was the most notable work of the Local Government Board during the year on the sanitary side of the administration. By this Act the numerous Sanitary Acts then in operation were consolidated, and in some respects amended. The work of amendment was, however, quite subsidiary to the work of consolidation, and for the most part only carried so far as to remove certain defects impeding the operation of the existing law. By this consolidation of sanitary law certain great advantages have been obtained. First, it is no mean advantage practically to have the existing law within the compass of a single Act of Parliament, notwithstanding its bulkiness. But such evils as may attach to bulk have been in effect narrowed by the admirable arrangement of the Act. Next, the consolidation admits of the existing law being more readily studied, with reference to such further amendment as was required, as a whole. Although, from the nature of the subject, having now effected a consolidation, we must begin to tag to the consolidating Act a fringe of amending Acts, these need not be of the patchwork and badly fitted character which has hitherto distinguished amending Sanitary Acts. It may be possible now to draft such Acts so as to enlighten and not obscure existing law. The Public Health Act, 1875, is indeed a great gain, and the Local Government Board deserves and will receive much credit for it. But hardly has the Board achieved this work before it proceeds, so far as itself is responsible for the administration of the Act, to render it foolish. Among the amendments contained in it is one (Section 286) giving power to the Local Government Board to unite districts for the appointment of medical officers of health. This provision, although directly contravening the avowed policy of the Board, was felt to be requisite in order that the Board might have some chance of escaping from the muddle of administrative futilities into which it had blindly plunged in its administration of the Public Health Act of 1872. But the Board has used its lately acquired additional power simply to make confusion worse confounded. It has endeavoured and is endeavouring to put the power into operation by promoting combinations without any rational reference to the duties to be performed in them. Indeed, it avows that it would never seek to define the duties until the combinations were made; and is no doubt, as are its inspectors, surprised to find that local authorities very generally object to pay for "a fancy article" in medical officers of health.

Our Commission has been engaged on two important inquiries during the past year—the Sanitary Condition of our Public Schools, and the Management of the Public Lunatic Asylums. With regard to the former, it was felt, after the revelations made by our Commissioners last year, with respect to the disgraceful sanitary condition of the two chief universities, Oxford and Cambridge, and the death from fever of several of the undergraduates, that a visit to some of our chief public schools would not be without benefit, and that any definite suggestions our Commissioners might be able to make for the better protection of boys against the introduction of zymotic diseases would be of service to the governing bodies. The fact that during the present year we have had to record three severe and extensive outbreaks occurring at three different scholastic institutions—namely, Mr. Müller's Orphanage, Bristol; the *Cornwall* training-ship, and Uppingham School—shows the necessity for establishing some very distinct regulations for the protection of schools against the introduction of epidemic diseases. The inquiry extended over the following subjects:—1. The connexion of the school with the town. 2. The precautions adopted to prevent the introduction of infectious diseases into the school. 3. The measures taken to isolate cases in the event of an outbreak occurring. 4. The general sanitary arrangements with respect to waterclosets, cisterns, waste-pipes, &c. 5. The relative proportion of working to playing hours, and what supervision protects the weak and delicate from engaging in too much mental or physical exertion. The schools as yet visited have been Eton, Winchester, Harrow, Rugby, Marlborough, Shrewsbury, and the "Royal Medical College" at Epsom. Reports on most of these have already appeared in our columns, and the remainder will be completed during the ensuing year. Our Commissioners have been pleased to find that no case of wilful neglect could be brought against any of the schools visited. The domestic arrangements in every case were excellent, and attempts had been made to keep pace with the sanitary requirements of the day. It was interesting, however, to observe how these varied at the different schools. At Marlborough and Rugby, where the medical attendant is responsible and consulted by the governing body, the arrangements were complete, and left little to be desired. At Shrewsbury also, which has the advantage of having Sir James Paget as a member of the governing body, the sanitary details were in thorough order. At the older schools, Eton, Harrow, and Winchester, which ignore the services of the medical man, except in cases of illness, and which employ no system whatever of medical supervision, matters were not so satisfactory, and much remains to be done to render their arrangements complete. We need hardly say there is little use in entering on extensive schemes of sewage-disposal or water-supply if at the same time no system is adopted by which disease can be discovered and isolated when imported into the school on the boys' return from the holidays. This supervision ought also to be extended to the examination of the boys, even whilst in reputed health, at frequent intervals during term time, for in this way acute diseases may be earlier detected and checked by treatment, the more insidious forms of chronic disease brought to light, and the influence a boy's work in school or in the playground is having on him, can be registered. The medical attendant of a school holds as important an office as the head-master; and, whilst the latter is responsible for the boys' moral training, the former should have the sole responsibility of his physical well-being. The purposes of our inquiry into the management of Lunatic Asylums are to ascertain the general character and efficiency of the provisions made for the insane in asylums and the conditions of their daily life, to discover the measures, and, as far as possible, to formulate the treatment, adopted for the cure of remediable or recent cases, and the means of relief for incurable or chronic cases. We believe this inquiry will help to furnish the profession with the much-needed data for personal opinion on many urgent questions relating to the treatment in public and special institutions of patients labouring under the various forms of mental disease. It should also contribute to the sum of evidence required to determine moot points with respect to the diverse methods of treating insanity, and it may do some service by exposing and thereby removing and redressing grievances affecting the insane. The asylums visited and reported on have been Brookwood and Hanwell: others will follow, and next year we hope to show that the objects above indicated have been fulfilled. Our Sanitary Commission have also issued reports on other subjects of interest. In April, in consequence of a statement of Lord Robert Montagu, "that Folkestone might be matched with any town in England for pestilential holes, from which scarlatina and fever were never absent," our Commissioners visited the town, and were able to report that there was nothing in the present condition of Folkestone to excite alarm, and that the town at the time was perfectly healthy; they made a few suggestions, chiefly with respect to the water-supply, which was without doubt the weak point in the sanitary arrangements of the town. Reports also have appeared in connexion with our Commission on the Dwellings of the Poor, which have acquired an additional interest from the passing of the Artisans' Dwellings Bill. The buildings of the Improved Industrial Dwellings Company were selected for inspection, as representing the class of building which is most likely to return a dividend at the least expense to the occupiers. These buildings were found immeasurably superior to the ordinary dwellings which artisans are usually compelled to inhabit, although we were obliged to criticise one or two minor points in the sanitary arrangements. In concluding this notice of the work done by our Commission, we must advert with some satisfaction to the labours of the past. The authorities at Cambridge have consented at last to appoint a medical officer of health for the town. At Oxford we understand efforts are being made to improve the water-supply and divert the Hincksey sewage from contaminating it. The Brentford pauper children are removed from their dismal quarters; the Knightsbridge Barracks have solved the question of removal and restoration by their own decay; and the huts on Woolwich Common have been removed.

We are pleased to record that, after a lapse of three years, Mr. Simon's Sanitary and Scientific Reports once more make their appearance. Their suppression in the first instance must remain a permanent stigma on Mr. Stansfeld's administration, for all sanitary workers had been accustomed to look forward to them as giving the most accurate and advanced information on points connected with sanitary medicine. The present volume commences with an able article from the pen of Mr. Simon on Filth Diseases and their Prevention; then follow a series of admirable reports for the four years 1870 to 1873, from the medical inspectors, of outbreaks of fever in different districts throughout the kingdom. Among these we must distinguish Dr. Buchanan's report on the Outbreak of Enteric Fever at Caius College, and that by Mr. Netten Radcliffe and Mr. W. H. Power, as being especially able and interesting. The volume concludes with a report by Mr. Netten Radcliffe of an inquiry concerning the Prevention of Excrement Nuisances in Towns and Villages. This report is a valuable contribution to sanitary literature, and is a complete and exhaustive inquiry into probably the most abstruse problem concerning ourselves and our immediate successors. The medical inspectors have gained a high place in the estimation of the public, and the volume shows that it is not their fault at least that sanitary reform still lags behind. If their counsel and opinion were sought and attended to by those in authority, sanitary legislation would no longer be incoherent and ineffectual. The causes of preventable diseases are now so well understood and explained, that the responsibility rests with the public and the Legislature if they omit to carry out the means indicated to eradicate them.

The enormous number of steamships of large tonnage consequent upon the trade to India, China, and Australia, through the Suez Canal, and the great increase of first-class Transatlantic travelling, has at length compelled the Marine Department of the Board of Trade to look somewhat closely into the qualifications of medical men who offer themselves for service afloat. As it was found by a Parliamentary return published in June last that of those who signed articles, many were unregistered, and some unqualified, a circular order has been issued, directing that none but surgeons registered under the Medical Act are to be permitted to do duty afloat. The machinery for carrying out this order is, however, as yet very imperfect as regards vessels other than emigrant ships, but there is no doubt that the tendency of the movement is to raise the status, and by consequence the pay and position, of men attached to the Marine Medical Service. The Board of Trade has during the year issued revised scales of medicines and medical stores for the use of emigrants afloat. These were much needed, as the old scales were antiquated in a superlative degree. But the authorities at Whitehall have, during the past year, done literally nothing in the way of helping the shipowner to procure sound and healthy vital material wherewith to man his ships. So much time is taken up with "Plimsollian" proclivities, that Sir Charles Adderley and the member for Derby are entirely oblivious of the fact that, however seaworthy vessels may be, they will and must be lost if insufficiently or inefficiently manned. Rotten seamen increase in numbers year by year, and the official inquiries held lately on account of outbreaks of scurvy show that a large proportion of men shipped abroad are physically unfit for any sort of work afloat. An unusual number of cases of scurvy have occurred, caused chiefly by carelessness in serving out the lime-juice, and in two cases out of the ten investigations held this year the master was convicted and very heavily fined. Until, however, the provisions of the 10th section of the Merchant Shipping Act, 1867, are made obligatory instead of, as now, permissive, ships and valuable lives will continue to be lost at sea.

Port sanitary work progresses steadily, but no importation of epidemic disease has occurred either in London or at any of the outports. The school-ship *Cornwall*, moored in the Thames, has suffered from a very severe outbreak of enteric fever. About 90 per cent. of the ship's population were affected, and the cause appears to have been partly due to the faulty mode of conveying the drinking-water from the shore to the ship. This outbreak and others (ophthalmia and scarlatina) that have occurred during the past two years show pretty clearly that if school-ships are to be continued and, as is reported, increased in number, some definite system should be adopted, both as to their fittings and special sanitary arrangements. At present, no two school-ships in the United Kingdom are arranged alike; and skilled official supervision at the time that these ships are being fitted for their occupants is very much needed.

The principal matters of note during 1875 in regard to Epidemiology were the appearance of cholera in Syria, and the further development of plague in Mesopotamia. Cholera broke out at Hamah in Northern Syria some time during the first quarter of the year, and subsequently extended over a large district, spreading into Karamania in the north and Palestine in the south, attacking all the principal ports, from Alexandretta to St. Jean d'Acre, on the seaboard, and visiting Damascus and the Haman in the east. The disease, moreover, passed the Euphrates into the pashalek of Diarbekr. In Damascus, Aleppo, Antioch, &c., the malady was very fatal. The origin of this outbreak, still not extinct, is obscure. Cholera had been in existence two months at Hamah before the nature of the disease was discovered, and no inquiry deserving of the name has as yet been made into the antecedents. Plague, which had shown itself on the Lower Euphrates among the Afij Arabs the preceding year, appeared again early this year among the Arab tribes living lower down on both banks of the river. In this outbreak the disease manifested considerable intensity, and was very fatal. It affected the district lying between Diwanieh and Samara, and extended from the Tigris on the east to the Sea of Nedjef on the west. Of the several developments of plague since its reappearance in Mesopotamia in 1867, this was by far the most extensive and fatal. Comparing the several appearances of the disease, in the Hindieh marshes (Babylonia) in 1867, in Persian Kurdestan in 1870-71, on the Lower Euphrates, in the district of Benghazi (regency of Tripoli), and Eastern Arabia, in 1873-74, this later appearance on the Lower Euphrates suggests that the disease is gaining strength in each successive development. Into Fiji, just after its annexation to England, measles was imported, and caused enormous mortality. At home the chief points in epidemiology have been the prevalence of scarlet fever, whooping-cough, and measles, which still figure largely in the Weekly Returns of the Registrar-General.

As regards the Public Medical Services there has not been much to record. The Indian Medical Service still holds, and most deservedly so, the first place in the estimation of the profession, and in popularity with the younger members of it. It may not be all that it once was, but it still remains a fine service. Everything is relative in a matter of this kind, and we have only to compare the Indian with the British Medical Service to discover how great the difference in favour of the former service is: the pay and position are better; the country affords scope for the exercise of varied talents and attainments, and there is every chance of merit coming to the front. We wish we could say something in favour of the medical service of the British army at the present time, or prophesy smooth things in regard to it. The year 1875 will be chiefly remarkable for the flood of pamphlets, letters, &c., on the organisation and state of the Army Medical Service. The abolition of the regimental system was unpopular. We never expected it to be otherwise; but we hold that if the medical service is to become professionally efficient, progressive, and respected, it must be emancipated from that narrow system on which it has been moulded in the past. The whole organisation of the army is changed or changing, and the sooner the authorities have made up their minds definitely as to the future organisation of the medical service the better, for a feeling of insecurity seems to have run through it from top to bottom. Only the other day a professor of medicine, in opening the session of the Royal College of Surgeons, Ireland, publicly warned medical men against the army, in one of the most outspoken and well-considered addresses which we have yet read on this subject. The year closes with the usual advertisement announcing the next competitive examination for entrance into this service. As soon as the just and well-founded grievances are redressed we shall be prepared to advocate its claims, and not before. Meanwhile, let those who are thinking of entering it pause and peruse Dr. LITTLE's remarks in the address to which we have referred. Turning to the Navy, we have no hesitation in declaring that at the present time a medical officer would be better off in that service than in the army. Mr. WARD HUNT has had his share of abuse in other directions, but in this he deserves great credit. Once a service has got a bad name it is long, very long, before confidence is restored, and the Admiralty is still suffering for its past sins. We are utterly opposed to a practice of abusing Government services simply because they are Government services. We take it to be the duty of the journalist to bring judgment, fairness, and a sense of responsibility to the work of advising young men in the choice of their career, and to recognise any desire on the part of the Government to deal fairly with their servants. The navy then is, to those who have no aversion to a life at sea, a good service for medical men, and a far better one than it ever was before. Now that a knowledge of natural science and biology is more generally diffused, it affords scope, too, for the prosecution of scientific researches in these directions.

The General Council of Medical Education and Registration met in June under the Presidency of Dr. ACLAND, the successor of Dr. PAGET, and a passing tribute of gratitude as well as of respect is due to the late President for the courteous and genial as well as able manner in which he discharged the duties of his high and responsible office. Dr. ACLAND gave an opening address, in which he briefly reviewed the events of the past year, so far as they related to the proceedings and action of the Medical Council. He referred to the Bills of Sir JOHN LUBBOCK on the Conjoint Scheme, and to Mr. COWPER TEMPLE's Bill for the Registration of Women to whom licences to practise had been granted, to the Reports of the Visitors of Examinations, and to the large subjects of scientific education and the improvement of the public health. Various questions of interest were discussed by the Council. The importation of Dr. ROLLESTON into the Council gave additional interest to some of its debates. The Conjoint Scheme met with little attention, and those who still continued to believe in it were in a minority, and looked upon as men of great faith. The two subjects which occupied most of the time of the Council were the Reports of the Visitors of Examinations, and the question of the Medical Registration of Women. The Reports of the Visitors of Examinations were then read, which included those of the Universities of Oxford, Cambridge, Durham, Edinburgh, Aberdeen, St. Andrews, and Dublin; those of the Colleges of Physicians and of Surgeons in London, the Colleges of Physicians and of Surgeons and the Society of Apothecaries in Dublin. The Reports on the Medical Examinations of the Universities of Oxford, Cambridge, Aberdeen, and Edinburgh were favourable, the only point noted by the Visitors of the University of Oxford being the absence of dissection, in regard to which some difference of opinion was expressed by members of the Council, some thinking it of importance, others regarding it as an unessential part of the examination. We can entertain but one feeling in regard to it, having always insisted upon the necessity of such dissection as the best means of enabling a correct judgment to be formed by the examiners of the knowledge of the candidate in this subject, which, as Professor Huxley has said, is the one thing that is well and thoroughly taught in our profession. The remarks of the Visitors in their Report on the University of Aberdeen raised the question of examinations being conducted by the teachers of the same or of other schools; and the different views were acutely expressed by Professors Turner and Rolleston, the former maintaining that a man who selected his wife from a family with the members of which he was well acquainted was more likely to be well suited than he who took one at a garden party, whilst Dr. Rolleston compared teachers examining their own pupils to men auditing their own accounts. Perhaps a compromise is the best means of settling this point, the board of examiners in every case being partly composed of the teachers and partly of extraneous elements. The Report on the University of St. Andrews led to some severe criticism, Sir D. Corrigan going so far as to ridicule the idea of registering the medical degrees given by this University, since there was no infirmary, no dissecting-room, no chemical laboratory, and no medical students, rendering it impossible that an *annus medicus* could be kept. There can be no doubt that if this University is to continue granting degrees some material alteration must be introduced into its method of examination. The examination at the Royal College of Physicians of London also came in for some caustic remarks from Sir William Gull. The action of the General Council in the case of this College and in those of the College of Surgeons, the University of St. Andrews, and the Apothecaries' Hall of Ireland, in all of which serious defects were noted by the Visitors, was marked by singular inconsistency; for whilst, in the former, as well as in several other cases, the Council passed a resolution calling attention to the faults of the examination, it declined to do so in the case of the latter. Upon the whole, we cannot doubt that these visitations are of immense importance, and we sincerely trust that they will be continued from time to time by the Council, the Visitors being in all instances directed to report without previous communication with the examining body. This at least is certain, that great improvement has resulted in many instances in the character of the examination when the attention of the more sensible members of a licensing body has been directed to glaring defects.—The question of the registration of women was raised in the Medical Council by nothing less than a letter from the Lord President of the Privy Council, asking the General Council's opinion not only on Mr. Cowper-Temple's Bill for the Registration of Women with Foreign Medical Degrees, but on the general question, "whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men, as a profession and means of livelihood." Mr. Simon, speaking for the Lord President, added: "I am to say, that as Government may have to express an opinion on this general question, with regard, on the one hand, to women who desire to obtain legal status as medical practitioners in this country, and on the other, to the examination rules or conditions which prevent them from accomplishing their wish," his Grace would be glad of any observations with which the Medical Council might see fit to favour him. There has not been such sensation produced in the Council as this letter caused since a former letter by the same amanuensis, on the absurd system of half qualifications, which, however, still survives. Our readers are familiar with the answer made by the Council as regards the admission of women to the Medical Register. Dr. Andrew Wood, in that direct and outspoken style for which we all like him, wanted to return a decided negative to the question of the admission of women, but the majority of the Council thought it best to content themselves with replying that "the Medical Council are of opinion that the study and practice of medicine and surgery, instead of affording a field of exertion well fitted for women, do, on the contrary, present special difficulties; but the Council is not prepared to say that women ought to be excluded from the profession." Having declined to say that women should be excluded, it went on to say that if it should appear to the Government and the Legislature that women should obtain a legal status, then, in the interests of public order, their education and examination should be conducted entirely apart from those of male students. In short, the Council leaves the responsibility of admitting women to the profession where it should be left, with the Legislature, only protesting against an education in which the male and female students would study together. The other questions discussed by the Council need not detain us here.

The meeting of the British Medical Association took place in Edinburgh in August, and of course was a successful one. The Edinburgh school acquitted itself in a way worthy of its fame. Dr. Begbie's Address in Medicine was very learned and able, consisting mainly of a comparison of modern and ancient medicine, and erring, if in anything, in too modest an estimate of the modern art of which he is so worthy a representative. Sir Robert Christison defended, with his usual boldness and vigour, the existing system of education by lectures and of examination by nineteen bodies. He strove hard to reverse the general opinion that this system is not satisfactory. Professor Lister gave demonstrations of his Antiseptic System, which impressed hitherto doubting minds, and Professor Spence showed that it was possible to get very good results without the antiseptic system. Pending the settlement of the question of the admission of women to the profession, the "powers that be" of the British Medical Association had quietly settled the question of their admission to the Association in their favour, and papers by one or two ladies were announced. This gave rise to a warm discussion, ending in a resolution that the opinion of members be taken on this question before next meeting.

It is always the most painful part of our duty to record the death of members of our own profession. There has been nothing so sadly premature, perhaps, this year as that of Dr. Anstie in 1874, but a few names of those who have left us will indicate that our loss has been great:—Kiernan; Surgeon-General O'Flaherty; Robert Adams, of Dublin; Deputy Inspector-General B. T. C. Scott; James Dawson, Wray Castle, Windermere, M.R.C.S. 1806; Thomas Paget, of Leicester; Dr. George Robinson; D. P. Evans, M.B., of Belper; Professor Oswald Home Bell, of St. Andrews; M. Demarquay; J. F. Clarke; Dr. Peter Mere Latham; Sir Charles Locock; John Hughes Bennett; Wm. Hey, of Leeds; M. Duchenne; M. Lorain; John Hamilton, of Dublin; Geo. Allarton; Dr. Maunsell; Henry Ashton; to say nothing of numerous other practitioners who have died in the midst of active duties of general practice. When we think of the acute intellects that were once represented by some of the above names, and then consider that all their contributions to medicine and science are over, we may at first feel sad; but our sadness is qualified by considering the immortality of much of the work they have done, and by the perpetuity of the influence which they have impressed on their successors. We cannot in this connexion forbear one word of respect to the memory of John Churchill, not himself a member of the profession, but once the publisher of The Lancet, and pre-eminently the publisher of the profession.

There are various events of a somewhat miscellaneous character which should scarcely be overlooked, even, as we have said, in the medical history of the year. Captain Boyton in May crossed the Channel in his swimming dress from Dover to Boulogne, paddling his way. The suffering endured was considerable. He became sleepy, and actually slept, starting up afterwards to find himself paddling. Green tea refreshed him and removed the unpleasant sensations. He was in the water twenty-three and a half hours, and though fatigued at the end of this time, was yet not so much so as might have been expected. In August Captain Webb performed the still more marvellous feat of swimming across the Channel. Mr. Henry Smith favoured us in September with a satisfactory account of Captain Webb's physical condition and appearance. The feat remains unprecedented, and is likely to continue unique. On the 29th of May a new Arctic Expedition started very auspiciously with unprecedented provisions for the protection of life and the facilitation of discovery, of which we were able to give a somewhat detailed account, through the courtesy of Fleet Surgeon Colan, senior medical officer of the expedition. In him and his colleagues, the profession and natural science are well represented. As we write the Prince of Wales is in the middle of a Royal visit to India, where he is receiving the welcome to which his rank and the urbanity of his manners entitle him. Every care is being taken to protect His Royal Highness from injurious climatic influences. He is accompanied by Dr. Fayrer, physician to the Council of India, who accompanied the Duke of Edinburgh on his Indian tour.

We must now take leave of our readers for the year 1875. We have said little about ourselves. We shall leave our pages to speak for themselves. Every kind of article has been found in them. Every branch of medicine has had its share of attention. Nothing affecting the honour and dignity of the profession has been unnoticed. Questions in Pathology and Practice have naturally had precedence. And some very important ones have been started in our columns. Witness the views of croup set forth in the lectures of Sir William Jenner, and all the discussions to which they gave rise; the discussion as to the advantages of ether over chloroform; the discussion between Sir Henry Thompson, and his critics as to the ulterior results of lithotrity. If there is one part of this journal of which we are more disposed to boast than another, it is the reports of the proceedings of the Medical Societies, which of late we have been able to furnish with promptitude and faithfulness. But we shall desist from boasting, remembering that for much of the material which makes up The Lancet we are indebted to the busy practitioners of the country and of the metropolis, who make it the medium of their opinions and their experience. We have only to thank our various contributors, and to assure all practitioners who have anything at once true and new in medicine to announce, that these pages are at their disposal. The day on which we say our last word for the year to our readers is a great day:—

"Heaven's youngest-teemed star
Hath fix'd her polish'd car,
Her sleeping Lord with handmaid lamp attending;
And all about the courtly stable
Bright-harness'd angels sit in order serviceable."

We wish our readers a happy Christmas. Even where there are elements of sorrow there may be excess of joy. Our national way of keeping Christmas is not without some suggestion of coarseness. But there is more in it, after all, than mere roast beef and plum pudding. We bury old grudges at this time, and forget old offences. We catch fresh inspirations of generosity and charity, which make the years more magnanimous, and add to the still too scanty stock of goodwill among men.

Another death from the incautious use of powerful drugs as alleviators of pain has occurred. Lady Chesterfield died on Monday last at Edinburgh from an overdose of tincture of opium. The lamentable frequency of disasters of a like nature forces on the profession the duty of protesting earnestly against a fashion which permits ladies to keep bottles of chloroform and laudanum in their bedrooms. The public should understand that even in the hands of careful surgeons the administration of these drugs, especially the former, is not unaccompanied with danger, and that their use by non-professional persons is unjustifiable and necessarily reckless. The sad fate of Mrs. Childers is fresh in the memory of all, and the present catastrophe enforces the lesson taught by that event. The indiscriminate practice of self-doctoring generally cannot be too strongly discountenanced.

Annotations.

"Ne quid nimis."

THE FREE SYSTEM AT THE QUEEN'S HOSPITAL, BIRMINGHAM.

The resolution of the governors of the Queen's Hospital abolishing privileges and adopting the free system was at once followed by the appointment of a sub-committee, on which were the chairman and two other members of the Medical Board, to carry the scheme into effect. The report of that sub-committee, which has already been approved by the Hospital Board, is now before us, and we purpose showing how it is proposed to apply the free system with proper checks as to inquiry into social fitness and with proper selection of suitable cases. The report starts with the proposition that a hospital is designed to deal with two classes of patients—"1. Those who, from accidents or the attacks of acute disease in a serious form, must be passed immediately into the wards as in-patients. 2. Those who, having been in-patients, still require for a time the supervision of the staff in order to effect a permanent cure, or who, though not sufficiently indisposed to require in-door treatment, are obliged to seek at the hospital the advantage of skilled consultants or of specialists, whose advice, while necessary, is beyond the pecuniary means of the applicants." The first class is to be admitted without any inquiry into social and pecuniary fitness, and without registration fee. The second class, which is now altogether too large, it is proposed to diminish by the weeding out of trivial cases which should be attended to by private practitioners or in sick clubs, and by a careful system of inquiry into the social status of the applicants, combined with a registration fee of one shilling for each case.

The general superintendence of admissions is to be entrusted to the House Committee, and all applicants declined by the inquiring officer will have liberty of appeal to the House Committee for a revision of their applications. That officer is directed to make inquiry as to the available income of the applicant, number of children, &c., and "in ordinary cases, not decided by special circumstances, an income of 35*s.* a week, with not more than four children or six persons in the family, is to be regarded as the limit of pecuniary fitness." No paupers, except when bringing special forms of recommendation from a recognised parochial medical officer, are to be received. All cases of peculiar urgency or importance which have been under the care of a medical man may, upon his certificate, be admitted.

These are two concessions to the medical profession of the district which are of the highest importance, and ought to insure for the hospital their cordial support and co-operation. All cases needing special advice or treatment, prolonged watching and nursing, and such attention as cannot be provided in any private house, may thus, at the bidding and on the recommendation of any qualified practitioner, be franked admission to the hospital, a boon which only those medical men who have had protracted surgical accidents or medical diseases under their care in the houses of the poor can fully appreciate.

The scheme is put forward in a tentative and modest spirit, although it evidently has cost much thought and careful consideration. The adoption of the free system by a large general hospital is a new feature, and the committee, having no precedents to guide them, have wisely submitted their recommendations as an experiment in hospital reform, and they trust to, what we think they will undoubtedly obtain, "the co-operation of the governors, the general committee, the staff of the hospital, and the patients themselves, for the gradual perfecting of the arrangements." Other minor reforms—as the reduction of the qualifications of governors from two guineas to one; the increase in the number of visitors with authority to inspect the hospital at any time during their year of office—show that the Committee are alive to the necessity of making the hospital as popular as possible, by increasing the number of their constituents, and by allowing representatives from among them to see that the work of the hospital is done thoroughly in all its departments at all seasons. We trust that a continued and increasing prosperity may follow these sincere efforts to promote the usefulness of the institution.

THE TRANSMISSION OF POTABLE WATERS.

The last report of the Rivers' Pollution Commissioners relating to domestic water-supply gives some particulars on this subject, which are the more important because the storage of water and its distribution to communities often necessitate its transmission through mains to a considerable distance.

There is no doubt that water originally clear is sometimes rendered turbid during its transmission through cast-iron mains, the turbidity being due to the rusting of the iron. Hard waters have but little action upon cast-iron, but soft waters generally attack the pipes so vigorously as to weaken them by deep corrosion, and to block them up by the formation of concretions. This corrosion and its consequences can, however, be prevented by a process invented by Dr. Angus Smith, which consists in heating newly-cast mains or pipes to about 500° F., and then dipping them perpendicularly into a bath containing a mixture of pitch and heavy coal oil, maintained at a temperature of about 430° F. The pipe is raised after a few minutes, the surplus composition runs off, and a black shining varnish remains on both the inside and outside surfaces of the pipe, even penetrating deeply into the pores of the iron. It is essential, however, that the pipes should be newly cast and hot.

Much injury to water frequently occurs by the improper construction of the joints of the mains. It is a frequent practice to caulk the joints with tow next the interior of the pipe, and then to run the joint with molten lead. The Commissioners condemn this practice strongly, because it allows, in a long main, the contact with the water of a large amount of hempen or other matter, which renders the fluid disagreeable both to the taste and sight, and affords, moreover, a nidus for the breeding, development, and decay of animalculæ. It is reported that the polluting effect of tarred yarn joints also is equally marked, and is not eliminated even after twenty years. There are two remedies for these evils. Turned and bored joints may be employed, or the joints may be carefully pointed inside the pipe with Portland cement, the latter plan, however, being only applicable when the main is large enough for a man to enter. The East London Water Company recently laid a main 4 ft. in diameter and 18¾ miles in length upon this latter plan. Every pipe was lime-whited inside from end to end, and the crevices that usually exist between the end of one and the socket of another pipe, when laid, were filled with Portland cement, so as to produce as even a surface as possible to the running water. All hemp dust is thus shut off from the water, and the joints in many parts are indistinguishable. The analysis of the water conveyed by these pipes showed an entire absence of deterioration.

In discussing the demerits of leaden pipes for the conveyance of water from the main to the houses, the Commissioners report that "the commonly received opinion that soft waters necessarily act upon lead is erroneous," for, whilst many samples attack the metal when its surface has been recently scraped, comparatively few have any action upon the tarnished metal. Waters that act violently upon lead lose this power by contact for a very short time with animal charcoal, this immunity being obtained by the solution of a minute trace of phosphate of lime from the charcoal. The Loch Katrine water, and that supplied to Manchester and Salford, both act powerfully on lead, but no case of lead-poisoning from the use of these waters has as yet been recorded. But, although the action of water deficient in carbonic and phosphoric acids upon lead is transitory, some polluted shallow well waters are found to act violently and continuously upon leaden pipes, and several instances of poisoning from this cause have occurred.

THE CRITICAL FACULTY IN MEDICAL OFFICERS OF HEALTH.

The remarks which we had recently occasion to offer* concerning the unwisdom of the tendency to set themselves up as professional critics which had been exhibited by some medical officers of health, find additional justification in the paper read by Dr. Gilbert Child, health officer for Oxfordshire, at the Social Science Association last week. It appears that a consideration of "the necessary limits to the applicability of the method of statistics, with especial reference to sanitary investigations," has led Dr. Child to the conclusion that statistics based on the returns of causes of death are so fallacious that the "large amount of public money" expended upon their "compilation and manipulation" may be said to be "squandered"; and further, that not only is it impossible at the present time to obtain accurate statements of the number of fatal diseases, but "there is no reason to suppose" we ever shall or can obtain such. The affirmation is that the causes of death are first incorrectly returned by the medical practitioners, and afterwards incorrectly classified by the statists. Of course cases of actual and possible mistaken diagnosis, of ignorance, and of suppression of the truth in respect of fatal diseases were adduced, and in commenting upon these and upon his general experience as medical officer of health for Oxfordshire—one of the seven smallest counties of England as regards population—Dr. Child was led, in the discussion which followed the reading of his paper, to say (hastily and unguardedly let us hope) that the causes of death as returned by the general medical practitioners were not worth a farthing, while those returned by coroners were not worth a twopenny piece!

Now, upon the statistical side of the question, we have simply to observe that Dr. Child has nothing new to tell us; experienced statists have years and years ago instructed us in the proper use and limits of the statistical method as applied to the mortality returns, and practical people are content to believe that, imperfect as those returns may be, they do yield results of some value now, and that the progress of medical education is year by year reducing the imperfections of the record. But the important point raised by Dr. Child's paper is, after all, this: Is it expedient (to say the least) that a professional brother, "armed with a little brief authority," should make use of the opportunities which his public position has afforded him of becoming acquainted with any shortcomings on the part of the general practitioners of his county, to blazon forth such shortcomings before an audience so little competent to discuss questions of medical education and diagnosis as ordinarily would be found assembled at the Social Science Rooms? Is not such a course likely rather, in the first place, to irritate the great body of general practitioners, and goad them into an antagonistic position upon all matters of public health administration; secondly, to foster that "depreciation of medicine at head quarters" of which we have before spoken; and, lastly, to strengthen immeasurably the hands of all opponents of sanitary work?

THE PROVIDENT DISPENSARIES AND FRIENDLY SOCIETIES IN MANCHESTER.

The great scheme for organising a number of provident dispensaries in Manchester and Salford, to be worked in unison with the free medical charities, is still only in course of evolution. The latest phase of the process has called forth a smart discussion in the *Manchester Guardian.* It took the shape of a proposal to admit the friendly societies into the provident dispensary system. It will be readily understood that this proposal was open to two objections—that it was interfering with provident arrangements already made, and creditably made, and, secondly, that it was interfering with the interests, in some sense vested or established, of the doctors of clubs and friendly societies. These objections have been ably answered by Mr. O. Hanlon. But they are not without much force. It will be a lamentable mistake if the promoters of this most praiseworthy experiment in Manchester, in trying to extend forethought and independence in medical matters among the working classes, introduce disturbance into the only provident arrangements that exist, and excite the prejudice of those medical men who for years have been working laboriously in connexion with friendly societies. It was not certainly the members of benefit societies whose improvidence required the early attention of the Council of the provident dispensaries. And we trust that either these societies will be undisturbed, or the interests of their medical advisers will be insured. It is quite true that they do not pay their medical officers as they should. But it is also true that some of them have acted very creditably in this matter, and that they are self-supporting and independent institutions, whereas the provident dispensaries have still a large charitable element in them. We make these remarks from a pure desire to see the Council avoid the cheap glory of working in other men's fields of labour, believing that there is a huge mass of material outside the friendly societies on which to try the most interesting public experiment that has been made to put the medical attendance on the artisan class on a satisfactory footing.

FEES FOR MEDICAL ATTENDANCE.

An attempt has recently been made by the medical profession in Madras to assimilate the scale of fees in that Presidency to that of the Presidencies of Bengal and Bombay; and this has led to a correspondence between the officiating Chief Secretary to the Government and Dr. Balfour, the Surgeon-General, Indian Medical Department. The subject has, moreover, been a good deal discussed and commented upon by the Indian papers. According to an order of the Government of India, the amount of remuneration for attendance on the families of public servants is left to private adjustment. By a well-known and long-established custom in the Bengal and Bombay Presidencies, the repayment of an equivalent of one week's income was understood to be the fee for medical attendance for the year; and, not to enter into a number of details, the fees for consultation, professional visits, confinements, operations, and so forth, have also been tolerably well known. The doctors in Madras, probably having deemed it expedient that something like uniformity should be adopted, projected a scale of remuneration for their professional services in these respects, to which, however, very strong exception has been taken. Dr. Balfour urges that the scale is, in his opinion, a very fair one, and contrasts favourably with the rates obtaining in the sister presidencies; and he is very careful to point out that the fees have been fixed, not to affect the indigent, but to protect practitioners at the presidency from gratuitous or inadequately remunerative attendance on the rich, and on those who have no official claim for their services, and that now, as ever, they are performing a large amount of work either almost or quite gratuitously among the needy. Those classes who have no means or small means may, therefore, be altogether put aside, as the scale of fees was only intended to apply to the rich and well-to-do, for whom the scale is neither a new nor an excessive one. There is not, Dr. Balfour says, in the large city of Madras a single non-official medical practitioner who has come from Europe—a fact which, at any rate, proves that there is nothing to tempt them to come out. But to this the Government replies that the scale of fees agreed upon by the doctors is excessive, and Dr. Balfour is desired to communicate this opinion to the medical men in Government employment. We very much regret that this question has sprung up, although it is natural that it should do so. It is well known that medical fees in Madras have been diminishing in amount, and that if the Government hear of every case in which an apparently excessive fee has been demanded, they never hear of the larger number of cases in which a very inadequate one has been tendered. A medical man, and especially a medical officer, feels that he is a public servant, that anyone has a claim on his services, and that those who cannot afford to pay have still a claim which he is quite ready to recognise; but what he does not recognise is that those who are indubitably in a position to pay should put a value on his reputation, skill, and services lower than seems to him reasonable. Still, as we have said, we regret the occurrence of this discussion. The case is undoubtedly one of much difficulty and delicacy, and anything like a combined movement on the part of professional men, serving under the Government, is certain to lead to misconstruction, and very probably to imputations that can neither be accepted nor repelled without some sacrifice of professional dignity. We hope never to see professional men animated with the spirit of a trading community, and we believe that we never shall see it, especially in India, so long as the medical officers continue to regard their skill and information as a trust to be used for the common good of everyone; but if the exercise of their profession is to be a source of remuneration at all, the question of what is an adequate and reasonable remuneration must, of course, arise. Official incomes in India being well known, there should be no difficulty about it, and we can understand that a medical man would prefer to give his professional services than to have them valued at a price so far beneath their worth as to make him feel that he had not been regarded with the respect to which he was fairly entitled.

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* See The Lancet of Nov. 27th.

FORCE AND WORK.

WORK without implies work within. No exercise of force can be made except by the generation and use of force of which no part enters into the external result. The use of muscles involves use of nerves. The external force, if exerted by a muscle, is only part of that which it produces. Now the proportion between these two in their several degrees is a subject of great practical importance, and some interesting facts have recently been published by Helmholtz. From these it is clear that the greater the external force exerted the greater is the proportion of the needful internal force—that is, great exertion is more wasteful than moderate exertion. Then force has to be evolved in proportion to the external work done, and therefore the greater is the wear and tear of the animal machine. The same increased proportion of non-productive work is seen when the external energy is below a moderate amount. It is found, for instance, that in walking, a speed of three miles an hour gives the most economical use of the forces. No doubt in these facts we have an index to much of the ill effects of the present high-pressure rate of work and life. The waste of force is out of proportion to the work done. More is effected in a given time, but the body feels it more, and its working period is proportionately shorter. These facts cannot be too often repeated or too constantly remembered by those who have the regulation of labour.

THE PRINCE'S TOUR.

WE have received intelligence as to the health and movements of His Royal Highness up to the 26th ultimo. The *Serapis* left Bombay on the preceding day destined for Ceylon, visiting Goa and Beypore *en route*. The future movements of the Prince would be decided by the reports received at Ceylon as to the movements of cholera which had been prevalent in Mysore, and the Madras Presidency. The alteration in the programme, as regards the shooting trip to the Annamully Hills, and a visit to Seringapatam, has already been made known, as well as the Prince's subsequent visit to Madras itself. Our correspondent reports that the Prince "is in excellent health and spirits, and as much pleased with India as India is with him." It was unusually hot steaming in Bombay; indeed the year has been altogether an exceptional one as regards India; and although the Prince has shown great powers of endurance, and an absence of physical fatigue, and has, moreover, stood the heat admirably, it has of course been absolutely requisite to guard against any risk, notwithstanding the disappointment to the inhabitants of those districts and places that have been unvisited. So long as the Prince is in India a similar exercise of caution will obviously be required, but there cannot be a doubt that the climate has thoroughly agreed with His Royal Highness so far, and there is every reason to believe that his visit to India will be a great success, and productive of much good. Our correspondent adds that the Prince's suite are also quite well, after having stood the test of sixteen days' experience of Bombay, Poona, and Baroda.

PROPOSED EXTENSION OF THE BOROUGH OF BRIGHTON.

THAT Hove, so essentially a part of Brighton, should be under a local government and sanitary organisation perfectly distinct from that of the municipal borough of Brighton appears to an impartial looker-on very much like an administrative blunder. We were glad therefore to hear some time since that it was proposed by the Corporation of Brighton to promote a Bill in the next session for the further extension of the boundaries of the borough so as to include the Improvement District of Hove, and the remainder of the parish of Preston, which will probably ere long be absorbed by the rapid extension of building operations. It now appears that the Commissioners for the "town and district of Hove" object to being absorbed by their thriving corporate neighbours, and at a special meeting on the 1st inst. unanimously resolved to oppose the Bill proposed by the Brighton Corporation, and to promote one themselves for the extension of their own district by the addition of that part of Preston parish desired by the Brighton borough. The advantages of consolidation, both from an economical and sanitary aspect, in the case of Brighton and Hove, appear so obvious that it may be hoped the opposition on the part of Hove to the extension of the municipal borough of Brighton to the boundaries of the

Parliamentary borough may yet be withdrawn. That the Commissioners object to be superseded is comprehensible, but it is difficult to imagine that with the Hove ratepayers any serious objection to be incorporated with the borough of Brighton can be entertained.

HEALTH OF THE ARMY AT HOME STATIONS IN 1873.

The Army Medical Report for 1873, a copy of which has just reached us, gives the following summary of the sickness and mortality among the troops serving in the United Kingdom during the year in question. The average strength of the troops, calculated from the weekly sick returns, was 88,957; the admissions into hospital were 67,541; the deaths were 699; the average number constantly sick was 3334. The ratios per 1000 of the strength represented by these numbers are—for admissions 759·2, for deaths 7·85, and for constantly sick 37·47. In addition, however, to those included in the weekly returns, 92 deaths occurred during the year among men detached from their regiments; the average number so detached is given in the Adjutant-General's returns as 6812. The average strength of the force serving in the United Kingdom was therefore 95,767, and the total number of deaths in it 791, being in the ratio of 8·26 per 1000 men. The ratio of admissions is 25·1 lower than that of the previous year; the ratio of deaths is fractionally higher (·31 higher); the ratio of the average number constantly sick is 1·87 per 1000 men lower. All the ratios are lower than those of the average period of the four preceding years.

HUMAN ANATOMY AT CAMBRIDGE.

A discussion is going on at Cambridge as to whether human anatomy should be regarded as a branch of natural science, and admitted to a more prominent and definite position in the Natural Sciences Tripos. Professor Humphry argues that if it is studied simply as a collection of facts and with reference only to the requirements of the medical examinations, it would not constitute a good educational subject, and it would scarcely be worth while to continue the cost and trouble of maintaining a school of Human Anatomy in the University. But if studied as it ought to be in the University, and as it would be if made one of the subjects of the examination for the Tripos, and associated with the thoughts and views which properly belong to it, it then would be an excellent medium of education, combining, in as great a degree as any other subject, the exercise of thought with the observation of facts. With this view it is proposed to connect it with mechanism, comparison with lower animals, development, &c. It is not proposed to make it a compulsory subject, but only an alternative one, so as to offer an additional inducement to medical students to present themselves for the honour examination for the Tripos, and so keep up the connexion between the schools of medicine and natural science.

THE SKULL AS THE TYPE OF RACE.

Prof. Virchow, whose work on the development of the base of the skull will be known to many of our readers, gave at the meetings of the Berlin Academy of Science, according to the monthly reports (Jan. 7th and March 15th), some interesting lectures on evolutional defects of the bones of the skull as a sign of some lower types of the human race. His observations referred to the processus frontalis, squamæ temporalis, and the catarrhine formation of the nasal bones, as positive symptoms of an animal-like, and especially of a monkeyish, type. The existence of the os incæ, which is found in several South American aboriginal races, Virchow holds to be a simple arrest of development of the human type, and of a purely negative character, though it constitutes a very valuable sign for the determination of the ethnological characters, more so than is generally known. The os incæ as a part of the os occipitis, which has not become waited by osseous tissue with the latter, forms the posterior covering of the cerebrum, while the cerebellum is covered by the lower part of the squama ossis occipitis. The latter serves as the place of insertion for muscles; the os incæ, or os interparietale, is, as a rule, free of such insertions. In the aboriginals of Peru the os incæ has been found to be always very large; in the Pampas Indians, however, it is often exceedingly diminutive. In the hare the muscle insertions ascend so high that the os interparietale appears as an oblong square between them. It is to be expected that Virchow will be able to extend his researches over the remains of all the South American aboriginal tribes, since the Emperor of Brazil sent him last summer, through his ambassador at Berlin, several boxes with bones from Indian graves, with a very complimentary letter, in which that enlightened Prince confesses his special interest in the matter.

THE BROWN LECTURES.

Dr. Burdon-Sanderson, F.R.S., has just completed the delivery of the annual course of lectures established by the trustees of the Brown bequest. Taking for his subject the Pathology of Inflammation, the learned professor commenced his course on the 15th inst. by referring at length to the experiments and doctrines of John Hunter. He then combated the attraction theory of Alison and the cellular theory of Virchow, which latter he stated was based on erroneous deductions from Hunter's experiments. In his second lecture he dwelt on the experiments and observations of Dr. J. C. B. Williams, Mr. Wharton Jones, and Professor Lister, and expressed his belief that the paper of the last-named observer had not received the full attention it merited. The third lecture, delivered on the 20th, was devoted to the subject of Exudation, Dr. Sanderson describing in detail the experiments of Cohnheim, which he had himself verified. The fourth lecture was devoted to Inflammation of Non-vascular Tissues, with special reference to recent researches of his own confuting the statements of Stricker and others as to the part played by the tissues themselves in the process.

THE KEIGHLEY GUARDIANS.

The anti-vaccination guardians of the Keighley Board have sought relief in a memorial to the Prime Minister, asking him whether the Government consider it to be the duty of the guardians, holding an opinion unfavourable to the Vaccination Acts, to insist on enforcing a law which they think a law of compulsory infanticide. Mr. Disraeli has no comfort for these guardians. He says, in reply, through Mr. James F. Daly: "It is clearly shown by the above-mentioned Acts that no power is left with guardians or their officers to decide as to the expediency of carrying out either the provisions of the Acts or the regulations of the Local Government Board made in conformity therewith, and that as long as they continue to hold to their offices they are decidedly bound to discharge the duties thus imposed upon them."

DISTURBANCES AT THE FACULTY OF VIENNA.

On the 10th of December very disgraceful scenes occurred at the General Hospital of Vienna, and in the lecture-room of Professor Billroth. The latter has lately published a book on "The Learning and Teaching of Medicine," wherein he attacks the present system vigorously. But, besides this, he lays bare the shortcomings of the students, reproaches them with various failings, and, in fact, blames them in no measured terms. Unfortunately, the supporters of Billroth had organised a kind of ovation to the professor; and the aggrieved students, enraged at this, raised their voices, hissed the lecturer, and both parties at last came to blows. The affair has caused the greatest sensation at Vienna, and the authorities are busy restoring order. Even in the House of Representatives the matter has been taken up, and some members have found great fault with the manner in which Professor Billroth, in his book, has treated the Austrian students.

THE MUCOUS MEMBRANE OF THE UTERUS.

IN Stricker's *Medizinische Jahrbücher* for 1873 there appeared a paper on the Mucous Membrane of the Uterus by Drs. Kunchat and Engelmann. Dr. Engelmann, differing from some of the opinions expressed in that paper, especially those regarding the relation in time between ovulation and menstruation, has republished the paper with some additions and alterations in the "American Journal of Obstetrics." In its present form the paper treats of the mucous membrane of the uterus before puberty; its fully developed but quiescent state; its state during menstruation; of the decidua vera and reflexa during the first, second, third and fourth, and fourth to the ninth months of pregnancy; the development and structure of the placenta; retrograde metamorphosis of the membranes; the expulsion of the decidua and the regeneration of the mucous membrane after parturition.

IN a report of the Sanitary Administration of South Shields recently issued by Mr. John Spear, medical officer of health for the district, he describes an outbreak of enteric fever in the town, for the occurrence of which no very clear cause could be traced out by investigation. Mr. Spear has to rest content with the conclusion that there are conditions constantly at work in the locality which predispose the inhabitants to receive epidemic influences. As bearing upon the question of the alleged action of fumes from alkali works on certain zymotic diseases, it is not without interest to learn that in the infected quarter there exists a chemical factory giving off large quantities of chlorine and other gases, and that the streets which suffered most severely from the fever were those most exposed to the fumes. Four cases of typhoid were observed among the operatives themselves. A rather serious outbreak of diphtheria also occurred in the early part of the year. Mr. Spear winds up his report by specifying certain measures which should be carried out by the sanitary authority.

NOT a single death from small-pox was registered last week among more than six millions of persons living in sixteen of the largest English towns. The only fatal cases of this disease reported by the Registrar-General in his last weekly return were three in the city of Manchester and four in the borough of Salford. The prevalence and fatality of small-pox have recently increased in Manchester and Salford. Seventeen deaths were referred to this cause during the first nine months of this year, and since the end of September twenty-six other fatal cases have been recorded, including seventeen in the four weeks ending 18th inst.

IT is rumoured that H.M.S. *Grampus*, now used as a powder depôt at Portsmouth, is to be converted into a naval prison hulk. If this idea is carried out, great care should be exercised by the Admiralty in fitting this ship for such a purpose. Floating establishments at fixed moorings are not specially healthy, and the convict hulks moored off Woolwich some years ago were no exception to the rule.

DR. A. M. BUCHANAN lately delivered an address before the Andersonian University Medical Society, Glasgow, on the subject of "Free Trade in Medical Teaching." We have already stated that the lectures of one of the teachers at this institution would in future qualify for graduation in the University of Glasgow, and Dr. Buchanan enlarged on the benefits likely to accrue from such a liberal concession, and expressed a hope that the same privilege would be extended to every individual teacher at the Andersonian. He believed that the effect of the recognition of an extramural school upon the University of Glasgow would act as a stimulus to its professors. At the same time, unlimited free trade in medical teaching was strongly and pointedly deprecated.

IN London 1834 deaths were registered last week, including 68 from measles, 107 from scarlet fever, 8 from diphtheria, 88 from whooping-cough, 24 from different forms of fever, 15 from diarrhœa, 1 from varicella, and 514 from diseases of the respiratory organs. Of the fatal cases of fever twelve were referred to puerperal fever. Although in many of our large industries there are conditions strongly inimical to health, it is not often that we find a death recorded as directly due to the work. Last week the death of a woman in Limehouse was certified by the coroner to be caused by "chronic inflammation of stomach, produced by arsenical poisoning through working in an emerald-green factory."

AT a recent examination of the Pharmaceutical Society a lady—Miss J. S. Clarke—was declared qualified to be registered as a pharmaceutical chemist. The initiative taken by Miss Clarke will most probably be quickly followed, and the Society may expect a considerable influx of female students at its premises in Bloomsbury-square. A most praiseworthy determination is evinced by the Society to maintain a high standard of knowledge on the part of English pharmaceutists, as will appear from a report of an examination held this month, when out of forty candidates twenty-three were rejected.

WE learn from a contemporary that the ship *Borrowdale* arrived at San Francisco in the month of November with several cases of scurvy on board, and that until the British Consul intervened several men suffering from other diseases were kept on board the ship, and more or less neglected. Ship-masters are often chary of incurring hospital expenses in a foreign port, so that the men are entirely dependent upon the activity and energy of the consul, to whom, as it appears, these cases were represented by the reporter of one of the local daily papers.

The Times states that the Local Board of Hampton Wick have been served with a summons for neglecting to prevent the sewage of the parish from entering the river Thames. The penalties incurred since the date of notice amount to £94,000. The conservators, however, have decided that the summons should stand over for a short time, and that in the meantime a deputation from the Board should be received.

THERE are now two typical cases of scurvy in the Seamen's Hospital at Greenwich under the care of Dr. Ralfe. This disease in an uncomplicated form is now comparatively rarely seen in London, and so we recommend students to go down to Greenwich and increase their clinical experience as to a malady that many have not seen at all, and with which very few are familiar.

THE latest life returns from India give an annual rate of mortality of thirty-five per thousand for Madras. Fifty deaths from cholera occurred in the city in one week.

AT a time when the attention of all Englishmen is directed to India, there is an opportuneness in the commencement of an illustrated history of our vast dependency by Messrs. Cassell, Petter, and Galpin, who are widely known for their popular educational publications. We have received Part I. of the history, which is an admirable production in every way, while the price at which it is sold brings it within the reach of all.

THE Paris Municipality has of late been very liberal to scientific institutions. The Faculty of Medicine has obtained a grant of £4000; the Faculty of Sciences, £3000; and £2000 has been voted to the Finishing Scientific School. A vote of £12,000 to the five higher scientific institutions of the department of the Seine was also adopted.

AN important omission has been discovered in the 116th Section of the Public Health Act. The word "butter" has been omitted among articles that may be seized and destroyed under a magistrate's order, if found to be unfit for food. So that bad butter may still be exposed for sale and sold with impunity.

THE profession will learn with much regret that the health of Sir George Burrows has been somewhat impaired of late. We sincerely trust, and so also will a host of friends, that his indisposition will be of but short duration.

NUMEROUS cases of varicella have lately occurred on board H.M. cadet ship *Britannia* moored off Dartmouth, and, according to the *Army and Navy Gazette*, the school has been broken up prematurely in consequence.

PRINCE LEOPOLD has intimated, through Dr. Poore, his intention of subscribing ten guineas annually to the funds of the Royal Infirmary for Children and Women, Waterloo-road, S.E.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN important meeting of the Council of the College of Surgeons was held on Monday, the 20th inst. The Report of the Committee on "Examinations in Anatomy and Physiology" was adopted, and the following fellows of the College were elected members of the Board of Examiners in Anatomy and Physiology for the membership and fellowship:—Mr. John Birkett; Mr. Holden, Mr. Savory, and Mr. Henry Power, of St. Bartholomew's; Mr. Cooper Forster, of Guy's; Mr. T. Holmes, of St. George's; Mr. John Wood, of King's College; Mr. G. Gascoyen, of St. Mary's; and Mr. Christopher Heath, of University College. It will be seen that five of the nine appointments to the Board of Examiners have been filled by gentlemen who were already members of the Court of Examiners in Surgery, two of these gentlemen being the senior surgeons at the two largest metropolitan hospitals. Whether this be consistent with the spirit and intention of the resolution that the Board of Examiners and the Court of Examiners should be separate is a question for future consideration. On the first blush it certainly appears undesirable that the majority of the members of examiners in Anatomy should be also examiners in Surgery, several of them being at the same time members of the Council. If this practice be recognised there is no reason why the members of the Court of Examiners should not all nominate themselves and secure their election to the Board of Examiners, and thus defeat the object of the measure.

At the same meeting a committee was appointed to consider and report on Mr. Marshall's scheme for the institution of a compulsory examination in Anatomy at the end of the first winter session, and also to consider a rider which has been added by Mr. Le Gros Clark respecting the desirability of changing the periods of Primary and Pass Examinations of the College. This committee is composed of Messrs. Hancock, Holden, Gay, Marshall, Baker, and Forster, and the President and Vice-Presidents. The decision which these gentlemen will arrive at will be looked forward to with interest.

The motion of Mr. Critchett—the medical women's advocate—respecting the advisability of admitting women to the examination for the certificate of qualification in Midwifery, was referred to the Standing Counsel, who will report on the legal position of the Council in the matter.

Sir James Paget stated that the bodies co-operating for a Conjoint Scheme had invited the co-operation of the Society of Apothecaries, and that that body had consented to send two representatives to the conference. We believe that the Council of the College of Surgeons has determined to adhere to its resolution of June respecting the appointment of examiners as an essential condition of co-operation in the Conjoint Scheme.

The report of the Court of Examiners on the report of the visitors from the General Medical Council on the College examinations and on the recommendations and opinions of the General Medical Council, and that on Mr. Quain's letter to the Council reporting the proceedings of the General Medical Council during their annual meeting in 1875, were read and adopted. Without going closely into the details of these reports, it may be remarked that while the Court of Examiners acquiesced in some of the opinions and recommendations of the visitors of the Medical Council, it has decided against others, and has pointed out several inaccuracies made by the visitors in their report. We are glad to find that the Court of Examiners is of opinion that the physiological part of the Primary Examination is at present defective, and that it is expedient that it should be extended. This, we trust, will be done at once. By chance there are on the new Board of Examiners two physiologists, and only two. With the exception of Mr. Savory and Mr. Power, both from St. Bartholomew's, there is no one on the Board who can conscientiously lay claim to more than a general knowledge of physiology. If it were not that Mr. Power's great experience as an examiner in physiology necessitated his election, it would be difficult to account for the presence of three St. Bartholomew's surgeons on the Board. It is, however, we believe, probable that when Mr. Holden has assured himself that the newly-elected examiners have shown themselves equal to their duties, he will resign his examinership in anatomy and physiology, and bestow on the Court of Examiners the benefit of his undivided services. Mr. Forster, the senior surgeon of Guy's, may be expected to take the same praiseworthy step. Mr. Savory's presence at the Board as a physiologist is indispensable, but we sincerely trust that either one more special examiner in physiology will be appointed, or that the first vacancies that arise will be filled by Fellows of the College who have had actual experience as teachers or examiners in physiology, and that the examination in this subject, both the written and *vivâ voce*, will henceforth be separate from that in anatomy.

With reference to the recommendations of the General Medical Council that an examination should be held at the College in Materia Medica and Chemistry, the Court of Examiners do not advise the addition of a special examination in these subjects.

THE BIRKENHEAD BOROUGH HOSPITAL.

To the Editor of The Lancet.

Sir,—It is sometimes a difficult thing strictly to define in small provincial hospitals the exact duties of the house-surgeons and of the matrons. But I think it will be apparent to everyone that the house-surgeons' duties ought to be, as much as possible, of a professional nature.

Some little time since, the Committee of the Birkenhead Borough Hospital decided that the house-surgeons should be compelled to keep accurate accounts of all things consumed in the kitchen—such as tea, sugar, potatoes, &c. Upon the Committee informing the senior house-surgeon of their decision, he calmly remonstrated with them upon the indignity which he would suffer in being compelled to perform the duties of a housekeeper. It was all, however, to no purpose, and he, of course, at once resigned his appointment.

Committees are not, as a rule, noted for courtesy to their medical officers, or for profound knowledge of the institutions which they govern; but it is, I think, rare to find even an irresponsible body of men so far forget themselves as to offer such an indignity to a member of the profession.

I am, Sir, your obedient servant,

December 9th, 1875. A Late House-Surgeon.

Obituary.

JAMES PART, M.D.

Dr. Part was born in the neighbourhood of Wigan (to which district his family belonged) in the year 1809. He served his apprenticeship to the medical profession with a Mr. Christopher Morris at Wigan. He came to London about 1830, and studied at St. Bartholomew's and University College Hospitals, and obtained the surgical prize for the year 1830–31 of the Medical School in Aldersgate-street. He was L.S.A. 1832, M.R.C.S. 1832, F.R.C.S. 1854, M.D. St. Andrews 1860.

He commenced his medical practice as house-surgeon to the Wigan Dispensary, but shortly after settled in London, where he became Surgeon of the Artists' Annuity Fund Society, and was for a time President of the North London Medical Society.

He was author of the Medical and Surgical Pocket Casebook, and contributed various papers on medical and anatomical subjects to The Lancet and the Transactions of the Pathological Society, and other publications. He also delivered various lectures, and notably a course devoted to the anatomy of expression, with copious diagrams.

As a professional man, he gained the high esteem and confidence of his brother practitioners, as well as of the large circle of patients to whom his professional skill was of service. He was twice married, and leaves by his first wife five children surviving him.

JAMES TUCKER, M.D.

We regret to announce the death of Dr. James Tucker, which sad event took place at his residence in Sligo, on the 1st of October. Dr. Tucker had for many years past been one of the leading sanitarians in the west of Ireland, and as officer of health for the borough of Sligo did good service to the community. His efforts to promote the sanitary welfare of the people, and so to prevent disease, were unceasing. The members of the profession to which he belonged have also cause to remember him, for he was ever foremost in endeavouring to promote their welfare. He was author of Essays on Cholera and Fever, Public Health, &c., as well as of a pamphlet lately written, entitled "Light and Scenery: Thoughts on Health." So highly were his investigations on those subjects thought of, that he was commissioned by the Irish Government to examine and report on the English cattle plague of 1866. Dr. Tucker was surgeon to the Sligo Rifles, and held many other appointments, the duties of which he attended until a week before his death, in the 63rd year of his age.

Medical News.

Royal College of Physicians of London.—At a meeting of the College on Dec. 20th the following gentlemen were admitted Licentiates:—

Atkinson, Francis Edward, Regent-square.
Bartlett, Henry, Great Dover-street.
Barton, James Kingston, Doughty-street.
Birch, Philip, Lichfield.
Cadge, William Hotson, Woburn-place.
Cobb, Robert, St. Bartholomew's Hospital, Chatham.
Crétin, Eugène, M.B. Lond., St. Bartholomew's Hospital.
Foley, Samuel, St. David's.
Harper, Robert Russell, Holbeach.
Hastings, George, M.D. Brussels, St. Bartholomew's Hospital.
Hawkins, Alexander Frederick, Regent-square.
Miller, Frederick Daniel, Angles-road.
Morris, Henry, Wickham.
Morris, William Whitehead, East Bridgford.
Richardson, Timothy, Commercial-road.
Sheehy, William Henry Patmore, St. Bartholomew's Hospital.
Smalley, Herbert, East Thurrock, Grays.
Strugnell, Frederick William, Queen Charlotte's Hospital.
Verco, Joseph Cooke, M.B. Lond., Ovington-street.

Royal College of Surgeons of England.—At a meeting of the Council held on the 20th inst., the following Members, who passed the examination for the Fellowship on the 25th, 26th, and 27th of November, were duly admitted Fellows of the College:—

Barrow, Albert Boyce, Newmarket.
Garton, William, L.S.A., St. Helens, Lancashire.
Jacobson, Walter Hamilton A., M.B. Oxon., Guy's Hospital.
Jones, Thomas, M.B. Lond., Manchester.
Law, William Thomas, M.B. Ed., Seamen's Hospital, Greenwich.
Lyell, Robert Wishart, M.D. Lond., Penge, Surrey.
Mackenzie, Lewis, L.R.C.P. Lond., Tiverton, Devon.
Winterbottom, Augustus, Sloane-street, Chelsea.

Six candidates, having failed to satisfy the Court of Examiners, were referred for twelve months' further professional study.

The following Members of the College were elected Fellows:—

Bratton, James, L.S.A., Shrewsbury; diploma of membership dated May, 1836.
Spong, William Nash, L.S.A., Faversham; Aug. 1842.

The election of an Examiner in Medicine in the vacancy occasioned by the resignation of Dr. Wilks will take place at the meeting of the Council in January next.

Apothecaries' Hall.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 16th:—

Buckell, Ernest Hook, University College Hospital.
Haselden, Robert, Bolton, Lancashire.
Macintire, John Henry Lee, Gower-street.
Reeve, Henry, Victoria-park, Hackney.
Richardson, Arthur, Rusholme, Lancashire.

The following gentlemen passed the Primary Professional Examination on the same day:—

Charles Gerald Dalton, London Hospital; John Morgan, Guy's Hospital; Edward Thurlow Prior, William Bradshaw Rigby, and Francis George Herbert Whitley, St. Bartholomew's Hospital; Charles Wm. Ebenezer Gay, Ernest Oliver Scallon, John Symons, William Arthur Stephenson Walsh, and William Robert White, King's College.

Dr. William Matterson, has been placed on the Commission of the Peace for the city of York.

On December 20th, a handsome clock, with a suitable inscription, was presented to Mrs. Puddington, the Matron of the London Fever Hospital, by the members of the Committee of that institution, in the presence of all the nurses and officers.

BOOKS ETC. RECEIVED.

Dr. Carpenter's Physiology.
Dr. Dalton's Human Physiology.
Dr. Ridge: Diet for the Sick.
Cholera Epidemic of 1873 in the United States of America. Vols. I. and II.
Dr. Billroth: Uber das Lehren und Lernen der Medicinischen Wissenschaften.
A Biennial Retrospect of Medicine and Surgery, 1873–74.
Mr. Hutchinson's Catalogue of Skin Diseases.
Mr. Stigand: Life, Work, and Opinions of Heinrich Heine. Vols. I. and II.
Mr. Benson: Time and Time Tellers.
Mr. Haviland's Geography of Heart Disease, Cancer, and Phthisis.
Year-book of Pharmacy, and Transactions of the British Pharmacy Conference.
The Indian Alps. By a Lady Pioneer.
The Poems of Sir Walter Scott, Bart.
M. de Chaumont: Lectures on State Medicine.

Medical Appointments.

Bain, D. S. E., F.R.C.S.Ed., has been appointed Medical Officer for the Sellinge District of the Elham Union, Kent, vice E. J. Kent, resigned.

Brookfield, J. S., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Clayton West and Gunthwaite and Ingbirchworth Urban Sanitary Districts, and the High Hoyland Sub-district of the Penistone Rural Sanitary District.

Clarke, F. W., M.R.C.S.E., has been reappointed a Surgeon to Sir John James's Charity, Bury St. Edmund's.

Cooke, W. C., M.R.C.S.E., has been appointed Resident Medical Officer to the St. Pancras and Northern Dispensary, vice Cross, resigned.

Dick, J., M.D., L.R.C.P.Ed., L.M., has been appointed Medical Officer and Public Vaccinator for the Harrington District of the Whitehaven Union, vice Dixon, resigned.

Hichens, J. S., M.R.C.S.E., has been appointed Medical Officer of Health for the Redruth Urban Sanitary District.

Hinnell, G. J., M.R.C.S.E., has been reappointed a Surgeon to Sir John James's Charity, Bury St. Edmund's.

Mawson, T. W., M.B., C.M., has been appointed Medical Officer for the Messingham District of the Glanford Brigg Union, Lincolnshire, vice Richardson, resigned.

Morris, D. W., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Skenfrith District of the Monmouth Union, vice Lane, resigned.

Pattinson, Mr. J., has been appointed Public Analyst for South Shields: £25 per annum, and 7*s.* 6*d.* per analysis.

Peirce, J. E., M.R.C.S.E., has been appointed Medical Officer to the Redditch and District Medical Aid Association, vice Draper, resigned.

Rowland, J. D., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Western Division of the Tralee Dispensary District of the Tralee Union, vice Lawlor, resigned.

Sidey, J. A., M.D., L.R.C.S.Ed., has been appointed Medical Officer to the Edinburgh County Prison, vice Simson, resigned.

Traill, H. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the No. 7 District of the South Molton Union, vice Ford, resigned.

Turner, J. E., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Tuam No. 2 Division of the Tuam Dispensary District of the Tuam Union, Co. Galway, vice Dwyer, deceased.

Van, A. F., M.R.C.S.E., has been appointed Medical Officer of Health for the Cranborne Sub-district of the Wimborne and Cranborne Rural Sanitary District, vice Underhay, resigned.

Wacher, F., M.R.C.S.E., has been appointed Medical Officer for the Sturry District of the Blean Union, Kent, vice Jameson, deceased.

Walker, H. E., M.D., L.K.Q.C.P.I., has been appointed Medical Officer and Public Vaccinator for the Whitwell District of the Worksop Union, vice Kenny, resigned.

Watson, A. M., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Penistone Urban Sanitary District, and the Townships of Langsett and Oxspring and the rural part of the Township of Hunshelf in the Penistone Rural Sanitary District.

White, J. C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester, vice Pearse, resigned.

Wilson, J., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Stockton Rural Sanitary District: £200 per annum.

Births, Marriages, and Deaths.

BIRTHS.

Etheridge.—On the 19th inst., at Seasalter, Whitstable, the wife of Chas. Etheridge, M.R.C.S.E., of a son.

Longhurst.—On the 17th inst., at Witham, the wife of Dr. Longhurst, late 60th Rifles, of a son.

Ogle.—On the 15th inst., at The Elms, Derby, the wife of W. Ogle, M.D., of a son.

Will.—On the 20th inst., at Sheerness, the wife of George Elmsly Will, Surgeon-Major Army Medical Department, of a daughter (Mildred Agnes).

MARRIAGES.

Denham—Barclay.—On the 2nd ult., at St. Paul's Presbyterian Church, Bayswater, John Denham, M.D., to Louise, widow of Captain Barclay.

Moss—Downing.—On the 14th inst., at St. Peter's, Dublin, Herbert Campbell Moss, M.B., to Mary Elizabeth, daughter of A. M. Downing, Esq.

DEATHS.

Andrew.—On the 12th inst., at Northampton, Henry Andrew, F.R.C.S.E., of Truro, aged 60.

Beaumont.—On the 12th of Oct., at Toronto, Wm. Rawlins Beaumont, M.D.

Bourne.—On the 14th inst., at Old Brompton, M. W. Bourne, M.D., aged 51.

Carleton.—On the 16th inst., at Russell-place, Dublin, D. J. Carleton, L.K.Q.C.P.I., aged 30.

Daniell.—On the 6th inst., W. C. Daniell, M.R.C.S.E., of Calverton Limes, Stony Stratford, Bucks, aged 40.

Reid.—On the 25th ult., at Bowmanville, Ontario, Canada, H. R. Reid, M.D.

Smith.—On the 9th inst., at Ventnor, H. C. Smith, M.R.C.S.E., of Maidstone, aged 34.

Squarey.—On the 12th inst., at Brighton, Dr. C. E. Squarey, late of Upper Wimpole-street, aged 32.

Sutherland.—On the 12th inst., at Thurso, Robt. Sutherland, L.R.C.P.Ed., Staff Assistant-Surgeon, on half-pay.

White.—On the 12th inst., at Penrhos, near Carnarvon, Dr. Wm. White, retired Surgeon-Major Bengal Army, aged 58.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

The Lancet Office, Dec. 23rd, 1875.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Dec. 17	30·18	S.W.	35	36	...	40	35	...	Foggy
„ 18	30·02	S.W.	40	40	...	48	34	...	Foggy
„ 19	29·87	S.	42	43	...	47	39	...	Hazy
„ 20	29·70	S.W.	43	44	...	48	41	...	Cloudy
„ 21	29·74	S.W.	43	44	...	53	40	0·15	Overcast
„ 22	29·90	N.W.	43	45	...	55	44	0·10	Raining
„ 23	29·61	W.	53	54	...	58	45	0·06	Fine

Notes, Short Comments, and Answers to Correspondents.

THE LANCET COMMISSION ON LUNATIC ASYLUMS.

The Report of The Lancet Sanitary Commission on Colney Hatch Lunatic Asylum will appear next week, Jan. 1st, 1876.

Traction on Ligatures.

M. Boeckel, of Strasburg, has published an article in the *Bull. de Thérap.* (Dec. 15th, 1875), on the well-known system of continuous traction in the treatment of fractures, white swelling of the knee, &c. He is a great advocate of this mode of treatment in appropriate cases, and throws out the hint that it might be used with advantage to get rid of ligatures which are too long in coming away. The author considers that, as early as the eighth day, means should be used to detach the ligature, and he advises to tie a string to the latter, and to connect with it a weight of between one and three ounces. In this way he succeeded, in about twelve hours, with ligatures of the carotid and other large vessels. He holds that in a few days, when the ligature is not interfered with, it is reduced to a mere loop, which no longer exercises any constriction. If this were quite true, the least traction with the hand should carry it away. M. Boeckel closes by saying that continuous traction of ligatures should, as a rule, be begun after the eighth day as long as catgut, acu- or forci-pressure (and he might have said torsion) have not abolished the use of ligatures altogether.

The Treatment of Ringworm.

To the Editor of The Lancet.

Sir,—In your issue of the 11th inst. I observe the letter of Dr. J. F. Brice on this subject. I received my copy of The Lancet too late to be able to reply last week. I would point out to Dr. Brice that, according to his own statement, he has not followed my plan of treatment. I use the iodine for three days. He *persistently* applies it for five weeks. There is such a thing as doing more than curing the disease—viz., causing another. This I have frequently seen in the case of itch treated with sulphur ointment, where the ointment has been too long employed, and so with iodine in ringworm. When I first used it, I was in doubts about the appearance at the end of the week, as the disease was still perceptible, although it did not spread. What I would suggest to Dr. Brice is, that he try it again, using the iodine two or three times, and then wait, when he will find the spots will scale off.

Your obedient servant,
Kinghorn, Dec. 21st, 1875. Jas. Welsh, M.D.

To the Editor of The Lancet.

Sir,—In case petroleum fails, I would advise your correspondent to try a solution of perchloride of mercury in rectified spirits of wine (one scruple to the ounce). It should be applied with a camel-hair brush, and repeated if the first application fails in arresting the progress of the disease. It generally blisters the part slightly. I have never known it fail.

Your obedient servant,
Sibford, Banbury, Dec. 11th, 1875. F. L. Milburn.

To the Editor of The Lancet.

Sir,—Will you allow me to ask Dr. Brice to try *pure* liquid carbolic acid on his obstinate case of ringworm? I tried it while with Mr. Bishop, of Tonbridge, in several cases, and never knew it to fail. Smear some oil outside the ringworm, then paint the worm with the pure acid by means of a brush, and allow it to dry. Yours truly,
Greenhithe, Dec. 15th, 1875. Edwin Tipple, L.R.C.P. Ed., &c.

Medical Advertising in the Colonies.

This system is painfully prevalent in New South Wales. More than two columns of the *Miner's Advocate* is taken up with advertisements of the testimonials of John Harris, M.B., C.M., L.R.C.S.E., L.R.C.P.E., L.M. R.C.S. & P.E. Mr. Harris does not display so much taste as might be hoped for in one with so many letters after his name. The columns are occupied with testimonials from John Struthers, M.D.; John Macrobin, M.D.; Alexander Harvey, M.D.; William Pirrie, M.D., &c. &c., all testifying that Mr. Harris is a promising young man. If this use is to be made of testimonials, those teachers who write them so freely will have to consider whether they do right in so doing, or they will have to insert in large letters in their testimonials—"Not to be used as puffs."

Professor Dittel's Advice in Enlarged Prostate.

If our readers will refer to page 900 of last week's number of The Lancet, they will see that the professor thinks puncture of the bladder in the hypogastrium, and the permanent escape of urine through an apparatus, preferable to battling with the enlarged prostate and the consequent evils. We did not for a moment think that Prof. Dittel was the originator of the method, and wished simply to put upon record that such was his view of the subject. The Viennese surgeon had been forestalled, as evidenced by a passage in a lecture of Sir Henry Thompson's, published in this journal (The Lancet, Jan. 2nd, 1875).

Mr. John Taylor, (Sheffield.)—A parliamentary paper was published on the subject on the occasion of the last debate in the House of Commons, and might probably be obtained on application to Hansard, Great Queen-street.

Dr. J. Bell Pettigrew is thanked, but we have already noticed the fact.

The Residence Condition of British Medical Graduation.

To the Editor of The Lancet.

Sir,—Without trespassing much on your space in reference to the letter of "Omega" in your issue of Dec. 11th, I assert that the question, "How is it that registered medical practitioners in this country cannot obtain degrees at home without residence?" is one of the greatest importance to the well-being of the profession, and the unanimity which should pervade it. But I cannot look upon the statements of your correspondent as to the iniquitous combination of the Universities, and their degrees being reserved for youths, whose time is valueless, and best employed in useless residence, without experience, and with a store of theoretical knowledge got up for the occasion, as other than, to say the least, equally inconsiderate and unjust. I think that any rational medical man will say that youth is the time of greatest value in the medical profession, and even a child is taught the value of time when young; and, in regard to University teaching, it is now universally acknowledged to be eminently practical, not only in the truly professional branches, but in the collateral sciences, a theoretical knowledge of which is also necessary to form the basis for the acquirement and cultivation of medical knowledge, and not to vanish as quickly as learned; and, until "Omega" alters his opinion, I doubt if he would be a fit recipient of their degrees. However, the cart is sometimes put before the horse; and if, after several years' practice, a hard-working man is willing to be submitted to examination for a doctor's degree at home, rather than obtain a foreign one, and finds himself unable to keep the period of residence exacted from risk to his practice or unwillingness from his position, is it not sad that he cannot have an opportunity of doing so? Could the examining University of the kingdom, granting other degrees without residence, not initiate, and extend its sphere of usefulness to such as "Omega"?

Yours truly,
Dec. 13th, 1875. Alpha.

To the Editor of The Lancet.

Sir,—In common with many others, I am in much the same situation as "Omega," whose letter appears in your issue of Dec. 11th. Like him, I have taken every pains to keep myself well read in every branch of my profession since I have been in practice, and am willing to submit to (and I believe am able to undergo) any examination to obtain the M.D. degree at a British University; but such is the obstinacy with which these institutions insist upon residence that I am unable to obtain the degree in this country. I would ask, Is a man who at twenty-three or twenty-four years of age obtains his diploma or degree supposed to have acquired all knowledge respecting our science and art? Is it not possible for him to acquire a vast amount of the most important information after he has left his school? And yet, whatever his knowledge, experience, and skill may be, he has no opportunity of obtaining a degree in medicine, and he has no incentive whatever to keep up the knowledge he acquired when a student. I submit that, were a man able to obtain a degree after he has been five or six years in practice, without residence, it would be a great encouragement to him to keep up his knowledge.

Respecting foreign degrees, I myself thought of going to Brussels to be examined during the past autumn; but the knowledge that my professional brethren would certainly say that my degree was *but* a foreign one (and perhaps my other qualifications also) induced me before doing so to write several letters to the University of Durham on the matter, and the answers I received were such as to lead me to suppose that its governing body were contemplating throwing open its degrees to qualified men, which I venture to hope may be the case, although I have heard nothing since to confirm my hopes, and the regulations published in the Students' Number of The Lancet are the same as they were last year. I cannot, however, but think that some University will before long see the matter in the right light, and throw open its doors. Cambridge has in the subject of State Medicine, and surely some other University might follow its example by doing the same in the larger and more important subject of medicine generally.

I am, Sir, your obedient servant,
Dec. 14th, 1875. L.R.C.P. Lond.

P.S.—I have often thought, if the profession petitioned some University, it might have the desired effect.

To the Editor of The Lancet.

Sir,—"Omega," whose letter you published in your issue of the 11th inst., states a hard case. Mine is, I think, harder. The misconduct of a brother M.D. whom I rescued from ruin, conjoined with that of a clergyman into whose family I married, has hurled me from riches to comparative poverty, from strength to weakness. Possessing as I do a natural aptitude for imparting knowledge, I could, without doubt, make a fair income as a schoolmaster, provided only I could obtain a respectable B.A. I am already a medical graduate of a Scotch University, yet even my *alma mater* is forbidden by law to grant me a title in Arts unless I undergo a two years' residence. I have a wife and three children, and am forty-one years of age. How can I sacrifice both time and money? Why should not Durham—a University in need, I am informed, of both occupation and funds—be empowered to grant degrees of all kinds to middle-aged men after examination, but without residence? Can you assist us, Mr. Editor?

I remain, Sir, yours truly,
Dec. 12th, 1875. M.D., M.R.C.S., L.S.A.

Treatment of Lipoma.

Dr. Hasse, of Nordhausen, injects these tumours with alcohol. A certain amount of the latter should be made to enter the fatty growth through several apertures, allowing some days to intervene between each injection. The tumour then softens and fluctuates; and the operator should at that period incise the growth and empty it, by means of gentle pressure, of the oily liquid which has been formed. Febrile reaction is generally very slight. It is hardly worth while in some fatty tumours to subject the patient to numerous punctures and injections, which may be more or less painful, and crown all by an incision and kneading of the tumour. In very large lipomatous growths, where enucleation leaves a deep cavity, which is sometimes a long time in healing, and where the incision must be large, and the tearing out requires a certain amount of force and manipulation, Dr. Hasse's system may perhaps be applicable, especially with timid patients.

A Good Almanac.

The British Almanac of the Society for the Diffusion of Useful Knowledge for 1876, published by the London Stationers' Company, is a well-known publication, containing about as good a shilling's worth of useful information—some of which cannot be obtained elsewhere—as can well be expected.

Indignans.—We entirely agree with our correspondent. "Indignans" should send the bill to the President of the College whose diploma is held by the person in question.

Commune Bonum should authenticate his communication.

Certificates of Still-birth.

To the Editor of The Lancet.

Sir,—Would you kindly enlighten me whether it is compulsory to give a certificate for the burial of a miscarriage. I am not aware of any rule. The ordinary certificate of death cannot, I think, refer to abortions. In this case the certificate is given to the sexton, the registrar refusing to have anything to do with the registration of still-born infants.

I am, Sir, yours &c.,
Silloth, December, 1875. J. Leitch.

⁂ Under the 18th section of the Births and Deaths Registration Act, 1874, it is provided that no still-born child shall be buried in any burial-ground without the production of, either (*a*) a written certificate that such child was not born alive, signed by a registered medical practitioner who was in attendance at the birth, or who has examined the body of such child; or (*b*) declaration signed by some person who would, if the child had been born alive, have been required by this Act to give information concerning the birth, to the effect that no registered medical practitioner was present at the birth, or that his certificate cannot be obtained, and that the child was not born alive; or (*c*), if there has been an inquest, an order of the coroner. The Act contains no clause making it *compulsory* upon the medical practitioner to give a certificate of still-birth, and indeed especially provides for the production of a declaration to the same effect in cases where a medical practitioner is from any cause unwilling or unable to give the required certificate.—Ed. L.

Centenarians.

There is always some doubt respecting these, and often the simplest documents are wanting to place the real age on a secure basis. A very interesting little book on this subject has just been published, called "Recherches sur les Centenaires nés ou morts dans le Département de la Marne," by Amédée Lhote. This department appears favourable to the threading out of numerous years, as there centenarians are not scarce. Some verses are scattered in the book, among which we notice the following epitaph quoted by *L'Union Médicale*, Nov. 27th, 1875:—

> "Ci gît Paul, qui, docile à cet avis du sage :
> Dans tout ce que tu fais, hâte-toi lentement ;
> Pour gagner l'autre monde, alla tout doucement ;
> Et mit cent ans entiers à faire le voyage."

C. K. W.—1. Only in very urgent circumstances would it be right to do so.—2. It would be an act of pure good nature to do so.—3. It would be a reason for being dissatisfied with that surgeon.

M.D.—We have unfortunately not kept the particulars of the case referred to.

Unfortunate Catheterism.

Some time ago we alluded to a case of death after catheterism which occurred at Bordeaux. A pharmacien, very fond of prescribing and operating, had been applied to in a case of retention. He sent his son to relieve the patient, and the instrument was so used that the latter died soon after the operation. The affair was lately before a French Court, and the young pharmacien was sentenced to ten days' imprisonment for wounding through carelessness, and fined £1 16*s*. for illegally practising medicine.

A Correction.

To the Editor of The Lancet.

Sir,—In the excellent report of the proceedings of the Clinical Society on the 10th inst., in your issue of to-day, I observe an error and an omission in reference to the case of the carpenter (not carman) whom I exhibited at the meeting, both of which are important, clinically considered. These are—first, the patient suffered severe symptoms of diabetes *three months* instead of six weeks, as stated; and secondly, he lost 3 st. 8 lb. in weight before being placed under treatment—a fact attesting the severity of the disease.

Yours truly,
Wimpole-street, Dec. 18th, 1875. A. Scott Donkin, M.D.

Another Medical Victim.

The public at large have no conception of the number of medical men who die from contagious diseases caught in the practice of their perilous profession; nay, many of them perish at the threshold of their career whilst being employed as dressers in hospitals. At Paris, quite lately, a student of the Children's Hospital (Ste. Eugénie), named Gary, died of diphtheria whilst attending little patients affected with that destructive complaint. At the beginning of this year another student, named Vallerian, was carried off by small-pox at the temporary hospital erected for the reception of variolous patients; and shortly afterwards M. Gipoulon fell a victim to diphtheria, the germ of which had been taken in hospital.

Tyro's complaint is a little too vague. If he will furnish us with definite facts or cases in illustration, we shall be glad to give him our opinion.

Mr. Alfred Cresswell's letter shall appear next week.

Cheap Doctoring.

To the Editor of The Lancet.

Sir,—My attention has been attracted by your remarks (Oct. 30th), in answer to "S.," on the "cheap" system of attending and supplying poor persons with medicines, and the question of the "possibility of supplying proper medicines on such terms."

In the early part of my professional life I was one of the medical officers to the Christ Church, to the St. George's, and to the All Saints Church Provident Societies in Birmingham. To the first, all the medical officers attended gratuitously, but did not supply medicines. The medical officers to the two other Societies agreed to supply the medicines, and to be paid at a low rate for their attendance, with the exception of myself; but I was so urgently pressed to attend on the same terms as the other medical officers that I consented to do so for one quarter. Accordingly I made an arrangement with a respectable druggist, whose shop was conveniently situated, to dispense for such of my patients as belonged to the Society. On explaining to him the circumstances of the case, he readily undertook to do the dispensing, charging the *cost* price only for the drugs, and five per cent. for his trouble. At the end of the quarter I had to pay him about £1 12*s.* over and above what I received from the Society for my quarter's attendance.

I also attended gratuitously a dispensary, established in a populous neighbourhood, on the self-supporting system; but although there were many honorary subscribers, it had to be closed after a few years, because it could not pay its expenses, and this was owing to the great difficulty of collecting the subscription of one penny weekly from each self-supporting member.

After the experience I had for several years, I cannot understand how "S." can make the "cheap" system pay him. In my opinion it is better for the "doctor" to *give* his advice to such of his poor neighbours who cannot afford to pay him, and let them obtain the medicines themselves.

Your obedient servant,
Francis Elkington, M.D.,
Formerly of Birmingham, England.
Brockville, Ontario, Nov. 16th, 1875.

Punch's Pocket-Book for 1876.

In addition to illustrations by Tenniel, Charles Keene, and Linley Sambourne, with much light amusing matter, Punch's Pocket-Book contains the calendar, cash account, diary, and daily memoranda that go to make up the ordinary almanacs.

L. E.—In estimating the population of a town or district, it is generally assumed, failing a more reliable basis for calculation, that the *rate of increase* which prevailed between the last two census enumerations has since been maintained. In the case of Shardlow district we know that the population was 31,113 in 1861, and 33,925 in 1871; from these numbers first find the annual (geometrical) rate of increase in the ten years, and the addition of four and a quarter to this rate to the number in 1871 will give the estimated population in the middle of the year 1875. Very few annual reports of medical officers of health can be obtained, except on application to medical officers of health or sanitary authorities.

The Keighley Union.

To the Editor of The Lancet.

Sir,—I am very much astonished that upon the *ipse dixit* of a local paper you should charge me with receiving my instructions as to the treatment of my pauper patients from the guardians. There is not one of the guardians who has ever in any way whatever suggested to me how I should treat my patients. Knowing the benefits which my private patients receive from a modified water treatment, both hot and cold, I asked the guardians to find me the requisite means, that I might treat my pauper patients as I thought would soonest lead to their recovery, and to pay some person to give to them baths, or wet packs, or whatever else I might deem necessary. I need not quote to you or the profession the names of the leading physicians both in England and on the Continent who use this treatment with marked success. I certainly think that it is due to me for you to place this disclaimer in as prominent a place as your own article.

I am, Sir, your obedient servant,
Arthur Roberts,
Medical Officer of the North Keighley Union.
Keighley, Dec. 21st, 1875.

*** It is a pity that the Chairman of the Board, in noticing the matter, did not state that the first overture on the subject was from the medical officer. We have, of course, no objection to offer to Mr. Roberts treating his patients in the way which seems to him best.—Ed. L.

A. M. D., (Dover.)—The remarks referred to were made by Dr. Little, Professor of Medicine, at the opening of the Royal College of Surgeons, Ireland, and they strike us as among the best and most judicious remarks that we have read for some time.

The new Dean of the Paris Faculty.

Professor Vulpian is finally installed in this office. This was done with a certain amount of ceremonial, during which highly complimentary speeches were addressed to M. Wurtz, the late Dean, the efficient manner in which he had performed his difficult task being eulogistically acknowledged. It should be remembered that in France the Dean is virtually the chief of the school, that he has vast powers, and that his office is in no way analogous to that of the Deans of our own medical schools.

Communications not noticed in the current number will receive attention in our issue of the ensuing week.

Communications, Letters, &c., have been received from—Sir Jas. Paget, Bart., London; Sir Thomas Watson, Bart.; Sir W. W. Gull, Bart.; Dr. Brown-Séquard, Paris; Sir H. Thompson, London; Prof. Rolleston, Oxford; Dr. R. Barnes, London; Dr. Maudsley, London; Mr. Pollock, London; Dr. Geo. Johnson, London; Dr. Hughlings Jackson, London; Prof. Laycock, Edinburgh; Dr. Donkin, London; Mr. Maunder, London; Mr. Holthouse, London; Mr. John Wood, London; Dr. Langdon Down, London; Mr. Henry Smith, London; Mr. Adams, London; Dr. B. Hicks, London; Mr. Barwell, London; Prof. Spence, Edinburgh; Dr. Pettigrew, St. Andrews; Dr. Wilson Fox, London; Mr. C. De Morgan, London; Dr. Broadbent, London; Mr. Sidney Jones, London; Dr. C. Bell, Edinburgh; Dr. Dreschfeld, Manchester; Dr. Matthews Duncan, Edinburgh; Mr. Jolliffe Tufnell, Dublin; Mr. Mackey, Birmingham; Dr. Pollock, London; Dr. McCall Anderson, Glasgow; Dr. Johnston, Birmingham; Dr. Morgan, Manchester; Dr. Yeld, Sunderland; Mr. Bulley, Reading; Dr. Day, Stafford; Dr. Ferguson, Cheltenham; Dr. Greenhow, London; Dr. Ogston, Aberdeen; Dr. Tuckwell, Oxford; Dr. Chadwick, Devon; Mr. J. P. Teale, Leeds; Mr. Kebbell, Floxton; Mr. M'Nab, Inverness; Mr. H. Lee, London; Dr. Allbutt, Leeds; Mr. Baker, Derby; Dr. Fox, Clifton; Dr. Struthers, Leith; Dr. Bradbury, Cambridge; Dr. Watson, Tottenham; Dr. Cooper, Snaresbrook; Dr. Woodward, Worcester; Dr. Blake, Kilkelly; Dr. Reed, Edmonton; Mr. Tipple, Greenhithe; Mr. N. Baker, London; Dr. Moriarty, Tralee; Mr. Grimshaw, Dublin; Mr. Finney, Dublin; Dr. Fiddes, Aberdeen; Dr. Rose, Chesterfield; Dr. Pierson, Dresden; Dr. Ogle, Derby; Mr. Lockie, Carlisle; Mr. Miller, Stourbridge; Dr. Hassall, Ventnor; Dr. Watkins, Iowa, U.S.; Dr. Cole, Bath; Mr. Dyce Brown, Aberdeen; Mr. Swain, Devonport; Mr. Butler; Mr. Wheelhouse, Leeds; Mr. Perry, Glasgow; Mr. Hayes, Newington; Mr. Taylor, Johnstone, N.B.; Mr. Prince, London; Mr. Augusta Nolan; Dr. Roberts, London; Mr. Deeping, Southend; Dr. Dickinson, London; Mr. Pirrie, Aberdeen; Dr. Armstrong, Newcastle-on-Tyne; Dr. Shettle, Reading; Dr. U. Pritchard, London; Mr. O. Pemberton, Birmingham; Mr. Nottingham, Liverpool; Mr. Lund, Manchester; Dr. B. Foster, Birmingham; Mr. Keally, Gosport; Dr. L. Owen, Southsea; Mr. Morgan, Bishopwearmouth; Dr. Robt. Travers, Dublin; Mr. C. Orton, Newcastle; Dr. Barton, London; Dr. Robertson, Buxton; Mr. F. Cook, Cheltenham; Mr. Butler, Winchester; Dr. Styrap, Shrewsbury; Mr. Hawkins, London; Dr. Brittan, Clifton; Mr. Marsh, Shrewsbury; The Registrar-General of Edinburgh; Honesty is the best Policy; Tyro; Medicus; L.R.C.P. Edin.; The Registrar of the Royal College of Physicians; A. B.; &c. &c.

Letters, *each with enclosure*, are also acknowledged from—Mr. Barnett, Weston-super-Mare; Mr. Nankivell, Chatham; Mr. Mackie, Warrington; Mr. Onions, Market Drayton; Mr. Fox, London; Mr. Newington, Tenterden; Mr. Clapp, Nant-y-glo; Dr. Adey, Chulmleigh; Dr. GreatRex, Lawton; Mr. Lawrence, Bangalore; Mr. Marshall, Dromore; Mr. Walker, Corwen; Dr. Murchison, London; Mr. Crocket, Merthyr; Dr. Munroe, Hull; Mr. Whidborne, Topsham; Statim; F., Bolton; M.D., Leicester; L. L. G., New Brighton; X. Y. Z., Haverfordwest; Beta F., London; M.D., Brighton; Medicus; J. S., Manchester; A. L. O. W., Brighton; F. S. G.

Manchester Guardian, Western Morning News, Local Government Chronicle, Welshman, Newcastle Chronicle, Liverpool Post, Isle of Man Times, Leeds Mercury, Birmingham Morning News, Craven Pioneer, Surrey Advertiser, East London Observer, Huddersfield Chronicle, Cork Constitution, Croydon Advertiser, and *Northern Daily Express* have been received.

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